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Aktionsart and Aspectotemporality in Non-European Languages

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Preface

In June 2000, sixteen linguists met in Zurich to discuss aktionsart (actionality) and aspecto-temporality in non-European languages. Some of us had already worked together in the EUROTYP group on Tense and Aspect. The work of others developed from a seminar on aspect at the University of Zurich. Our common background was a functional approach, and most of us tried to test the theories of Johanson and/or of Breu & Sasse, which had earlier proved fruitful in the description of aspect-related phenomena in a number of languages of different types (cf. i.a. Johanson 1971, 2000; Sasse (ed.) 1991, Breu (ed.) 2000). The approaches share the distinction of at least five aktionsarten, defined by phases and boundaries or a combination thereof. Grammatical aspect operates on the aktionsarten. Whereas Breu and Sasse present a unified analysis of aspect systems, *Johanson* stresses the fundamental difference between the Slavic type and the more widespread Romance type (see also in this volume).

The results of our investigations were rather mixed. The theories can be nicely applied to languages of Northern Eurasia. *Mattissen*'s thorough analysis of Laz in this volume applies the latest version of Breu (1997, 2000). *Roos* describes Mandarin Chinese aktionsarten and the functions of the aspectual suffix *-zhe* on the basis of Johanson's theory. Further south in Eurasia, e.g. in Thai, the search for aktionsarten becomes futile. Practically every word can be used in any test context, as *Jenny* shows, and the Thai TAM categories bear only a vague resemblance with the 'universal' gram types claimed, e.g. by Dahl (1985), Bybee et al. (1994). *Ebert*, puzzled by tense flip-flops in Kiranti languages, arrives at the conclusion that a gram type tentatively called "new situation" is underlying – a category that Jenny arrived at independently for Thai *-leeu*³. The well-known aktionsarten and aspect categories seem to fade out the further we move Southeast. Some languages of Irian Jaya have no tense-aspect markers at all (see *Dahl*).

On the other side of the world, the Chilean Mapudungun fits in with the aktionsarten, though less perfectly with aspects ($Zu\tilde{n}iga$). The remaining two papers deal with somewhat different questions. Csato describes the form and function of compound verb constructions in Turkic and some nonrelated languages. No matter what the form is, the functions are cross-linguistically remarkably consistent (also in languages not considered here). Bearth

investigates the Swahili tense-aspect markers and especially the auxiliary 'be' as a viewpoint marker in the framework of discourse analysis.

Due to various reasons, not all papers presented at the workshop are included here. We would like to thank Piermarco Bertinetto, Walter Breu, Casper de Groot, Ursula Drolc, Christa König, Lukas Neukom, and Martin Schult for their active participation and for some fascinating data, which will appear elsewhere.

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List of abbreviations

A	actor	DISTR	distributive
ABL	ablative	e	exclusive
ADH	adhortative	EMPH	emphatic
ADV	adverbial marker	ERG	ergative
AGN	agentive noun	EVI	evidential
ALL	allative	EXPER	experiential
AMB	ambulative	f, F	feminine, female
ANIM	animate	fam	familiar
ANT	anterior	FIN	final
APPL	applicative	FOC	focus
ART	article	FUT	future
ATT	suffix calling for attention	FV	final verb vowel
ATTR	attributivizer	GEN	genitive
AUX	auxiliary	GER	gerund
BEN	benefactive	HAB	habitual
c3-11	class prefixes of nominal	hh	high honorific
CAUS	classes 3-11 causative	hiLOC	high locative
CESS	causative	hon	honorific
CESS		hum, HUM	human
CLAF	counter-expectative classifier	i	inclusive
COM	comitative	IDEO	ideophone
COMM	comment marker	IMM	immediate
COMP		IMPER	imperative
COMPAR	complementizer	INAN	inanimate
COMPL	comparative	INCEP	inceptive
COMPL	completive conditional	INCH	inchoative
CONS	consequential	INCL	inclusion ('as well as')
CONT	continuous	INCMP	incompletive
CONV	converb	IND	indicative
d, DL	dual	INDEF	indefinite
DAT	dative	INF	infinitive
DEF	definite	INGR	ingressive
DEM	demonstrative	INST	instrumental
DEM	desiderative	INTJ	interjection
		INTRA	initiotransformative
DIR	directive / directional verb	INV	inverse
DIST	distal		

TDDX /			
IPFV	imperfective	PURP	purposive
IRVS	irreversible	Q	question marker
itr, ITR	intransitive	QUOT	quote marker
LOC	locative	RDP	reduplication
m, M	masculine, male	REC	reciprocal
MAN	manner subordinator	REFL	reflexive
MID	middle	REL	relativizer
MOT	motative	REP	reportive / report particle
NARR	narrative	RES	resultative
NEG	negation	REV	reversionary
NML	nominalizer	RLNQ	relinquitive
NPT	nonpast	RVC	resultative verb compound
ns, NS	non-singular	s, SG	singular
NSIT	new situation	S	intransitive subject
O	object	SEQ	sequential
OBL	oblique	SFP	sentence-final particle
OPT	optative	SIM	simultaneous
OR	orientation verb	STAT	stativizer
P	patient / undergoer	SUB	subordinator
p, PL	plural	SUBJ	subjunctive
PART	particle	TAMP	tense-aspect-mood-person
PASS	passive	TEL	telicizer
PATN	patientive noun	TEMP	temporal subordinator /
PCPL	participle		marker
PERF	perfect	TMPR	temporary aspect
PERS	persistive	TOP	topic
PFV	perfective	tr, TR	transitive
POL	politeness	u	unmarked
POSS	possessive	vlg	vulgar
POST	posterior	VOL	volitive
POT	potential	VR	verbalizer
PPOS	postposition		
PPERF	pluperfect		
PREF	prefix for personal names		
PREP	preposition		
PRES	present		
PROB	probability		
PROG	progressive		
PROH	prohibitive		
PROS	prospective		
PROX	proximative		
PT	past		
	Lane		

The aspectually neutral situation type

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Aim. The aim of this paper is to argue for the existence of an aspectually neutral situation type across languages. The remarks are based on an aspect-actionality-tense model presented in previous work, e.g. Johanson (1971) and Johanson (2000).

Viewpoint categories. In this model, aspect is defined as encoding viewpoint perspectives. Viewpoint categories are grammaticalized morphological devices expressing different views of linguistically represented events, envisaging them in various ways relative to their limits, and signaling how they come into view at aspectual viewpoints.

Events are conceived of as having an initial and a final limit, *terminus initialis* and *terminus finalis*. The more or less salient interval between the limits is the course, *cursus*. The distance between the two limits may be considerable, as with events consisting of actions such as 'to sleep', 'to sit', 'to bark' or 'to eat an apple'. The distance may be small, as with events consisting of actions such as 'to fall asleep' or 'to sit down'. In certain cases the limits may be conceived of as practically coinciding, e.g. with events consisting of actions such as 'to explode'.

Three perspectives. Three natural ways of envisaging events in relation to their limits are postulated, three perspectives founded on basic human perception:

- (i) The INTRATERMINAL perspective envisages an event within its limits, *intra terminos*. The initial limit is already passed over; and the final limit is not yet attained.
- (ii) The POSTTERMINAL perspective envisages an event after the transgression of its relevant limit, *post terminum*. The decisive limit, whether initial or final, is already passed over.

(iii) The ADTERMINAL perspective envisages an event at the very attainment of its relevant limit, *ad terminum*. The decisive limit of the event is reached.

What comes into view at a given viewpoint is thus (i) a point situated within the limits of the event, (ii) a point situated after the decisive limit, or (iii) the decisive limit itself. The viewpoint is the moment of speaking or some point of time referred to, e.g. the point in a narrative text to which the plot has advanced.

Aspect, tense and actionality. The fact that the aspectual perspectives are concerned with time does not mean that they are tenses. The task of temporal categories is to localize entire propositional contents, including aspectual perspectives, in relation to points of time. Combinations of aspect and tense produce aspecto-temporal items, which display both kinds of properties, e.g. was eating (+INTRATERMINAL, +ANTERIOR). Viewpoint categories do not subsume actional contents in the sense of lexical semantics and thus do not include actional modifications expressing the way actions are carried out or specifying phases of them, e.g. to eat up as against to eat.

Aspect operates on the actional content encoded in the actional phrase, which minimally consists of a verb but may also comprise complements and adverbials. Actional devices are not perspectivizing in the sense of viewpoint operators. They do not offer various views of one and the same event, but specify the actions themselves. Aspectual, actional and temporal categories interact to determine the interrelations of events in texts.

Interplay of aspectual and actional categories. While the interrelatedness of aspect grammar and actional lexical semantics is common to all aspectual systems, the classification is a matter of language-specific conventionalization. A classificatory framework for the analysis of the interplay of aspectual and aspect-sensitive actional categories has been suggested in Johanson (1971: 194–233) and Johanson (2000: 145-169). The main distinctions are the following:

TABLE 1
ACTIONAL STRUCTURE AND CONCEPTUALIZATION

Actional structure	The actional content is conceptualized
Transformative	as implying transformation:
 Finitransformative 	 as implying final transformation
 Initiotransformative 	 as implying initial transformation
Nontransformative	without transformation

Transformatives imply a crucial limit that must be attained in order for the action to count as accomplished, e.g. English to fall asleep. Nontransformatives do not imply such a crucial limit, e.g. to sleep. With finitransformatives, the crucial limit implying transformation is the final one; with initiotransformatives, it is the initial one. Since initiotransformatives are rare in modern European languages, they are frequently ignored in linguistic analyses. The lexical meaning of to hide comprises both an initial transformation and a new state beginning with this transformation. English mostly distinguishes such phases by means of one transformative and one nontransformative verb, e.g. to fall asleep and to sleep.

Situation types with respect to limits. The application of aspectual perspectives to classes of aspect-sensitive actional phrases may be illustrated with the following simple English examples expressing anterior uni-occasional events.

ADTERMINAL

Initiotransformative:

Hid behind a tree.

Finitransformative:

Drowned. Left the room. Ate up the apple.

POSTTERMINAL

Nontransformative:

Had played.

Initiotransformative:

Had hidden behind a tree.

Finitransformative:

Had left the room. Had eaten the apple.

INTRATERMINAL

Nontransformative:

Was playing.

Initiotransformative:

Was hiding behind a tree.

Finitransformative:

Was drowning. Was leaving the room. Was eating

the apple.

There is, however, a fourth, aspectually neutral, way of referring to events, namely without any characterization with respect to limits.

Four situation types. A simple narrative text may illustrate the interaction of the four situation types: *I entered the garden. The girl was playing. Her brother had left. I watched her for a while*. The story leads us from one point of time to another, each one being a potential vantage point for an aspectual perspective.

At the initial point, the final limit of 'entering' is attained. Since the natural interpretation is adterminal, the situation is suitable for items such as the Russian perfective past. English, lacking adterminals, uses a non-intraterminal and non-postterminal item instead.

At the vantage point of was playing no new event begins or ends. The viewpoint is situated between the limits of the event: the child had started to play and had not stopped playing. Since the natural interpretation is an intraterminal one, the situation is suitable for an intraterminal item, which is available in English.

Similarly, at the vantage point of *had left* no event begins or ends. The event of 'leaving' is referred to after its crucial limit is transgressed. Since the natural interpretation is postterminal, this is a situation suitable for a postterminal item such as the English perfect.

With watched her for a while, a new event 'watching' including both natural limits takes place. Since no crucial limit is said to be attained or transgressed here, the natural interpretation cannot be adterminal, intraterminal or postterminal. Since the action lacks a decisive final limit that must be attained in order for the event to count as accomplished, the situation is unsuitable for adterminals. On the other hand, the event is not seen from within or after a decisive limit. This situation type, which does not tolerate marked aspectual characterization, will be referred to as the NEUTRAL type.

More or less qualified items. Optimally, the aspectual structure of texts might be indicated by adterminal, intraterminal or postterminal markers on the corresponding sentences. However, languages handle the meta-level structures according to their specific devices, expressing the perspectives selectively and in idiosyncratic ways. In order to realize the situation types, they employ more or less qualified items.

If one of the perspectives is grammaticalized in the verbal morphology through inflections, clitics or free syntactic elements, we are dealing with a VIEWPOINT OPERATOR (+INTRA, +POST or +AD). Viewpoint operator systems may be simple, signaling one of the perspectives, or more complex, involving more terms.

Languages differ in obligatoriness, i.e. with respect to what perspectives they must express. Certain languages must express the intraterminal situation type explicitly, leaving the adterminal and neutral types to less qualified items. Other languages must express the adterminal type, leaving the intraterminal and neutral types to less qualified items. Certain languages must express the postterminal type, whereas they leave non-postterminal situations to less qualified items.

Languages lacking a given operator do not need to express the corresponding situation type explicitly. The lack may partly be compensated by other linguistic means, various "aspectual strategies". However, the mere occurrence of an item in a sentence suggesting a situation type characteristic of an intra-, post- or adterminal view is not sufficient for ascribing that item a corresponding language-specific grammatical value. Thus, nonadterminals cannot express an intraterminal perspective on events, and nonintraterminals cannot express an adterminal perspective. In sentences such as Russian *ona*

prišla domoj and English she came home, the verbs exhibit a similar textual behavior, but possess different grammatical values. Three degrees of qualification for items covering a given situation type may be distinguished:

- (i) Marked intraterminal, adterminal or postterminal items (viewpoint operators).
- (ii) Unmarked opposition partners of such items, i.e. non-intraterminals, non-adterminals and non-postterminals, which negate the concept expressed by their respective partner, or are indifferent towards it.
- (iii) Aspectually unqualified items not participating in any opposition with a viewpoint operator and thus incapable of expressing a situation type.

English exhibits intraterminals ("progressives"), postterminals ("perfects") and the corresponding unmarked opposition members. It uses the non-intraterminal and non-postterminal simple past for the adterminal and neutral situation types. Russian possesses adterminals ("perfectives") and corresponding unmarked opposition members ("imperfectives"). It uses the non-adterminal for the intraterminal and neutral situation types. English and Russian thus apply contrary methods. For the neutral situation type, the respective unmarked items are used.

Characteristics of the neutral type. Referring to events in an aspectually neutral way means that the whole event including its course and limits is envisaged in an integral way without any specific point being highlighted. This perspective is suitable for nontransformatives and initiotransformatives. It is not 'perfective' in any goal-oriented sense; and there is no limiting object involved. The mere occurrence is stated: a stretch of action took place without the idea of a crucial limit implied. Adterminal items are thus excluded.

On the other hand, the perspective is not "imperfective" in the intraterminal sense. The event is not described with specific attention to its internal structure, viewed "from within". On the contrary, the idea of introspection is incompatible with the indication of the total temporal extension (Johanson 2000: 167). The neutral type readily combines with 'for X time' adverbials, e.g. English sat there for a while, Russian pisal dva časa 'wrote for two hours'; cf. the well-known example reigned for thirty years, Classical Greek ebasíleuse triákonta étē, French régna trente ans, Russian carstvoval tridcat' let, Bulgarian caruva trijset godini. However, the length of duration is irrelevant for the use of the neutral type.

This type should not be confused with the adterminal type with which a specific stretch of time filled with a certain actional content is envisaged at its achievement: 'to spend a certain time period V-ing' (Johanson 2000: 157), e.g.

Russian prožil tri goda 'lived for three years (= spent three years living)', Bulgarian pospa dva časa 'slept for two hours (= spent two hours sleeping)'. The time adverbials used here are mensural expressions indicating the whole interval filled with the action. The delimitative and perdurative modes of action used are transformative, implying a crucial limit.

"Imperfectives" and "perfectives". A brief comment on the relations of our types to so-called "imperfective" and "perfective" situations may be necessary.

Definitions to the effect that imperfectives "look inside" the limits of the event clearly correspond to intraterminality; see Comrie's definition of imperfectivity as "explicit reference to the internal temporal structure of a situation, viewing a situation from within" (1976: 24). However, if the event is presented as a "continuous, temporally unstructured course", we are dealing with the neutral type.

A definition of perfectivity as "a development heading for an endpoint" may seem to be close to the notion of adterminality. However, it rather corresponds to the actional notion of finitransformativity. Transformativity implies a crucial limit to attain, whereas adterminality envisages the actual attainment of that limit. If, on the other hand, perfectives are taken to present an event in an integral way, as "a bounded whole", we are again dealing with the neutral situation type.

What adterminal and neutral situations have in common is the propulsive power to advance the plot in narrative texts. The attainment of a limit leads into an event or out of an event ("situation change"). The difference is that with the adterminal situation type a limit is envisaged in its attainment, whereas with the neutral situation type both limits are implied, though none is highlighted. The so-called perfective aspect corresponds to adterminality only if it is defined as representing an event with reference to its crucial limit. The intra- and postterminal situation types are non-propulsive. No event ends and no event is introduced at the viewpoint established; the event is envisaged with its limits excluded from the view. The so-called imperfective aspect corresponds to intraterminality only if it is defined as representing an event under exclusion of its limits.

Marked items excluded. Our original contention was that the neutral type requires no aspectual characterization, or even does not tolerate any, since there is no point that should be highlighted. The perspective is neither intraterminal, nor adterminal or postterminal. A glance at some Indo-European languages gives us the empirical evidence that the neutral situation type does not permit aspectual characterization by means of viewpoint operators. It is only possible with non-intraterminal, non-adterminal and unqualified items.

The picture remains similar if we proceed to non-Indo-European languages possessing viewpoint operators of the types discussed. Turkish possesses

intraterminals, postterminals and corresponding unmarked opposition members. It employs the non-intraterminal simple past in cases that would be suitable for an adterminal view, e.g. girdi 'entered', oturdu 'sat down'. Typically, the same non-intraterminal past is also used in neutral cases, e.g. bakti 'watched', oturdu 'sat (for a period of time)', otuz yıl hüküm sürdü 'reigned for thirty years'. Analogously, Maltese also uses its non-intraterminal, e.g. raqad il-ğurnata koll-ha 'slept the whole day'. Chukchi does not use its intraterminal imperfect or its postterminal perfect to express the occurrence of an event as integral whole, but rather its non-intraterminal and non-postterminal simple past ("aorist") in -g?i, e.g. migciretg?i 'he worked'. Similarly, Kalmyk employs its "aorist" in -v rather than the past intraterminal in -na, e.g. ködlv 'worked', neg čas düŋgä kelv 'spoke for about one hour', xoyr časdas aqvn tavn čas kürtl gazet umšv 'read newspapers from two to five o'clock'. Finally, Georgian also uses its "aorist" rather than its intraterminal imperfect or its postterminal perfect, e.g. jaylma [didxans] iq'epa 'the dog barked [for a long time]'.

This random sample of sentences corroborates our contention that the neutral situation type is universally covered by unmarked or unqualified items, whereas the use of explicit aspect operators is excluded.

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Tense and aspect in Laz

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1 The Laz language*

Laz is a Kartvelian language spoken on the southeast coast of the Black Sea from Batumi in Georgia in the east to Pazar (Laz name: Atina) in Turkey in the west. The number of speakers is not known exactly due to a lack of statistics; ethnic estimates extend from 50,000 to 500,000 people. The language is in any case severely endangered, as people younger than 20 years of age no longer learn it. The variety of Laz presented here is the dialect of Ardeşen (Artaşeni) and its surrounding villages, just east of Pazar. The data consists of texts collected on the site and elicitations from speakers of Laz living in Germany.

Ardesen Laz is an SOV language in which central participants as well as local adverbials are not case-marked, contrary to most other Kartvelian languages and dialects (see contributions in Harris 1991). The verb is marked for TAM and person, with different verb classes determining which participants are encoded. Monopersonal active verbs mark one participant on the verb, the actor; monopersonal inactive verbs mark only the experiencer or possessor; and polypersonal verbs mark both the actor and undergoer (the primary object in the sense of Dryer 1986). While monopersonal active verbs are intransitive or reflexive and polypersonal verbs are (di)transitive, monopersonal inactive verbs comprise both intransitive and transitive ones (for details see Mattissen 1995).

^{*}This paper developed from my cooperation with Sevim Genç, to whom I would like to express my heartfelt thanks for her everlasting patience and kindness! I also would like to acknowledge comments by participants of the 1999 Meeting on Caucasian Linguistic Problems and of the Zurich Workshop on Aspect and Actionality in the summer of 2000.

(1) a. MONOPERSONAL ACTIVE VERBS

bulur 'I go'
byurur 'I die'
mcar 'I sleep'
bimpulam 'I hide'

b. MONOPERSONAL INACTIVE VERBS

maşKurinen 'I am afraid' maoropen 'I love sth.'

miyun 'I have sth. [inan.]'

mişkun 'I know sth.' golomaonen 'I can read sth.'

c. POLYPERSONAL VERBS

bompulam 'I hide sth.'

bampulam 'I hide from sb.'

boşkurinam 'I make sb. afraid of sth.'

mebuyam 'I take sth. to sb.'

The syntactic relation of explicit nominal participants to the predicate is identified by word order (but see section 4.2 for focus). Nominal participants are not obligatory, however.

(2) MONOPERSONAL ACTIVE VERB

a. ma bulur 'I am going.'

1s go:1s:PRES

b. ma bimpulam 'I am hiding (myself).'

1s hide:1s:PRES

(3) MONOPERSONAL INACTIVE VERB

a. ma (lači-sa) maskurinen 'I am afraid (of the dog).'

1s dog-MOT fear:>1s:PRES

b. ma ar oxori miyun 'I have a house.'

1s one house have[inan]:>1s:PRES

(4) POLYPERSONAL VERB

a. ma çitabi golobionam 'I am reading a book.'

1s book read:(1>3)s:PRES

b. ma tkwan cari megiyamt 'I am bringing you food.'

1s 2p bread bring:(1>2)p:PRES

The glosses reflect the different verb classes. The polypersonal gloss "(1>3)s" is to be understood as first person acting on third person without plural being marked. Number is not marked for each participant encoded within the verb

form separately, but only once and independent of person. As a consequence, a verb form like *me-g-iy-am-t*, in which *g-* encodes non-second person acting on second, *-am-* is a non-third actor, and *-t* a non-third plural, has three different interpretations: 'I take sth. to you (pl.)', 'we take sth. to you (sg.)' and 'we take sth. to you (pl.)'. The monopersonal inactive gloss ">1s" characterizes a verb as marking an experiencer. As is obvious from the examples, Ardeşen Laz exhibits ergativity neither in morphology (which dominates Kartvelian languages) nor in syntax. Rather, there is a lexicalized active system within the verb without syntactic consequences.

A closer look at the Ardesen Laz verb template shows the following slots:

(proclitic)=(preverb)-personal prefix-orientation vowel-root-(CAUS)-TAMP

Proclitics and preverbs will concern us later in some detail (see section 4). The different orientation vowels (called version or pre-root vowels in Kartvelology) indicate valency and syntactic role of participants to some degree (see Mattissen 1995). The TAMP suffix encodes tense-aspect or mood-aspect and person marking (person is marked discontinuously in the personal prefix, the TAMP, and in one case, in the orientation vowel).

The verb form below illustrates all slots except for the causative morpheme:

(5) proclitic preverb pers. prefix orientation vowel root **TAMP** va me b svel am **NEG** thither 1>3 3.beneficiary help PRES:non-3:sA NEG=help:(1>3)s:PRES 'I do not help him.'

The preverb in this case is an integral part of the verb's lexical meaning. The tense-aspect and mood-aspect forms existing in Laz are presented in Table 1. The present and the pluperfect do not distinguish aspect but are related to imperfective forms and perfective forms, respectively, by morphological form. From the Kartvelian perspective, it is striking that the paradigm is smaller than for instance in Georgian (see Aronson 1991), and that there is no separate perfect.

TABLE 1

	Imperfective forms	Perfective forms	
Tenses	Present	Present	
l		Pluperfect	
	Past _{IPFV}	$\operatorname{Past}_{\operatorname{PFV}}$	
	Future _{IPFV}	Future _{PFV}	
Moods	Optative _{IPFV}	Optative _{PFV}	
	Conditional _{IPFV}	Conditional _{PFV}	

Present and past forms will be studied in the body of this paper, so for reasons of completeness we will start with an overview of the other tense and mood categories.

2 Tense and mood functions

The Laz pluperfect is a relative-absolute tense (in the sense of Comrie 1985), used for states of affairs which took place (or did not take place) before a past state of affairs or prior to a point in time in the past and without relevance for the present moment. The past reference point or event can be encoded by an adverbial (as in (6)), adverbial clause, or attribute clause (as in (7)):

- (6) a cu ǯana ogine him (a defa) ko=maziru dortun one two year before 3s once FOC=see:>1s:PT.PFV PPERF 'I have seen him [only once] one or two years ago.' (and never again)
- (7) na yuru baba skani
 NML die:3s:PT.PFV father POSS:2s
 a cu defa ko=maziru dortun
 one two time FOC=see:>1s:PT.PFV PPERF
 'I saw your late father (only) once or twice (i.e. before he died).'

Pluperfect implies that further events have happened in the meantime after the event described which bear a relation to it:

(8) mčima mčiy! pencere-ti gomži dortun rain rain:3s:PRES window-also open:(1>3)s:PT.PFV PPERF '(Look), it is raining! And I had opened the window.'

The perfective future in Laz is used for future and for posterior habitual states of affairs:

(9) yazi ntxiri ora na moxtasen zade xazi maertey summer hazelnut time NML come:3s:FUT.PFV very joy become:>1p:PT.IPFV 'We used to be looking forward to the time of the hazelnut harvest in the summer.'

It is also employed together with the complementizer *deyi* to express purposive, and in the apodosis of conditional sentences. The imperfective future occurs infrequently, for instance with reference to "the same time tomorrow" or in warnings uttered to prevent an imminent event:

(10) mondo golionamtare don't.dare read:(2>3)s:FUT.IPFV

'Don't you dare read this!'

The optative is used in requests to non-second person, in negative imperatives or purposives.

(11) bigzalat! depart:1p:OPT.PFV

'Let's go!'

(12) mondo zuya-şa k=amaxta! 'Don't enter the sea!' don't.dare sea-MOT FOC=enter:2s:OPT.PFV

In addition, the optative turns up in the protasis of hypothetical conditionals and in temporal clauses with future reference; note the difference in aspect:

(13) a. mofta-șa

'until I come'

come:1s:OPT.PFV-MOT

b. mobulurta-șa

'while I am coming'

come:1s:OPT.IPFV-MOT

The conditional is found in the apodosis and sometimes even in the protasis of unreal conditionals:

(14) Kuçxe-te citi-ko, epeyi ora ko=golaxtasertu foot-INST go.down:2s:PT.PFV-SUBquite time FOC=go.over.to:3s:COND.PFV 'If you went on foot it would take quite some time.'

Furthermore, the conditional encodes the future of the past in non-habitual contexts:

- (15) Artaşeni haku zade na dogutasertu var=uşkurtu

 A. so much NML stop:3s:COND.PFV NEG=know:>3s:PT.IPFV

 '(S)he did not know (then) (s)he was going to stay in Artaşeni for so long.'
- (16) gomžartu open:(1>3)s:COND.PFV

'I wanted to open it (but did not undertake anything to do so).'

3 Laz aktionsart verb classes

In applying the aspect model developed by Breu (1994, 1996, 1997) and Sasse (1991a, 1991b), we examined which aktionsart classes exist in Laz, i.e. the lexical semantics of a verb with respect to situation change (event boundary) and sustained situation. We found that Laz fits into the model quite well although it was difficult to obtain reliable results from some tests. According to the tests presented below, six of the seven possible verb classes predicted by the model exist in Laz: totally static (TSTA; roughly, stative), inceptively static (ISTA; corresponding to initiotransfor-mative verbs in Johanson's terms (2000)), inchoative (INCO), activity (ACTI, roughly, dynamic atelic), gradually terminative (GTER, roughly, telic/accomplishments) and totally terminative (TTER, roughly, punctual) verbs. Relatively static verbs (temporary states) cannot be delimited as a separate class.

Inceptively static verbs are lexicalized as expressing a situation change and an ensuing temporary state (cf. Breu 1996: 44-45), e.g. French *savoir* 'get to know, know'; inchoative verbs denote a situation leading to a situation change, this change and the ensuing state (Breu 1997:62-63), e.g. *hide*, which means 'strive to enter a hiding-place', 'enter a hiding-place' as well as 'be hidden'.

Here is an overview of examples for each of the classes in Laz:

(17) TSTA

bore 'I am'	nçay	'[leaf] is [on the tree]'
mişkun'I know sth.'	mşun	'I remember sth.'
miyun 'I have sth. [inan.]'	midgun	'I have sth. standing'
mixen 'I have sth. sitting'	mizun	'I have sth. lying'
pxer 'I am seated'	bdgur	'I stand'
bzur 'I lie'	mcar	'I sleep'

(18) ISTA

maoropen	'I love sb.'	maşKurinen	'I am afraid'
mamşKorinen	'I am hungry'	mambinen	'I am thirsty'
maseiren	'I am astonished'	mafiçiren	'I have an idea'
maťamaxen	'I am jealous'	mambaren	'sth. is swollen on me'

(19) INCO

bimpulam	'I hide'	binciram	'I go to bed, fall/am asleep'
dopxedur	'I sit down'	dobgutur	'I stop, stay'

^{\$} Note from the editors: "Inchoative" is used in the sense of Breu (1997) and not in the traditional meaning.

(20) ACTI

biçalişan	ı 'I work'	bziʒam	'I laugh'
bukapam	ı 'I run'	bigzar	'I walk'
bixelam	'I am happy'	pťrayudum	'I sing'
bgorum	'I search for sth.'	božer	'I look at sth.'
cepçam	'I hit sth.'	dopľacum	'I hold on to sth.'

(21) GTER

bier	'I become'	bulur	'I go'
byurur	'I die'	xosǩun	'[animal] dies'
boyurinam	'I kill sb.'	gomžum	'I open sth.'
bogzam	'I light sth.'	boskurinam	'I dry sth.'

(22) TTER

bziram	'I find sth.'	oxobožonam	'I understand sth.'
pťvazum	'I burst'	gomandinen	'sth. gets lost on me'
bikomocer	'I marry [a man]'	baknam	'I grasp sth.'
biçiler	'I marry [a woman]'	mepçam	'I give sth. to sb.'
bigzalam	'I depart'	gomočondrun	'I forget sth.'

Additionally, however, it is necessary to posit a hybrid class of verbs which combine characteristics of both activities and gradually terminative verbs, as will be shown below. To this large class belong:

(23) ACTI/GTER

bimxor	'I eat sth.'	golobionam	'I read sth.'
mčarum	'I write sth.'	mkum	'I grind sth.'
pǯilum	'I pick [flower]'	božiram	'I show sth.'
pşkorum	'I cut sth.'	pŘvatum	'I fell [tree]'
pčum	'I sew sth.'	pčum	'I bake sth.'

All these verbs are transitive. The common feature setting them off from pure activities in terms of semantics seems to be the affectedness of the object. In contrast to objects of pure activity verbs, the object of verbs of the hybrid class is changed or effected by the action. It is striking, however, that *golobionam* 'I read it' belongs to this class while *cepčam* 'I hit him' does not. Yet, we can think of something which has been read as having changed its state from unknown to known. We leave this topic for further study.

In any case, the distinction between the ACTI, GTER and hybrid classes must be made on the lexical level as all verbs in Laz bear an inherent valency. There are no ambitransitive verbs like English *write* or *run* which are activities on the lexical level and behave like gradually terminative verbs on the phrasal level, depending on the presence and referential status of an object, e.g. *write a*

letter, run a mile. In Laz, the presence of a participant NP is optional and does not change transitivity nor aktionsart.

Before turning to the tests which led to the above classification, some observations on inceptively static verbs have to be made. In order to find out whether there are such verbs at all, we tested a considerable number of verbs, letting ourselves be inspired by the semantics of verbs described in the literature as ISTA verbs. Any ISTA verb should behave as follows: its imperfective form should encode a situation which holds after the situation change which is expressed by the perfective form. Most of the plausible candidates tested did not conform to this scheme, e.g. baknam 'I grasp sth.', dolobikunam 'I put sth. on', ebiselam 'I rise', mpun 'it boils', goomtun 'it covers sth.' (nor are they INCO verbs). In the example below, one of the sentences construed to find out what the imperfective form means shows that baknamti reads as 'I wanted to grasp [e.g. the bar]' but cannot mean 'I held [the bar]' (this sense would not be compatible with the following context in the example), for which another verb dopkaçum is used. In other words, the imperfective form encodes a state of affairs prior to the one of the perfective form bakni 'I grasped it', not after, while the phase after the situation change expressed by the perfective form is expressed by a different verb.

(24) on the bus:

bakınamtı ceboli memişveley ebiseli grasp:(1>3)s:PT.IPFV fall:1s:PT.PFV help:(3>1)p:PT.PFV rise:1s:PT.PFV bakını dopkaçı grasp:(1>3)s:PT.PFV hold.on:(1>3)s:PT.PFV

'I wanted to grasp the bar but fell, I was helped and rose, grasped the bar and held on to it.'

Finally, the verbs listed in (18) could be established as inceptively static verbs. Most strikingly, they all belong to one formal verb class: monopersonal inactive experiencer verbs. This class is identifiable by the structure of a verb form: the personal prefix encodes the person of the experiencer (m- 1s in the citation form), the orientation vowel is -a-, and the verbs belong to the inactive -en conjugation class, as the suffix shows (see Mattissen 1995:50). Thus, all ISTA verbs seem to be experiencer verbs, but the reverse does not hold true. Verbs like maziren 'I see', mayoden 'sth. happens to me', mažunen 'my sth. aches', mamkorinen 'I yawn', mardardalen 'I tremble', manciren 'I am able to sleep', etc. belong to different actionality classes.

The existing aktionsart classes will be established now with the help of critical tests based on the interactional readings of imperfective and perfective paradigmatic forms of verbs belonging to different lexical classes. First, the perfective forms, then the imperfective ones will be studied, finally we will proceed to several inconsistency tests.

3.1 Past perfective forms

In comparing perfective forms of different lexical verb classes we can delimit totally static verbs right away because they do not have perfective forms in the first place, i.e. corresponding to a present tense form *miṣkun* 'I know' there is no *miṣki 'I knew'. As a consequence, there is no pluperfect form either, since pluperfect is composed of a past perfective form and the invariable element dortun.

This does not mean, however, that there are concepts which cannot be expressed in Laz. For instance, besides the totally static verb *mcar* 'I sleep', there is *binciram* 'I go to bed, fall asleep, am asleep' which has perfective forms.

(25) seri do-binciri va=manciru
evening FOC-go.sleep:1s:PT.PFV NEG=go.sleep(POT):>1s:PT.PFV
cu saati şukule do-manciru
two hour after FOC-go.sleep(POT):>1s:PT.PFV
'I went to bed in the evening but could not sleep, I fell asleep (only) two hours later.'

3.2 Past perfective senses

All other verbs have perfective forms, but do not differ conspicuously in the senses the past perfective form conveys. Most frequently, it is used for sequential events or results.

- (26) Q: cu saati mu i?

 two hour what Q

 A: mčari, golobioni, cari pskomi
 write:(1>3)s:PT.PFV read:(1>3)s:PT.PFV bread eat:(1>3)s:PT.PFV
 'What did you do within the last two hours?' 'I wrote, read and ate.'
- (27) gomži 'I (have) opened it.' open:(1>3)s:PT.PFV
- (28) ko=bziri "I (have) found it.' (= "look here", or "yesterday")

The result sense derives from the implication that an afterstate still holds, i.e. in the example above, that what I opened is still open, or from a perceptible outcome of the event (compare the use of the present perfect in English). This is different from a resultative which denotes a resulting state and does not focus on the action which led to it as is the case here (see section 5).

For a clear distinction of verb classes we have to take further parameters into account. First, activity (29), inceptively static (30), and inchoative verbs (31) are compatible with adverbials of duration; gradually terminative verbs (32) and totally terminative verbs (33) are not:

- (29) cu saati bgori 'I searched it for two hours.' two hour look.for:(1>3)s:PT.PFV
- (30) cu ǯana lači-ṣa maṣkurinu 'I was afraid of the dog for two years two year dog-MOT afraid:>1s:PT.PFV [but things have changed].'
- (31) cu saati bimpuli 'I hid for two hours.' two hour hide:1s:PT.PFV
- (32) *a saati (Mutafi-şa) bidi *'I went (to Mutafi) for one hour.' one hour M.-MOT go:1s:PT.PFV
- (33) *a saati bziri *'I found (sth.) for one hour.' one hour find:(1>3)s:PT.PFV

Note that the last sentence is grammatical in the sense of 'I found one clock'. The presence of an explicit participant has no influence on the compatibility with an adverbial of duration (see (29) and (33)), not even if it is plural. As we saw in section 1, central participants licensed by a verb are not obligatorily encoded by an explicit NP. The sentence below was volunteered by a native speaker in supplement to the rejection of a sentence intended to mean 'I found several things for one hour'.

(34) zuya çenari dişka bziri a saati pkorobi sea border wood find:(1>3)s:PT.PFV one hour gather:(1>3)s:PT.PFV 'I found firewood on the beach and collected it for one hour.'

As plurality of a participant brings about a distributive or iterative sense of the verb (finding several things is a chain of a number of "find" events) this could in theory be a substitute for the lacking sustained situation of totally terminative states of affairs (compare the iterative meaning of the imperfective past form of such a verb in section 3.4) and could allow for a compatibility with an adverbial of duration. As example (34) above shows, however, this is not the case in Laz: a totally terminative verb is not compatible with such an adverbial in its perfective form.

Second, compatibility with adverbials expressing a delimited time span ('in x time') was checked. Inchoative (35) and activity verbs ((36), (37)) are incompatible with such adverbials, independent of transitivity.

(35) *a dakika-şa bimpuli *'I hid in one minute.'

(36) *a saati-şa biçalişi *'I worked in one hour.'

(37) *a saati-şa bgori *'I looked for it in one hour.'

Gradually terminative verbs can be used with them:

(38) a saati-şa nekna gomži 'I opened the door in one hour.' one hour-MOTdoor open:(1>3)s:PT.PFV

Inceptively static (39) and totally terminative verbs (40) are compatible with the adverbials, the meaning, however, is 'at the end of x time':

(39) cu saati-şa mamşkorinu 'After two hours I became hungry.' two hour-MOT hungry:>1s:PT.PFV

(40) context: I yelled and yelled

a saati-şa nena gomandinu 'After one hour I lost my voice.' one hour-MOT voice get.lost:>1s:PT.PFV

At this point, the hybrid class of verbs comes into play. These verbs are compatible with both kinds of adverbials, thus combining the positive values of the activity and gradually terminative verbs while being distinct from both classes.

(41) a saati o-şkomu 'He ate it for one hour.' one hour FOC-eat:(3>3)s:PT.PFV

(42) a saati-şa o-şKomu 'He ate it (up) in one hour.' one hour-MOT FOC-eat:(3>3)s:PT.PFV

Note that this behavior is independent of the presence of an explicit object. Let us see now if the corresponding imperfective forms confirm the findings with respect to different actionality classes.

3.3 Present tense senses

Of the possible senses of the Laz present, viz.

- (i) state of affairs existing or ongoing at the moment of speech,
- (ii) present habitual,
- (iii) universal (state of affairs always existing, e.g. the earth orbits around the sun),

(iv) performative (e.g. I declare this exhibition open), and

(v) prospective (something one is about to do),

all verbs share the present habitual and universal sense. Totally terminative verbs are the only class which cannot have the "existing" or "ongoing" sense in an affirmative form.

(43) yoxo muşi ko=mşun 'I know his name.' TSTA name POSS:3s FOC=remember:>1s:PRES

(44) mamşkorinen 'I am hungry now.' ISTA hungry:>1s:PRES

(45) bimpulam 'I am hiding.' INCO

(46) biçalişam 'I am working.' ACTI work:1s:PRES

(47) mçarum 'I am writing sth.' ACTI/GTER write:(1>3)s:PRES

(48) samduyi gomžum, xut kilidi-şi sumi gomži GTER chest open:(1>3)s:PRES five lock-GEN three open:(1>3)s:PT.PFV 'I am opening the chest, I have (already) opened three of the five locks.'

(49) bziram 'I (usually) find (what I lose).' TTER find:(1>3)s:PRES

As the translation in (49) indicates, the sense of the totally terminative verbs is habitual. The "ongoing" sense is possible in the corresponding negative form, however.

(50) va=bziram 'I cannot find it (right now).'
NEG=find:(1>3)s:PRES

In distinction to the other classes (of which there is a choice below), totally static and inceptively static verbs do not allow a prospective sense.

(51) mčarum 'I am about to write sth.' write:(1>3)s:PRES

(52) gomžum 'I am about to open sth.' open:(1>3)s:PRES

(53) ptvazum burst:1s:PRES

'I am going to burst.' (e.g. after eating a lot)

The present form of inchoative verbs (as well as all their imperfective forms) is characterized by its two possibilities of interpretation: either as the situation of bringing oneself into a position or as the situation of maintaining oneself in that position. For bimpulam 'I am hiding', for instance, these two interpretations are 'I am going into a hiding-place' and 'I am hidden'; for binciram, they are 'I am going to bed' and 'I am asleep'. One native speaker pointed out, however, that forms like dopxedur 'I am sitting down, sitting' and dobgutur 'I am stopping, staying', when used in the resultative sense, still imply the preceding situation change and are therefore employed only if the change is informative, e.g. when someone has moved and states her new situation. Thus, in most cases the simple (totally static) position verbs pxer 'I am seated', bdgur 'I stand' and mcar 'I sleep' are used.

3.4 Imperfective past senses

The imperfective past form of totally static verbs expresses a state which no longer holds.

(54) nçartu

hang.on.tree:3s:PT.IPFV

'[Leaves] were on the tree (but no longer are).'

For a state which began in the past and still continues, the "no longer" implicature has to be explicitly cancelled, for instance:

(55) aprili pavri ko=nçartu

huy-ti

April leaf

FOC=hang.on.tree:3s:PT.IPFV now-also

ko=nçay

FOC=hang.on.tree:3s:PRES

'In April leaves were on the tree, and they still are.'

The imperfective past form of inceptively static, inchoative, activity and hybrid verbs occurs in the incidency constellation of states of affairs for actions forming the background against which another action/event takes place:

(56) nelšna goinžu-si

golobionamti

door open(MID):3s:PT.PFV-SUB read:(1>3)s:PT.IPFV

'When the door opened I was reading.'

Inchoative verbs allow the characteristic double interpretation:

(57) bimpulamti nekna irau hide:1s:PT.IPFV door knock(MID):3s:PT.PFV 'I was hiding when there was a knock on the door.'

With gradually terminative verbs, the imperfective form reads as conative or prospective (as in the present), i.e. it denotes a phase which precedes and implies a situation change, even though this change does not necessarily have to take place.

- (58) gomžumti 'I tried to open it (but it would not open).' open:(1>3)s:PT.IPFV
- (59) yururtu 'He was about to die.' die:3s:PT.IPFV

Example (58) can mean 'I was going to open the door', 'I was opening the door (by pressing the handle)', or 'I was trying to open the door (but it would not open)'.

Finally, the imperfective past form of totally terminative verbs has an iterative meaning, as is expected of verbs which do not have extension in time as part of their lexical meaning. Such a phase is "smuggled in" by multiplying the single events over time. So in the example below it is expressed that somebody lost her voice time and again over a certain time span, not that the voice was gone for the whole period of time.

(60) nena gomandinertu 'I kept losing my voice.' voice get.lost:>1s:PT.IPFV

Turning to temporal adverbials again, totally static (as in (61)), inceptively static, inchoative, activity and hybrid verbs (as in (62)) are compatible with an adverbial of duration in their imperfective past form.

- (61) cu ndya mcarti 'I was confined to my bed for two days.' two day sleep:1s:PT.IPFV
- (62) cu saati golobionamti 'I used to read for two hours.' (e.g. a day) two hour read:(1>3)s:PT.IPFV

The dynamic verbs have a habitual sense in this case. A combination with an adverbial of duration is possible for gradually terminative verbs only if they are read as conatives or habituals.

(63) a saati boyurinamti 'I tried to kill him for one hour.' one hour kill:(1>3)s:PT.IPFV

If totally terminative verbs occur in the context of adverbials of duration, they are read as iteratives.

(64) cu xafta boyne lastriyi tvazurtu two week always tire burst:3s:PT.IPFV 'For two weeks my tires kept bursting.'

Imperfective past forms were not accepted with adverbials of delimited time span. The only possible interpretation of such a construction the native speaker could think of in a suitable context was 'sb. was V-ing up until x time ago'.

3.5 Inconsistency tests

Besides testing compatibilities with different adverbials, tests which set a perfective and an imperfective form of one and the same verb into a certain relation to find out if a consistent expression results are used in the classification of aktionsarten.

Activities and gradually terminative verbs are distinguished by the interruption test. Imagine somebody is reading something, like in (65):

(65) golobionam 'I am reading.' read:(1>3)s:PRES

and is interrupted (by a phone call, for example). This person can tell the caller

(66) golobioni 'I read.' (= 'I have already read sth.') read:(1>3)s:PT.PFV

In other words, even if the action is interrupted at a given point and not completed, its right boundary has already been transgressed by just stopping halfway. This behavior is typical of all activity verbs, as well as of the Laz hybrid verbs, as the example shows. Gradually terminative verbs, on the other hand, show the opposite results. When the action of opening a door as in (67)

(67) gomžum 'I am going to open it.' open:(1>3)s:PRES

is interrupted halfway (and not brought to its end) the right boundary has not yet been transgressed, which is evident from the clause

(68) *gomži 'I opened it (and it is open).' open:(1>3)s:PT.PFV

being ungrammatical as a response. The adequate answer is

(69) va=gomži 'I did not open it.' NEG=open:(1>3)s:PT.PFV

as the door is not yet open. Boundary transgression takes place only upon successfully completing the action. Another test on gradually terminative verbs is based on the prestadial reading of the imperfective form (no-transgression (of final boundary) test):

(70) yururtu do va=yuru 'He was dying, but did not die.' die:3s:PT.IPFV and NEG=die:3s:PT.PFV

Such a statement is impossible with an activity, inceptively static or totally static verb in Laz, but acceptable for inchoative and totally terminative verbs.

(71) doguturtu do va=dogutu 'He was stopping, but did not stop.' stop:3s:PT.IPFV and NEG=stop:3s:PT.PFV

In order to delimit inceptively static and inchoative verbs from other verbs, the following continuation test can be employed:

- (72) mamşkorinu, xolo mamşkorinen hungry:>1s:PT.PFV still/again hungry:>1s:PRES 'I got hungry, and I am still hungry.'
- (73) bimpuli xolo bimpulam hide:1s:PT.PFV still/again hide:1s:PRES 'I hid, and I am still hiding.'

With verbs of other aktionsarten, this construction is interpreted as referring to two unconnected events, with *xolo* reading as 'again'.

(74) gvoçondru, xolo gvoçondrun forget:>3s:PT.PFV still/again forget:>3s:PRES 'He forgot it, and he forgets it again and again [although I remind him continually].'

As a counter-check, the native speaker was asked to finish a sentence like [V(perfective past) *şukule* ...]. The spontaneous responses to sentences with inchoative verbs were for instance

- (75) bimpuli şukule Ali va=mziru hide:1s:PT.PFV after A. NEG=see:(3>1)s:PT.PFV 'After I hid, Ali did not see me.'
- (76) binciri şukule ezmoce bziri go.sleep:1s:PT.PFV after dream find:(1>3)s:PT.PFV 'After falling asleep, I had a dream.'

These answers clearly show that the interpretation of the perfective past form which first came to mind was that the person is still hidden/asleep, and not that the hiding/sleeping event is completed. In order to see if the latter (sequential) interpretation is possible as well, I construed suitable sentences which were accepted by the native speaker after adding some context, e.g.

- (77) oxori cu saati bimpuli şukule gale gamafti house two hour hide:1s:PT.PFV after outside exit:1s:PT.PFV 'After hiding in the house for two hours, I went outside.'
- (78) Ali-şi oxori cu xafta dobguti şukule bigzali A.-GEN house two week stop:1s:PT.PFV after depart:1s:PT.PFV 'After staying at Ali's for two weeks, I left.'

Finally, it was difficult to obtain neat results from testing phasal verbs. Phasal verbs are construed with the verbal noun, and verbs formed from one and the same root have identical verbal noun forms but need not belong to the same aktionsart class, e.g. *maziren* 'I see sth.' (ACTI) and *bziram* 'I find sth.' (TTER) with verbal noun *oziru*.

3.6 Aktionsart class criteria

So in conclusion, the relevant parameters for the distinction of aktionsart verb classes are the senses of the opposed aspect forms in the past, the meaning of the present tense, the compatibility with adverbials of duration and delimited time span, and the results of the interruption test, the no-transgression test, and the continuation test. Tables 2, 3 and 4 below give an overview of the behavior of different verb classes according to these parameters:

TABLE 2: PERFECTIVE FORMS

	Sense of past tense Compatibility with		Compatibility with adverbial		
		adverbial of duration	of delimited time span		
TSTA	no perfective forms	not applicable	not applicable		
ISTA	result, sequential	o.k.	'at the end of x time'		
INCO	result, sequential	o.k.	impossible		
ACTI	sequential, result	o.k.	impossible		
ACTI/GTER	sequential, result	o.k.	o.k.		
GTER	result, sequential	impossible	o.k.		
TTER	sequential, result	impossible	'at the end of x time'		

TABLE 3: IMPERFECTIVE FORMS

	Sense of present tense	Sense of past tense	Compatibility with adverbial of duration
TSTA	existing state, habitual	state no longer existing	o.k.
ISTA	existing state, habitual	state, backgrounded in incidency	o.k.
INCO	ongoing, existing state, habitual, prospective	backgrounded in incidency, conative	o.k., habitual
ACTI	ongoing (progressive), habitual, prospective	backgrounded in incidency	o.k., habitual
ACTI/GTER	ongoing (progressive), habitual, prospective	backgrounded in incidency	o.k., habitual
GTER	ongoing (progressive), habitual, prospective	conative, prospective	o.k., conative, habitual
TTER	habitual, prospective, ongoing under negation	iterative	(iterative)

TABLE 4: INCONSISTENCY TESTS

	Interruption	No transgression	Continuation
TSTA	not applicable	not applicable	not applicable
ISTA	transgression of initial	impossible	o.k.
	boundary		
INCO	ambiguous	o.k.	o.k.
ACTI	transgression of final	impossible	(different events)
	boundary	_	
ACTI/GTER	transgression of final	o.k.	(different events)
	boundary		
GTER	no transgression of final	o.k.	(different events)
	boundary		
TTER	not applicable	o.k.	(different events)

The existence of the hybrid class of verbs is confirmed by the inconsistency tests. In the interruption test, these verbs behave like activities, in the notransgression test, like gradually terminative verbs. We therefore chose to set up a separate class for these verbs instead of classifying them as either activities or gradually terminative verbs.

On the whole, applying the aspect model of Breu (1994, 1996, 1997) and Sasse (1991a, b) has turned out to be rewarding for Laz.

Two further complications of this system remain to be examined, which center around the perfect on the one hand and a mysterious morpheme represented by a proclitic and three preverbs on the other. As the former is based on a premise of the latter we will proceed with the proclitics and preverbs.

4 Proclitics and preverbs in Laz

In the Laz verb template (see (4)) there are two slots to the left of the personal prefix, one for proclitics and one for preverbs.

Laz has three proclitics which are mutually exclusive in the proclitic slot: negation var = va =, prohibitive mot = va =, and ko = va =, the function of which will be discussed below. The former two are illustrated in (79):

(79) a. va=mebuucamti 'I was not listening to them.'

NEG=listen.to:(1>3)s:PT.IPFV
b. mot=ulur 'Don't go.'

PROH-go:2s:PRES

The proclitic character of the elements was concluded from the facts that they (i) occur as free particles and (ii) coalesce with a verb as its outermost element to form one accentual unit. To a question 'did you do anything?' the answer can be *var* 'no'. A negative question or statement (e.g. 'you did not do anything') can be relegated by

(80) ko, do-biçalişi 'Oh yes, I did work.' oh.ves FOC-work:1s:PT.PFV

The proclitic ko= is affirmative and rejects a negation, corresponding to German doch or French si.

Laz disposes of a large set of preverbs which mostly encode local relations. They are independent of the proclitics and follow them in a given verb form. The preverbs are reminiscent of German or Russian preverbs and are generally semantically transparent. They are monosyllabic or bisyllabic in form and mutually exclusive in their preverb slot:

```
(81) e-
             'up'
                                                'onto'
                                        ee-
     ele-
            'sideways upward'
                                        eske-
                                                'inside up'
     ce-
            'down (on)'
                                        cele-
                                                'downward'
     dolo-
            'inside down'
                                                'into'
                                        amo-
     gamo- 'out of'
                                                'around'
                                        go-
            'on'
     goo-
                                        golo-
                                                'over (to) there'
            'hither'
     mo-
                                        molo- 'over (to) here'
            'thither'
     me-
                                        meo-
                                                'over, above'
    meşke-'inside through'
                                        eže-
                                                'under'
     eke-
            'behind'
                                        oko-
                                                'asunder, together'
     oxo-
            (opaque)
                                        Kosko- 'heap-wise'
```

These lexical preverbs combine with verbs and modify their meaning. In some cases, preverb and verb form a very tight unit such that the semantic contribution of the preverb is no longer transparent. This concerns verbs with the preverbs *me*- 'thither' (which is transparent e.g. in *mebulur* 'I go thither'), *oxo*- and *do*-, the basic meaning of which is totally obscured synchronically, e.g. in

```
(82) mebugnam
                   'I know a lot about sth.' (*bugnam; bognam 'I hear sth.')
    mebisinapamt 'we are having a small talk' (bisinapam 'I talk')
    dopxedur
                   'I sit down'
                                         (*pxedur; pxer 'I sit')
    dopkaçum
                   'I hold on to sth.'
                                         (*pkaçum)
    dopskudur
                   'I stay'
                                         (pskudur 'I live')
    oxobožonam
                   'I understand sth.'
                                         (*božonam; mažonen 'I weigh sth.')
    oxobuşkum
                   'I let sth. go'
                                         (*buşkum; boşkum 'I send sb.')
```

The most similar verb formed from the same root has been given in parentheses. As the starred forms indicate, in some cases a corresponding plain verb does not exist. The preverb must therefore be considered an integral part of the verb.

There are three grammatical preverbs (i.e. morphemes in the preverb slot which are mutually exclusive with other preverbs) which do not modify the verbal meaning at all, do not possess any transparent semantic meaning, and obligatorily occur on the verb in certain grammatical contexts (while not being lexicalized forms). They are the preverbs do- ($\sim dv$ - $\sim d$ -), mende- ($\sim mendv$ - $\sim menda$ -), and o-. Note that do- and its allomorphs are identical in form to the integral (lexicalized) preverb do-, but distinct in distribution and function.

These three grammatical preverbs stand in complementary distribution to the proclitic ko= while occurring in exactly the same contexts as ko=. Every Laz verb combines with only one of the four elements, the assignment being lexically conditioned. All verbs whose preverb slot is already filled cannot take

another (grammatical) preverb (as there is only one preverb slot), and instead take ko=.

```
(83) bulur 'I go': menda-fti 'I went' (past perfective + preverb)
mo-bulur 'I come': ko=mo-fti 'I came' (past perfective + proclitic)
(preverb mo- 'hither')
me-bulur 'I go there': ko=me-fti 'I went there' (past perfective + proclitic)

ko=me-fti 'I went' (past perfective + proclitic)
```

The difference between the lexical and the grammatical preverbs do- becomes obvious from the compatibility with ko=. Verbs with lexical do- take ko=, like all other verbs with preverbs, which is impossible for grammatical do- taking verbs, compare:

```
(84) 'hold on to' *pkaçum, dopkaçum, ko=dopkaçum, *kopkaçum, *dodopkaçum 'work' *biçalişam, do-biçalişam, *ko=dobiçalişam, *kobiçalişam
```

There are, in addition, preverbless verbs which nevertheless take ko = (under exclusion of other grammatical preverbs):

```
(85) bore
               'I am'
                                                            'I feed sb.'
                                                  pçam
    miskun
               'I know'
                                                            'I fill sth. up'
                                                  bopşam
    mşun
               'I remember'
                                                  miyun
                                                            'I have sth. [inan.]'
    baknam
               'I grasp sth.'
                                                  mionun
                                                            'I have sth. [anim.]'
              'sth. seizes me' (e.g. illness)
    maknen
                                                  maziren
                                                            'I see sth.'
    božiram
              'I show sth.'
                                                            'I find sth.'
                                                  bziram
    božer
               'I look at sth.'
```

Most verbs without a lexical preverb, however, take the grammatical preverb do-.

```
(86) biçalişam
                 'I work'
                                                 bier
                                                           'I become'
    bimpulam
                 'I hide'
                                                 bimçir
                                                           'I swim'
                 'I hide sth.'
    bompulam
                                                 byurur
                                                           'I die'
    bigzalam
                 'I depart'
                                                 mčarum 'I write sth.'
                                                 pskorum 'I cut sth.'
    binciram
                 'I go to bed, fall asleep'
```

If preverbless, directed motion and transfer verbs take the preverb mende-.

```
(87) bulur 'I go' boşkum 'I send sb. [anim.]' bionam 'I lead sb. [anim.] there' buyam 'I take sth. [inan.] there' buyam 'I take sth. [inan.] to sb.'
```

Preverbless consumption verbs formed from the roots for 'eat', 'drink', 'graze', 'burn', and 'catch' take o-:

(88) bimxor'I eat sth.' bičver 'I burn' mcuy '[animal] grazes' pčopum 'I catch sth.'

Finally, there are verbs which are not compatible with any of the grammatical preverbs nor with the proclitic, e.g.

(89) cemkolum 'I close sth.' mazunen 'I feel pain' bodum 'I close my eyes' mačven 'sth. hurts (me)' gomžum 'I open sth.' gomočondrun 'I forget sth.'

From further testing the compatibilities, we learn that ko= and the three grammatical preverbs are mutually exclusive not only among each other but also mutually exclusive with the negation proclitic var= and with the preverbal particle na which marks complement and attributive clauses, as in (90) and (91).

- (90) Ali para na ziru do-mižu

 A. money NML find:(3>3)s:PT.PFV FOC-tell:(3>1)s:PT.PFV 'Ali told me he had found money.'
- (91) para oxori na on cuma mepçi money house NML be:3s:PRES brother give:(1>3)s:PT.PFV 'I gave my brother, who is at home, the money.'

This means that ko=, do-, mende-, and o- do not occur under negation and in complement and attributive clauses. The restriction concerning negation becomes evident from the comparison of an affirmative and a corresponding negative experiential in the example below:

- (92) ma zuya do-bimçiri 'I have swum in the sea before.' 1s sea FOC-swim:1s:PT.PFV
- (93) hiçi zuya va=bimçiri 'I have never swum in the sea.' never sea NEG=swim:1s:PT.PFV

What is the function of the proclitic ko= and the three grammatical preverbs? A first conjecture, with the Georgian situation in mind, might be that the function is an additional marking of perfective forms, as this is what the

¹ domačven is lexicalized as 'it burns on me'.

Georgian cognate da- (of do-) does (see Aronson 1991). This supposition is not borne out, however, since the Laz elements in question turn up with all tenseaspect and mood-aspect forms, including imperfective ones. The only regular and predictable co-occurrence restrictions which emerged from the examination of vast spontaneous discourse material are

- (i) ongoing, performative, and universal readings of the present form are never marked by *ko*= or a grammatical preverb;
- (ii) a conative reading of an imperfective form is not possible for a marked form;
- (iii) with ko= or one of the grammatical preverbs, a present form constitutes a "historical" present, used instead of a past perfective:
- (94) Ferat dayi a ndγa balkoni ko=celapxer ya Ardeşen ... F. uncle one day balcony FOC=sit.on:3s:PRES say A. 'Uncle Ferat said: "One day I was sitting on the balcony in Ardeşen ..."'
- (iv) a perfective form intended to indicate a current relevance of a past event or an experiential is always marked (see section 5).

These observations suggest examining whether the proclitic ko= and the preverbs do-, mende-, and o- constitute boundedness or telicity markers supplementing the inflectional aspect system, similar to the Bulgarian case (cf. Lindstedt 1985). A comparison of the distribution of forms and of the contexts in both languages does not show convincing parallels, however. The two sentences below, adapted from their original versions (see Breu 1994:37-38) into Laz, serve as examples for critical uses, where telicity and aspect value in Bulgarian do not match. The first one is a sample of habituality of sequential actions, where Bulgarian employs a "perfective Imperfect", i.e. an imperfective inflectional form of a telicized verb. The second one illustrates a temporally extended (durative) situation presented as one item in a sequence of events, a context for the Bulgarian "imperfective Aorist", i.e. the inflectional perfective form of a non-telicized verb.

- (95) idu moxtu, idu moxtu go:3s:PT.PFV come:3s:PT.PFV go:3s:PT.PFV come:3s:PT.PFV 'Again and again he came and went.'
- (96) yoma si akṣami-ṣa ggori bigzali yesterday 2s evening-MOT look.for:(1>2)s:PT.PFV depart:1s:PT.PFV 'I looked for you all day yesterday, then left.'

Laz uses perfective forms without proclitic/preverb in both cases. If the proclitic/preverb were a telicity marker, analogous to Bulgarian preverbs, it should be present in the first sentence. Besides, past perfective forms marked

with the proclitic or grammatical preverbs do not turn up as frequently in the Laz texts as the Bulgarian "perfective aorist" forms (i.e. past perfective inflectional forms with telicizing preverb; cf. Lindtstedt 1985).

Also, ko= and the grammatical preverbs are independent of the verbal aktionsart class of a verb, as is evident from the lists above. This amounts to concluding that ko=, do-, mende-, and o- are not redundant markers of tense/aspect or aktionsart, but have a function of their own.

4.1 Status of the object

Still searching within the realm of aspect, it is known from Hopper & Thompson (1980:252pp) that the status of an object can play an important role in telicity and aspect systems. In section 1, we saw that the tense/aspect ergativity split common to Kartvelian languages is not found in Ardesen Laz. Tests showed that animacy and number are not relevant for *ko/do/mende/o-marking*, but the presence of a nominal object and its referential status interact to some degree with the mysterious category. As the contrasted examples (97 a : b) prove, the object is definite in the context of a marked form:

```
(97) a. mektubi nčaru 'S/he wrote a letter/letters.'
letter write:(3>3)s:PT.PFV
b. mektubi do-nčaru 'S/he wrote the letter.'
letter FOC-write:(3>3)s:PT.PFV
```

The marked verb form occurs both with and without a nominal object, but the unmarked one is considered somehow incomplete without an overt object by native speakers.

```
(98) mutu mişkun, ko=mişkun 'I know what I know.' something know:>1s:PRES FOC=know:>1s:PRES
```

If the category in question had an aspectual function we would expect (according to Hopper & Thompson (1980) and Sasse (1991b:30, 21)) the presence of the transitive object and telicity or perfectivity, and the absence of the object and atelicity or imperfectivity of the verb to correlate, which is obviously not the case.

4.2 Focus

Instead, native speakers agree that the complement to the left of the unmarked form is the central element of interest. A clause like

```
(99) ar oxorza maziru 'I saw a woman.' one woman see:>1:PT.PFV
```

implies that one unexpectedly saw a woman and had rather expected something else. This effect seems to be the result of highlighting or contrasting, i.e. of focus. Compare two further examples:

- (100) ar oxori miyun 'I have (only) one house (that's all).' one house have[inan.]:>1s:PRES
- (101) a bere mionun 'I have (only) a child (and nobody else).' one child have[anim.]:>1s:PRES

Indeed, not only patients but all kinds of participants can stand in the position directly left of the predicate and be focused, i.e. word order is determined by information structure. This principle is illustrated below for negation focus and contrastive focus.

- (102) a. çitabi cuma şkimi va=mepçi,
 book brother POSS:1s NEG=give:(1>3)s:PT.PFV
 Ali mepçi
 A. give:(1>3)s:PT.PFV
 'I did not give the book to my brother, but to Ali'
 - b. cuma şkimi çitabi va=mepçi, gazete mepçi brother POSS:1s book newspaper 'I did not give my brother a book, but a newspaper.'

In a parallel way, verb-adjacent adverbials or copredicates (see also section 5) are focused.

(103) ma yoma va=mofti, handya mofti
1s yesterday NEG=come:1s:PT.PFV today come:1s:PT.PFV
'I did not come yesterday but today.'

Now, in search of a corroboration for the hypothesis that the proclitic ko= and the grammatical preverbs interact with focus, we found that in the focal position, a noun phrase very often contains the numeral ar 'one', a halfway grammaticalized indefiniteness marker. Without that marker, a noun tends to be read as definite; and clauses without ar 'one' before the verb-adjacent complement and without the proclitic/preverbs are rejected by native speakers out of context, as for example

(104) *oxorza maziru 'I saw the woman' woman see:>1s:PT.PFV

or are interpreted in a different way, for example

(105) oxori miyun 'I have something at home/in the house' house have[inan.]:>1s:PRES

with *oxori* as local adjunct (local adjuncts are not case marked) and not as object (*'I have the house'), or are somehow idiomatized: The clause *bere mionun* 'I have the child' and its preferred version

(106) žulu bere mionun 'I have the small child' little child have[anim.]:>1s:PRES

were considered to be a proper explanation for an early departure in the sense of "I must be off now, you know I have that small child (I must take care of)".

In the presence of the proclitic/grammatical preverbs there is no focusing effect on a complement. Compare examples corresponding to the ones above:

- (107) oxorza ko=maziru 'I actually saw the woman.' woman FOC=see:>1s:PT.PFV
- (108) oxori ko=miyun 'I own a/the house.' house FOC=have[inan.]:>1s:PRES
- (109) bere ko=mionun 'I am a mother/father.' child FOC=have[anim.]:>1s:PRES

On adding the numeral *ar* 'one', sentences such as the ones below introduce a syntactically referential participant about which one is going to give further information:

- (110) ar oxorza ko=maziru 'I saw a woman ...' one woman FOC=see:>1s:PT.PFV
- (111) ar oxori ko=miyun 'I have a house (but not a big one...)' one house FOC=have[inan.]:>1s:PRES
- (112) a bere ko=mionun 'I have one child ...' one child FOC=have[anim.]:>1s:PRES

These findings show that discourse, too, plays a role in the use of ko=/do-/mende-/o-.

The comparison of sentences with and without proclitic or grammatical preverbs leads to the conclusion that the elements in question signal that a (verb adjacent) complement (or copredicate or adverbial, for that matter, see (114)) is not in the focus position (which is in front of the verb), and put the focus on the verb itself. The following pairs of examples underline this. The first pair is

parallel to an example repeated in the discussion about thetic and categorical judgments (e.g. Sasse 1987:522):

```
(113) a. Ali yuru (thetic, whole clause in focus)
A. die:3s:PT.PFV
'Ali died (unexpectedly)!'
```

```
b. Ali do-yuru (categorical, Ali = established topic)
A. FOC-die:3s:PT.PFV
'Ali (finally) died.' (e.g. after a long-lasting serious illness)
```

Adverbials and copredicates are focused as well if left-adjacent to a preverbless or ko=-less verb. In example (114b) below, the child is expected to go to bed in the house up the hill (where (s)he lives) but does not do so.

```
(114) a. bere d-inciru 'The child went to bed (in the house),' child FOC-go.sleep:3s:PT.PFV
b. bere žale inciru 'The child went to bed down the hill.' child slope.down go.sleep:3s:PT.PFV
```

For the following two sentences, the native speaker's explanations as given in the translations are very good support for the hypothesis that ko= and the grammatical preverbs mark verb focus.

(115) a. cututa-şa golomaonu
two month-MOT read(POT):>1s:PT.PFV
'I read it in two months = It took me two months to read it.'

b. cututa-şa ko=golomaonu two month-MOT FOC=read(POT):>1s:PT.PFV 'It took me two months, but I managed to read it (to the end).'

Verb focus again leaves open the possibility for two structural types: the complement may belong fto the backgrounded part of a sentence, or the focus-marked verb is contrasted to some other state of affairs. A nice example underscoring this is

(116) a. para bziri
money find:(1>3)s:PT.PFV
'(Imagine,) I found MONEY!'

```
b. para ko=bziri
money FOC=find:(1>3)s:PT.PFV
(i) 'The money (we are/were talking about), I found it'
(ii) 'I FOUND the money'
```

This interpretation also holds in a more elaborate context. In the examples below, the first sentence (117) presupposes that the money had already been mentioned and focuses on its receipt. The second sentence (118) does not presuppose money (in the universe of the discourse situation). In both sentences, it is not *mutu* 'something' which is focused, but the act of buying.

- (117) para k=ečopa-si da muşi a money FOC=take.up:(3>3)s:OPT.PFV-SUBsister POSS:3s one mutu d-uindramtu something FOC-buy:(3>3)s:PT.IPFV 'Whenever he got the money he bought something for his sister.'
- (118) para ečopa-si da musi a money take.up:(3>3)s:OPT.PFV-SUB sister POSS:3s one mutu d-uindray sth. FOC-buy:(3>3)s:OPT.PFV 'If he really gets money (for something) he should buy something for his sister.'

For the time being, the focus approach seems to be the most rewarding of all possible solutions (that is why the gloss FOC has been chosen), which also covers the findings at the end of section 4 (tense/aspect interaction) and in 4.1 (definiteness).

5 Perfect and resultative in Ardesen Laz

5.1 Perfect

Ardeşen Laz does not have a separate morphological perfect category, as for example Georgian does. Searching from the functional perspective, a past action with relevance to the moment of speech and an experiential, two crosslinguistically occurring senses of a perfect category (cf. Bybee et al. 1994:62, 78), can indeed be expressed in Ardeşen Laz, namely by a past perfective form bearing the proclitic or appropriate grammatical preverb. Evidentiality can be encoded through the choice of complementizers, but plays a minor role in Ardeşen Laz.

Current relevance of a past action is exemplified below for verbs of the hybrid activity/gradually terminative class in (119) and in (120), where it

manifests itself in the form of a result, and for a totally terminative verb in (121):

- (119) cari o-pṣkomi 'I have already eaten.' bread FOC-eat:(1>3)s:PT.PFV
- (120) cari do-pčvi '(Look here,) I have baked bread.' bread FOC-bake:(1>3)s:PT.PFV
- (121)cemilu. para Koci sum memisveley. money drop:>1s:PT.PFV three help:(3>1)p:PT.PFV man ioxu: ko=bziri ar30 para one.of.them shout:3s:PT.PFV money FOC=find:(1>3)s:PT.PFV 'I dropped money. Three men helped me (look for it). (Then) one of them shouted: I found the money.'

Experiential is encoded in a formally identical way:

- (122) ma zuya do-bimçiri 'I have swum in the sea before.' 1s sea FOC-swim:1s:PT.PFV
- (123) Mutafi-șa menda-fti 'I have been to Mutafi' M.-MOT FOC-go:1s:PT.PFV

As the proclitic ko= and the grammatical preverbs are not compatible with the negation proclitic, negated currently relevant past action or experiential are not distinct from any other past perfective form (except for the presence of *hiçi* 'never'):

(124) hiçi zuya va=bimçiri 'I have never swum in the sea.' never sea NEG=swim:1s:PT.PFV

The functional domain of the perfect has no distinct morphological expression, thus a currently relevant past action and an experiential cannot be united into a category of their own, but share the form of other (non-perfect) past functions, including narrative and imperative forms². The situation is parallel to Latin and reminiscent of German, where past and perfect are expressed with one and the same paradigmatic form; in German, however, it is the former morphological perfect.

² The past perfective forms, with or without proclitic or grammatical preverb, are used as imperative forms.

5.2 Resultative

Laz has a subjective, an objective, and a secondary possessive resultative (in the sense of Nedjalkov & Jaxontov 1988:9, 25-26) all of which put contrastive focus on the extant situation of a participant. The resultative does not use the past perfective, but the (only) participle in Ardeşen Laz, formed with the suffix -eri, plus the verb bore 'I am' (subjective and objective resultatives) or miyun/mionun 'I have sth. [±animate]' (possessive resultative), and is much less common than the "perfect".

```
(125) a. PAST PERFECTIVE
```

(ma) çitabi golobioni 'I read the book.'
1s book read:(1>3)s:PT.PFV

b. "PERFECT" (PAST PERFECTIVE + PROCLITIC/PREVERB)

(ma) citabi ko=golobioni 'I have read the book.'

1s book FOC=read:(1>3)s:PT.PFV

c. SUBJECTIVE RESULTATIVE: PARTICIPLE + 'BE'

(ma) golaon-eri bore 'I am in the state of having read sth.'

1s read-PCPL be:1s:PRES (e.g. of what I was expected to read).

- d. OBJECTIVE RESULTATIVE: PARTICIPLE + 'BE'

 çitabi golaon-eri on 'The book is read.'

 book read-PCPL be:3s:PRES
- e. (SECONDARY) POSSESSIVE RESULTATIVE: PARTICIPLE + 'HAVE'
 (ma) çitabi golaon-eri miyun 'I have the book (as a) read (one).'
 1s book read-PCPL have[inan.]:>1s:PRES

The contrastive sense is very strong in sentences like:

(126) cari xen-eri miyun 'I have the food ready (lit. made).' bread make-PCPL have[inan.]:>1s:PRES

which is uttered in a situation where someone has previously announced that s/he was going to start cooking and the speaker stresses that s/he now has done the cooking. Furthermore, the copredicative participle is focused; note that, suitably, the predicate is never marked by ko=/do-/mende-/o-. The object, consequently, belongs to the backgrounded part of the sentence, as in the following sentence

(127) a şişe şarabi dolabi ompul-eri miyun one bottle wine cupboard hide-PCPL have[inan.]:>1s:PRES 'I have a bottle of wine hidden in my cupboard.'

which is appropriate in a situation where someone is offered some wine but declines ("no, thanks, I have a supply"), i.e. *şarabi* 'wine' is the topic.

Not all verbs in Laz can enter into resultative constructions, as is to be expected, and aktionsart plays its role therein. Totally static verbs do not have a participle form in the first place. Activity verbs form the participle, but it does not enter into the resultative construction but is used as a copredicate or attribute only.

(128) a. *ziʒin-eri bore
laugh-PCPL be:1s:PRES
b. ziʒin-eri mulun 'He comes, laughing.'
laugh-PCPL come:3s:PRES

Inceptively static (129) and inchoative verbs (130), verbs of the hybrid class as in (125c, d) and (131), gradually (132) and totally terminative verbs (133) form participles which enter into the different resultative constructions. Intransitive verbs, however, do not have objective resultatives.

- (129) orop-eri borti 'I was in love.'
- (130) a. bere ncir-eri on 'The child is asleep.'
 child go.sleep-PCPL be:3s:PRES
 b. bere ncir-eri mionun 'I have a child who is asleep.'
 child go.sleep-PCPL have[anim.]:>1s:PRES
- (131) cari čv-eri miyun 'I have the bread baked.' bread bake-PCPL have[inan.]:>1s:PRES
- (132) a. baba yur-eri on 'Father is dead.'

 father die-PCPL be:3s:PRES

 b. baba yur-eri mionun 'My father is dead.'

 father die-PCPL have[anim.]:>1s:PRES
- (133) a. lastriyi tvazin-eri on 'The tire is burst.'

 tire burst-PCPL be:3s:PRES
 b. lastriyi tvazin-eri miyun 'I have a flat burst.'

 tire burst-PCPL have[inan.]:>1s:PRES

Resultatives are not formed from activity and totally stative verbs, thus the hybrid class behaves like gradually terminative verbs in this respect.

In the resultative construction the participle stands to the left of the verb. The participle of all verbs is also used as an attribute before a noun: *tvazineri lastriyi* 'a burst tire'. Thus, there are separate constructions for resultatives, but not for perfect meaning in Ardeşen Laz.

6 Conclusion

Ardeşen Laz has a grammaticalized aspect opposition of imperfective and perfective forms which are distinguished in the past and future tense and in the optative and conditional mood. In distinction to Georgian and other Kartvelian languages and even Laz dialects, Ardeşen Laz does not have a tense/aspect ergativity split in the case frames of predicates and no inflectional perfect set, i.e. person marking on verbs and the construction of participant relations are constant throughout all tense-aspect and mood-aspect forms for a given verb.

The sense of an aspect form depends on the lexical semantics of a verb: on the basis of the aspect model by Breu (1994, 1996) and Sasse (Sasse 1991a, b), Ardeşen Laz has six of the possible seven aktionsart verb classes - totally static, inceptively static, inchoative, activity, gradually terminative, terminative - and an additional hybrid class. Totally static verbs are characterized by the absence of perfective forms and of the participle, by compatibility with adverbials of duration, incompatibility with adverbials of delimited time span, and the absence of prospective and conative senses. Inceptively static verb can be recognized using the continuation test (after having V-ed is still V-ing) and the no-transgression test (*was V-ing but did not V). They do not have a prospective reading of imperfective forms and are compatible with adverbials of duration. Conspicuously, they are all experiencer verbs in Laz. Inchoative verbs are identified by the two readings of their imperfective forms as prestadial (entering a position) and resultative (maintaining the position). They are compatible with adverbials of duration, but not with adverbials of delimited time span. Both the continuation and the no-transgression tests yield positive results. Activity verbs are delimited by their compatibility with adverbials of duration and incompatibility with adverbials of delimited time span, the impossibility of a resultative construction, and their transgression of the final boundary on interrupting the event. Other tests yield negative results. Gradually terminative verbs are compatible with adverbials of delimited time span, and incompatible with adverbials of duration; they can be interrupted but do not transgress their final boundary in that case. Totally terminative verbs are defined by their habitual or iterative sense of imperfective forms and incompatibility with adverbials of duration. Gradually and totally terminative verbs are compatible with

adverbials of duration in their imperfective forms only if they read as habitual or conative.

The hybrid class combines characteristics of activities and gradually terminative verbs. They are all (inherently) transitive verbs which are compatible with both adverbials of duration (like ACTI) and of delimited time span (like GTER) and enter into the resultative construction (like GTER). They have transgressed a boundary on interruption (partial performance, like ACTI), and final transgression (complete performance) can be cancelled (like GTER).

There is no separate morphological perfect category in Ardesen Laz, but currently relevant past action and experiential are expressed with a past perfective form marked with proclitic ko= or one of the grammatical preverbs do-, mende-, and o-. These are lexically conditioned allomorphs of a morpheme marking verb focus. Although do- is cognate to Georgian da-, the morpheme is not a redundant marking on perfective forms as it is in Georgian, but compatible with all TAM forms. Subjective and objective as well as possessive resultatives are encoded by the construction [participle -eri+ a form of bore 'I am' or miyun/mionun 'I have sth./sb.'], respectively.

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Mandarin Chinese -zhe

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1 Introduction

This paper attempts to give an account of the Mandarin Chinese (MC) morpheme -zhe, commonly labeled a "progressive" or "resultative", within the framework of some more recent developments in aspect theory (Sasse 1991, Johanson 2000). At the core of these works stands the concept of aspectual meaning as the result of an interaction between inherent verb semantics, i.e. actionality or "Aktionsart", and aspectual operators (the aspect morphemes in a narrow sense). In what follows, I will mainly adhere to Johanson's terminology, and for the sake of intelligibility I have included a list of his labels for the various actional categories below (cf. Johanson 2000:33).

Category	The actional content is conceptualized		
[+tf] finitransformative	 as implying final transformation 		
[+tf, +mom]	without a salient cursus	\otimes	
[+tf, -mom]	with a salient cursus	——⊗	
[+ti] initiotransformative	 as implying initial transformation 	⊗	
[-t, +dyn]	• without transformation, as dynamic	X	
[-t, -dyn]	• without transformation, as static	X	

In investigating -zhe, I will first address the question whether it is plausible to postulate classes of actionality in MC, and if so, which classes can be distinguished. This will be followed by a section on the occurrence of -zhe and restrictions thereof. I will then proceed to inquire into its function and argue that it is indeed both used as a progressive and a resultative, while the last chapter tries to give an explanation for the polyfunctionality of -zhe.

¹ I will use "viewpoint operators" and "aspectual operators" as synonyms.

2 Actionality in Mandarin Chinese

To my knowledge there are but a few papers which deal explicitly with actionality in MC. In what follows I will refer mainly to Tai (1984), Li (1989), and Smith (1990) and (1991). There seems to be agreement on the validity of Vendler's distinction between statives, activities, and achievements for MC on the level of verbal lexemes. These classes correspond to Johanson's (2000) categories [-t, -dyn], [-t, +dyn], and [+tf, +mom], respectively. However, none of the authors mentioned above reports testing for actionality independently of aspect. Li's only criterion for distinguishing "process verbs" (Vendler's activities) from statives is that the former "occur very naturally with the progressive marker zài" (1989:34). Of course, without independently determining the function of zài the test remains circular. Smith (1991), too, seems to attach great importance to the combinability with aspect morphemes for determining actional content, although she does mention other characteristics as well, such as the incompatibility of achievements with the construction huā 'spend' + expression of time. She gives as examples for stative verbs xiàng 'resemble', shǔyú 'belong to', cúnzài 'exist'; for activities zǒu 'go/walk', chàng 'sing', zhǎo 'look for'; achievements are exemplified by sǐ 'die', huí 'return', míngbai 'understand'. As far as accomplishments ([+tf, mom]) are concerned, Tai and Smith share the view that they are not valid as a lexical category. However. Tai addresses the question whether accomplishments can be identified in the form of 'resultative verb compounds' (RVC)² or on a phrasal level, similar to English run a mile, paint a picture, etc. Tests on the behavior of actional phrases with delimitative and durative expressions of time should reveal their actionality: activities are incompatible with the former, accomplishment with the latter. For an exemplary investigation into RVCs, Tai compares xué 'study' and xuéhuì 'learn' (from xué + huì 'be able to') to their English counterparts. As can be seen below, the same pattern emerges for MC (Tai 1984:291):

- (1) tā **xué-le** wǔ nián de zhōng-wén. s/he study-PFV five year ATTR Chinese-language 'S/he **has studied** Chinese for five years.'
- (2) *tā **xué-huì-le** wǔ nián de zhōng-wén. *'S/he **has learned** Chinese for five years.'

² RVC are verbal composites made up of two verbs (V_1 and V_2) with V_2 usually expressing a result of the action of V_1 , as in, e.g., $c\bar{a}g\bar{a}n$ 'to wipe dry' ($c\bar{a}$ 'to wipe' + $g\bar{a}n$ 'dry'), $g\check{a}izh\grave{e}ng$ 'to correct' ($g\check{a}i$ 'to alter' + $zh\grave{e}ng$ 'right, correct'), $zh\check{a}od\grave{a}o$ 'to find' ($zh\check{a}o$ 'to look for' + $d\grave{a}o$ 'to arrive at'). Cf. Bisang (1992).

- (3) *tā zài wǔ nián nèi **xué-le** zhōng-wén. s/he be (LOC) five year within study-PFV Chinese-language *'S/he **has studied** Chinese in five years.'
- (4) tā zài wǔ nián nèi **xué-huì-le** zhōng-wén. 'S/he **has learned** Chinese in five years.'
- (5) *tā huā-le wǔ nián cái **xué-le** zhōng-wén. s/he spend-PFV five year only.then study-PFV Chinese-language *'It took him/her five years **to study** Chinese.'
- (6) tā huā-le wǔ nián cái **xué-huì-le** zhōng-wén. 'It took him/her five years **to learn** Chinese.'
- (4) and (6) indeed seem to express that the process of learning took five years, which rules out understanding *xuéhuì* as punctual. This would prove that MC does have [+tf, -mom] actional phrases. Tai draws the same conclusion, although with the reservation that

[w]hile an accomplishment verb in English has both action and result aspects, a resultative verb compound in Chinese has only the result aspect. (Tai 1984:292)³

He bases his opinion on the fact that $xu\acute{e}hu\grave{i}$, as opposed to $xu\acute{e}$, cannot occur in combination with the progressive $z\grave{a}i$:

(7) *wǒ zài xuéhuì zhōng-wén. 'I am learning Chinese.'

Again, the test with *zài* remains invalid unless its function has been established without recourse to the type of verbs it occurs with. Moreover, tests with the progressive might be altogether unsuitable to ascertain actionality differences. Even in English it seems that the compatibility of a verb with the progressive doesn't depend on its actionality alone, cf.

(8) a. I was reading a book, when you came in. b. ??I was learning Chinese, when you came in.

Although both 'read a book' and 'learn Chinese' are accomplishments, they behave differently with respect to the progressive. Given this, it appears reasonable to assume [+tf, -mom] actional phrases in the form of RVCs for MC. Since they point to the result of an action they can be expected to be telic.

³ By 'aspect' Tai obviously refers to something close to what is termed here 'actionality'.

In fact, I believe V_2 can be analyzed as a telicity marker conveying more detailed lexical information. In my judgement this is the case with all the RVCs listed in Bisang (1992).

Answering the question whether verb-object phrases represent accomplishments is more difficult. Tai examines which reading results from the application of perfective *-le* on phrases like *huà yì zhāng huà* 'paint a picture':

(9) wǒ zuótiān huà-le yì zhāng huà, kěshì méi huà-wán. I yesterday paint-PFV one CL painting but NEG paint-finish ?'I painted a picture yesterday but I didn't finish it.'

According to Tai, the grammaticality of (9), where *méi huà-wán* expresses incompletion and *-le* therefore cannot imply attainment of a final limit, indicates that *huà yì zhāng huà*, unlike *paint a picture*, is not an accomplishment. Conversely, Li (1989:31) reports that the speakers he consulted clearly rejected this sentence. I conclude from this that the matter remains controversial and awaits further clarification.

One class of verbs which none of the authors mentioned above argues for, but for which there is strong evidence is [+ti]. Ebert (1995:188) remarks that the conflation of a transformation and the following situation into a single lexeme is very common. In these cases a resultative may be used to refer to the (static) situation. Frequently this holds for concepts like 'sit down/sit', 'lie down/lie', 'put on/wear', 'take/hold', etc. in MC zuò, tăng, chuān, ná. Jaxontov (1988:119) makes a similar statement regarding zuò and tăng: "the same root may denote both a state and the preceding change of state."

Although a thorough investigation remains to be conducted, the few tests in Tai (1984) and Smith (1991) indicate that it is not unreasonable to postulate different actionality classes in MC. Sasse (1991) and Li (1991b) both claim that Chinese verbs are 'polyactional', i.e. their actional content is indeterminable. Therefore it is unnecessary to assume actionality classes in MC. In my opinion this point of view is unjustified.

3 Where -zhe occurs

3.1 Verbs which combine with -zhe

With regard to determining the aspectual meaning of -zhe an account of the actional content of verbs would, of course, be most welcome. Since, as I have mentioned before, no details were found in the literature, I will confine myself to listing some representative examples for the kinds of verbs which allow the combination with -zhe, as long as they can be grouped on rough semantic criteria. However, it remains to be seen whether any general semantic criteria can be determined to allow or prohibit the combination with -zhe. This section relies essentially on Ma (1985) and Jaxontov (1988).

- I. Verbs meaning 'to hold' or 'to wear', e.g.: ná 'take/hold', bào 'hold in one's arms', tí 'hold by the handle', bēi 'carry on one's back', etc.; chuān (dàyī) 'put on/wear (a coat)', dài (màozi) 'put on (a hat)', pī (dàyī) 'throw (a coat) over one's shoulder', shū (biànzi) 'have the hair plaited' (lit. 'combed in a plait'), liú (húzi) 'grow a beard', etc.
- (10) tā bào-zhe háizi. s/he hold-ZHE child 'S/he is holding a child in her/his arms.'
- (11) lǎotóur liú-zhe bái húzi. old.man grow-zhe white beard 'The old man has a white beard.'
- II. Posture verbs and verbs expressing the state of a part of one's body, e.g.: $zu\dot{o}$ 'sit down/sit', $zh\dot{a}n$ 'stand', $t\check{a}ng$ 'lie down/lie', $gu\dot{a}$ 'kneel', $d\bar{u}n$, 'crouch', $k\grave{a}o$ 'lean on', $zh\dot{u}$ 'live, reside', etc.; $b\grave{i}$ ($y\check{a}njing$) 'close (one's eyes)', $zh\bar{a}ng$ ($zu\check{i}$) 'have (the mouth) open', $zh\dot{o}u$ ($m\acute{e}i$) 'frown', \grave{e} ($d\grave{u}zi$) 'be hungry' (lit. 'have a hungry belly') etc.
- (12) mén wài zhàn-zhe sān ge rén.
 door outside stand-ZHE three CL man
 'Outside the door there are three men standing.' (Jaxontov 1988:118)
- (13) dàye háishi nàme dūn-zhe.

 uncle still this.way crouch-ZHE

 'Uncle was still squatting the same way as before.' (Jaxontov 1988:120)
- (14) zhèi tǔménlóu lǐ zhù-zhe ge guānggūnr lǎohàn, ... this gate in live-ZHE CL bachelor old.man 'Behind this gate lived an old bachelor, ...' (ZGTH, 5)

- (15) tā yǎnjing bì-zhe. s/he eyes close-ZHE 'S/he has his/her eyes closed.' (Li & Cheng 1993:442)
- (16) fūqī liǎng kǒu shícháng è-zhe dùzi. husband.and.wife two CL often hungry-ZHE belly 'Husband and wife were often hungry.' (ZGTH, 197)
- III. Verbs of placement and verbs with the meaning of immobilization or attachment, e.g.: fàng 'put', guà 'hang', cún 'store', tíng (chē) 'park (a car)', bǎi 'put up', zhuāng 'install', duī 'pile up', zhòng 'plant, grow', bāo 'wrap', dǔ 'block up', gài 'cover (with a lid), yā 'press down', xiě 'write', huà 'paint', yìn 'print', etc.
- (17) zhuōzi shang fàng-zhe sān běn shū. table on put-ZHE three CL book 'Three books lie on the table.'
- (18) qián zài yínháng lǐ cún-zhe. money be (LOC) bank in store-ZHE 'The money is deposited in the bank.'
- (19) dòng-kǒu dǔ-zhe kuài dà shítou.

 cave-mouth block-ZHE CL large stone

 'The cave's entrance was barred by a large stone.' (Jaxontov 1988:121)
- (20) hēibǎn shang xiě-zhe jǐ ge zì. blackboard on write-ZHE some CL characters 'Some characters are written on the blackboard.'
- IV. Verbs of movement and weather verbs, e.g.: zǒu 'walk', pá 'climb, crawl', pǎo 'run', fēi 'fly', yóu 'swim', liú 'flow, drip'; guā (fēng) 'blow' (wind), xià yǔ/xià xuě 'rain/snow' (xià literally means 'come down')
- (21) mǎyǐ zài dì shang pá-zhe. ant be (LOC) ground on crawl-ZHE 'Ants are crawling on the ground.' (Ma 1985:25)
- (22) hěn duō rén zài jiē shang zǒu-zhe. very many people be (LOC) street on walk-zhe 'Many people are walking on the street.' (Ma 1985:25)

- (23) zhèi liǎng tiān yìzhí xià-zhe dà yǔ. this two day continuously come.down-ZHE big rain 'The last two days it has been pouring down without stopping.'
- V. Verbs denoting existence: yǒu 'have', cúnzài 'exist'
- (24) tā yǒu-zhe gāoguì de pǐnzhì. s/he have-ZHE noble ATTR character 'S/he has a noble character.' (Zhang & Xu 1985, cited in Li 1991a:254)
- (25)wùshí niándài chūqī zhèngzhì jīngjì děng fāngmiàn fifty decade beginning politics economy aspect etc. yě cúnzài-zhe bù shǎo wèntí. also exist-ZHE NEG few problem 'In the beginning of the fifties there were a lot of problems in the area of politics and economy, too.' (Li 1991a:254)

For the sake of completeness, I have included below several semantically diverse verbs to illustrate the range of applicability of -zhe: chàng 'sing', gōngzuò 'work', tǎolùn 'discuss', fēnxī 'analyze, dòuzhēng 'fight, kū 'cry', tīng 'hear, listen', diǎn 'light up', shēnghuó 'live, be alive', xī 'switch off, etc.

- (26) tā zhùyì de tīng-zhe jiàoshòu de huà. s/he pay.attention ADV listen-ZHE professor ATTR words 'Attentively s/he listened to the professor's words.' (Li & Cheng 1993:445)
- (27) tāmen wánqiáng de dòuzhēng-zhe, gōngzuò-zhe, they tenacious ADV fight-ZHE work-ZHE shēnghuó-zhe.

 be.alive-ZHE
 'Tenaciously they fight, work, and stay alive.' (Li 1991a:253)
- (28) wūzi lǐ xī-zhe dēng.
 room in switch.off-ZHE light
 'The light is switched off in the room.'

Besides this, -zhe forms idiomatic phrases with verbs like jiē 'connect, come into contact', sui 'follow', zhào 'reflect', shuō 'say', but also with yìwèi 'meaning, sense': jiē-zhe 'after', sui-zhe 'along with', zhào-zhe 'according to', shuō-zhe 'with this', yìwèi-zhe 'mean': 4

⁴ Sung (1984:90) analyses jiē, sui, and zhào, among others, as prepositions (cf. also Paris (1981:203, footnote 1)). At any rate their verbal character seems to be bleached in

- (29)... dùnshí guā-qǐ-le dà fēng, jiē-zhe immediately blow-V₂:get.up-PFV big wind after.that xià-qǐ-le dà yŭ, ... come.down-V₂: get.up-PFV big rain '... immediately a strong wind came up and shortly after it started pouring...' (Deng & Gu 1989:200)
- (30)suí-zhe zhōngguó zuljin ji nián de jīngjì follow-ZHE China nearest a.few economy year ATTR fāzhǎn ... development 'Along with China's economic development in the last few years ...'
- (31)shuō-zhe, liù ge rén hùxiāng kàn-le vì yǎn, ... say-ZHE, six CLpeople mutually look-PFV one eye 'With this the six of them glanced at each other ...' (ZGTH, 199)
- (32) zhèi yí shùzi yìwèi-zhe shēngchǎn tígāo-le liǎng bèi. this one figure mean-ZHE production raise-PFV two time 'This figure means a twofold increase in production.' (XHDCD, 966)

3.2 Semantic restrictions on the occurrence of -zhe

Zhang & Xu (1985) (cited in Li (1991a)) and Sung (1984) provide a list of verbs which do not allow the combination with -zhe. Sung (1984:91) notes that -zhe is not applicable to verbs "denoting a state themselves" as, e.g., pèifu 'admire', zhīdao 'know', fănduì 'object to', xiàng 'resemble', but he does not reveal on what criteria he assumes these to be statives. Incompatibility with -zhe also holds for a number of telic verbs, allegedly for the reason that they denote "a single or very short action", e.g., wàngjì 'forget', juédìng 'decide', xiāomiè 'eliminate', yíshī 'lose (sth.)'. It remains to be seen, however, whether xī 'put out', which is combinable with -zhe (cf. (28)), is conceptualized as lasting longer than xiāomiè etc. If this is not the case, other factors must be responsible for the applicability of -zhe.

According to Jaxontov (1988:116f.), telic verbs must meet two conditions for -zhe to occur with them: a) the state resulting from an action has to be "physical and the result easily observable", and b) the state must be temporary, i.e. reversible. This rules out verbs denoting the creation or destruction of an object such as huà 'melt', miè 'extinguish, destroy', shā 'kill', zhǔ 'cook', as well as verbs referring to psychological states/processes. Moreover, verbs denoting actions resulting in the presence of an object or in somebody's

possession of it do not combine with -zhe either, e.g., lái 'come', mài 'sell', gài 'build', zhuō 'catch'.

Quite remarkably, RVCs seem to be generally incompatible with -zhe, cf.:

- (33) a. tā shǒu lǐ ná-zhe yí běn shū. s/he hand in take/hold-ZHE one CL book 'S/he is holding a book in his/her hand.'
 - b. * $t\bar{a}$ shǒu lǐ ná-zhù-zhe yí běn shū. s/he hand in take/hold- V_2 :stop-ZHE one CL book 'S/he is holding tight a book in his/her hand.'
- (34) *hēibǎn shang xiě-chéng-zhe jǐ ge zì. blackboard on write-V₂:become-ZHE some CL character 'Some characters are written on the blackboard.' (but cf. (20))

Yeh (1993) presents an investigation into the semantic properties of statives in MC and their combinability with -zhe. Following Dowty (1979) and Chu (1983) he relies on three tests for determining a verb to be stative: it cannot occur with zài (the progressive)⁵, it can be modified by hěn 'very', and it is not felicitous with adverbs of control like gùyì de 'deliberately'. The agentivity test can, of course, only sort out statives among verbs which take animate participants. Yeh then distinguishes two groups according to the applicability of -zhe:⁶

A. compatible	with <i>-zhe</i> , e.g.:	B. incompatible	with -zhe, e.g.:
gāoxìng	'happy'	xiàng	'resemble'
bēishāng	'sad'	cōngming	'intelligent'
bìng	'ill'	shànliáng	'kind'
tòng	'hurt'	hàokè	'hospitable'
máng	'busy'	chéngshí	'honest'
è	'hungry'		
q i	'angry'		

(35) tā hái qì-zhe, nǐ bié qù fàn tā. s/he still angry-ZHE, you PROH go bother s/he 'He is still angry. Don't go and bother him.' (Yeh 1993:81)

⁵ As I have already mentioned above, without independently establishing $z \dot{a} i$ as a progressive, using it to determine the actionality of a verb remains circular.

⁶ I render here Yeh's list slightly modified. In group A he also includes *hàipà* 'be afraid of' which according to Sung (1984:91) does not occur with *-zhe*. In group B, on the other hand, one also finds *yŏu* 'have', but cf. (24).

- (36) shāngkǒu réng tòng-zhe, yěxǔ fā yán-le.
 wound still hurt-zhe, maybe occur infection-PFV
 'The wound is still hurting; maybe it got infected.' (Yeh 1993:81)
- (37) *tā cōngming-zhe, tā zhīdao zěnme zǒu. s/he intelligent-zhe, s/he know how go 'S/he is intelligent, s/he knows the way.' (Yeh 1993:81)

Group A seems to comprise verbs denoting temporally limited properties whereas group B contains lexemes expressing permanent qualities. Following Carlson (1977), Yeh terms group A "stage-level predicates" and group B, "individual-level predicates". Stage-level predicates, as their name indicates, are characterized by relating to a spatially and temporally bounded stage of an individual. This accounts for their compatibility with expressions of time as opposed to individual-level predicates:

- (38) jīntiān zài xuéxiào, tā hěn gāoxìng. today be (LOC) school s/he very happy 'S/he was happy at school today.' (Yeh 1993:83)
- (39) ??jīntiān xiàwǔ, tā hěn xiàng tā māmā. today afternoon s/he very resemble s/he mother ??S/he resembled his/her mother this afternoon.

If one compares Yeh's characterization of group A as stage statives to Jaxontov's condition b), the similarity is striking. It seems then that the occurrence of *-zhe* crucially depends on a situation being conceptualized as temporally bounded. Supporting evidence for these findings comes from the fact that group B statives **can** combine with *-zhe* as long as they are taken to denote something temporary, as in:

(40) tā jīntiān kě chéngshí-zhe ne! s/he today EMPH honest-ZHE NE 'He is really honest today!' (Yeh 1993:94)

4 The function of -zhe

Before proceeding to the description of the aspectual function of -zhe I would like to point out two usages of this morpheme which are not the focus of this paper but which might be relevant in a wider discussion of -zhe.

On the one hand, *-zhe* can mark a subordinated predicate. In this case the situation described by this secondary predicate is seen as simultaneous or anterior to the situation portrayed by the verb in the main clause:⁷

- (41) tā kāi-zhe chuānghu chàng gē. s/he open-ZHE window sing song 'She sang while opening the window' / 'She sang with the window open.' (Chan 1980:67)
- (42) tā xié-zhe yǎn xiào-zhe kàn wǒ. s/he slant-ZHE eye smile-ZHE look I 'Smiling, s/he looked at me out of the corner of his/her eye.' (Li & Thompson 1981:224)

On the other hand, -zhe also occurs in combination with zài or zhèng, which are commonly analyzed as a progressive markers:⁸

(43) a. tā zhèng dǎ-zhe diànhuà ne. s/he right.now send-zhe telephone NE 'S/he is making a phone call.' (Li & Cheng 1993:442)

b. tā zài zhī-zhe máoyī ne. s/he be (LOC) knit-ZHE pullover NE 'S/he is knitting a pullover.' (Li & Cheng 1993:442)

4.1 -zhe as durative?

Several authors describe -zhe as a durative morpheme, e.g. Chan (1980), Li & Thompson (1981), Ma (1985), or Chu (1987). I would like to take a closer look at Ma's and Chu's analyses. They share a very similar view on the function of -zhe in assigning it the expression of "ongoingness of a situation" (Ma 1985:24). The exact meaning conveyed by -zhe, however, is seen as depending on the semantic content of the verb. Accordingly, the situation referred to can be dynamic or static. Ma distinguishes as relevant verb classes motion verbs, verbs of posture, and verbs of placement. A dynamic reading for -zhe results from the combination with a motion verb, whereas with the two other verb classes one gets a stative reading. Chu's classification differs slightly from Ma's. Besides verbs of posture and verbs of placement he posits the more

 $^{^{7}}$ For accounts on V_{1} -zhe V_{2} cf., among others, Li & Thompson (1981), Ma (1985), Chen (1987).

⁸ It is widely agreed upon that *zhèng* ('right, just now'), *zài* (introduces a locative expression), *zhèngzài*, and *ne* each alone or in combination mark the progressive (see, e.g., Li & Cheng 1993:432). Besides that, *ne* encodes emphasis or topic; Li & Thompson (1981) call *ne* 'Response to Expectation particle'.

general class of action verbs and also mentions statives. However, neither Ma nor Chu give any explicit criteria for assigning a verb to one class or another. I will discuss both analyses with regard to each verb class.

A. "Stative verbs"

Chu lists as "stative verbs" hǎo 'good', máng 'busy', duō 'a lot', rè 'hot'. They can combine with -zhe as in:

(44) zhèi ge duō-zhe ne! this CL a.lot-zhe NE 'There is an awful lot of this!' (Chu 1987:10)

However, he notes that "under normal circumstances, there is no need to additionally specify the durative aspect of a state verb, and thus -zhe doesn't occur with state verbs" (1987:10). Yet he does not make clear what he understands by "normal circumstances". When -zhe does occur with state verbs, he attributes a syntactic or pragmatic function of subordination/emphasis rather than an aspectual one to it.

B. Motion verbs / action verbs

As to motion verbs, the difference between the single verb form and verb + -zhe is that, according to Ma, using -zhe adds emphasis on the continuity of the dynamic process. Thus, both (45a) and (22), repeated here as (45b), are well-formed and refer to the same situation.

- (45) a. hěn duō rén zài jiē shang zǒu-Ø. very many people be (LOC) street on walk 'Many people are walking on the street.'
 - b. hěn duō rén zài jiē shang zǒu-zhe.

Chu basically agrees with Ma on the emphasizing role of *-zhe* in combination with this type of verbs and explains it as follows:

The occurrence of an action verb with *-zhe* in an utterance [...] provides a more natural environment for a durative aspect interpretation for the suffix than any other type of verbs can. That is, the *-zhe* attached to an action verb typically specifies that the duration of the action is the center of attention [...]. (Ma 1987:4)

⁹ Again, it remains to be seen whether these verbs behave like real statives in independent actionality tests.

C. Posture / placement verbs

As far as posture verbs and verbs of placement are concerned, in both Ma's and Chu's opinion *-zhe* specifies the stative meaning of the verb. Both kinds of verbs share the property of encompassing the initial action as well as the resulting state. Chu assumes that verbs of posture and verbs of placement are unspecified as to being active or stative, i.e. they are [-action, -state]. In order to disambiguate this potential double meaning a complement TAM marker is necessary:

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(46) a. tāmen zhàn-qǐlái (le).
they stand-V<sub>2</sub>:up PFV
'They are standing up (stood up).'(Chu 1987:6)
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b. tāmen zài ménkǒu zhàn-zhe. they be (LOC) door stand-ZHE 'They are standing at the door.' (Chu 1987:6)

Chu argues that V_2 $qil\acute{a}i$ in (46a) – which forms an RVC with $zh\grave{a}n$ – highlights the action-related meaning component of $zh\grave{a}n$, while reference to the static situation in (46b) takes place only by means of -zhe. Although he does not make it explicit, I take it from this argument that he assigns -zhe the property [+static]. But then this contradicts his statement that the combination of -zhe with an action verb should be more natural (s. above).

Ma also characterizes posture verbs as being able to refer either to the initial action or to the resulting state. As a durative marker, then, -zhe should in principle allow this ambiguity: "Since posture verbs involve both an action and the continuing state of that action, zhe theoretically could describe the durative nature of both the active and stative parts [...]" (Ma 1985:26). But she explains the suppression of this ambiguity with the very short extension in time of the dynamic situation: sitting down, for example, only requires a very small amount of time from the beginning to the end of the action and is therefore "not considered a process in the true sense" (Ma 1985:27). This suffices for her to determine that -zhe stresses the stative component. In my view, this argumentation is unsatisfactory for two reasons. First, conceptualization of situations into verb meaning does not depend directly on how much or how little time they encompass, i.e. Aktionsart is not a matter of duration in the real world. For example, while English die and MC si may be used to refer to the same event, they conceptualize it differently, independent of the actual duration of a particular situation: die is felicitous with delimitative expressions of time ('in x time'), i.e. it is [+tf, -mom], whereas $s\check{t}$, being [+tf, +mom], is not. Second, there actually seem to be verbs, although only very few, which in combination with -zhe can express both the action and the resulting state (two-phase verbs as described in chapter 1). chuān 'put on/wear'

has been mentioned above, and Smith (1991) claims zhòng 'plant/grow' to behave in the same way: 10

- (47) tā chuān-zhe dàyī.

 s/he put.on/wear-ZHE coat

 'S/he is putting on a coat/is wearing a coat.'
- (48) tián lǐ zhòng-zhe huār.

 field in plant-ZHE flowers

 'Flowers are planted in the ground'/'In the ground flowers are being planted.' (Smith 1991:362)

In the light of these examples, it is difficult to see how Ma's and Chu's notion of *-zhe* as highlighting the stative part of the verb meaning could be maintained.

From the point of view of a theory of aspect as it is used here, it remains unclear whether Ma and Chu consider -zhe to be an element modifying the actionality or a viewpoint operator. It is desirable to keep these two domains terminologically apart and I will refer to Comrie (1976) for this purpose. In his opinion durativity is a dimension of the lexical content, or "inherent meaning". He defines it as follows (1976:41): "[...] durativity simply refers to the fact that the given situation lasts for a certain period of time (or at least, is conceived of as lasting for a certain period of time) [...]". Thus it corresponds to Johanson's feature [-mom]. -zhe, however, can hardly be seen as transforming a [+mom] actional phrase into [-mom]. This becomes very clear when it combines with iterative phrases. A serial interpretation of several [+tf, +mom] events is a frequent way of actionality change from transformative to nontransformative, cf. Johanson (2000:36): "The actional content then no longer involves one single transformation, but recurrent transformations all through its duration [...]. Iteratives are normally nontransformative. [...] When [+tf, +mom] actional contents such as 'explode' are realized as [serial], they normally lose their transformativity." This is exactly the case in (49), where -zhe does not express any duration of the situation, but, quite to the contrary, it is only the conceptualization of the situation as [-mom] that allows the use of -zhe:

(49) a. *yì kē shǒuliúdàn bàozhà-zhe. one CL hand.grenade explode-ZHE 'A hand grenade exploded.'

¹⁰ However, my informant rejected the progressive reading in (48). Interestingly enough, 'put on/wear' seems to be equally ambiguous in Korean with *-ko iss-* (see Kim 1993) and in Japanese with *-te iru* (see Ebert 1995).

- b. shǒuliúdàn yì kē jiē yì kē de bàozhà-zhe. hand.grenade one CL join one CL ADV explode-ZHE 'The hand grenades exploded one after the other.'
- c. wúshù shǒuliúdàn bàozhà-zhe.
 countless hand.grenades explode-ZHE
 'Countless hand grenades exploded.' (Dai 1991:100)

The term "continuative", which is common mostly in the Chinese literature ("chixùti"), is not quite accurate either — provided that continuativity is taken to refer to a phase of an event ('go on x-ing'); as such, it is opposed to ingressivity ('start x-ing') and egressivity ('stop x-ing'). A continuative reading in this sense results for -zhe only from the combination with the imperative, but even then it is not compulsory:

- (50) a. nĭ chàng-zhe! you sing-zhe 'Keep singing!'
 - b. bì-zhe yănjing!
 close-ZHE eyes
 'Close your eyes!/Keep your eyes closed!' (Huang & Davis 1989:157)

Evidently, -zhe can neither be described as an element modifying actionality nor as expressing a phase of an event. Instead, I will argue that it fulfills the function of a viewpoint operator, presenting an action/process in its course. Several authors have termed it an "imperfective" (e.g., Smith (1991)) or a "progressive" (e.g., Wang (1992), Ebert (1995) (although she reckons it is primarily a resultative)). Imperfectivity as defined by Comrie (1976) also includes habituality, but -zhe is excluded from being used in habitual contexts, as exemplified by (51):

(51) *wǒ měi tiān xiàwǔ chàng-zhe gē.

I every day afternoon sing-ZHE song
'I sing every afternoon.'

Thus it seems appropriate to apply the term "progressive" to -zhe in spite of the existence of another progressive form, zài. I will discuss the differences between the two forms in Johanson's terms in chapter 5.

4.2 -zhe as a resultative

There is only one context in which *-zhe* is obligatory, namely if one wants to point to the posttransformative situation of posture verbs:

(52) a. tāmen zài ménkǒu zhàn-zhe/*zhàn-Ø. they be (LOC) door stand-ZHE 'They are standing at the door.' (Ma 1985:27)

b. jiē shang tíng-zhe/*tíng-Ø hěn duō qìchē. street on park-ZHE very many car 'There are many cars parked on the street.' (Ma 1985:31)

Given this, analyzing -zhe as a resultative seems quite natural. To my knowledge, Jaxontov (1988) was the first to present such an analysis, and I would like to take a closer look at his work.

Nedjalkov and Jaxontov's (1988:6) (henceforth N & J) definition of resultative is:

The term resultative is applied to those verb forms that express a state implying a previous event.

Resultatives differ from statives in that the latter pertain to a stative situation without implying a previous event. N & J categorize resultatives mainly from two points of view. On the one hand, three diathesis types are distinguished according to the semantic relationship between the clause with the "base verb", or "underlying clause", i.e. the clause expressing the event (e.g., "Susan has put on a hat"), and the sentence with the derived resultative form referring to the resulting state ("Susan has a hat on"). -zhe covers all three common types:

- SUBJECTIVE RESULTATIVE: the subject of the resultative sentence is coreferential with the underlying subject; this kind of resultative is typically derived from intransitive verbs, e.g., $t\bar{a}$ $zu\hat{o}$ $xi\hat{a}$ 'S/he is sitting down' $\rightarrow t\bar{a}$ $zu\hat{o}$ -zhe 'S/he is sitting'
- OBJECTIVE RESULTATIVE: the subject of the resultative sentence is coreferential with the underlying object, e.g., $t\bar{a}$ $k\bar{a}i$ $m\acute{e}n$ 'S/he is opening the door' \rightarrow $m\acute{e}n$ $k\bar{a}i$ -zhe 'The door is open'
- POSSESSIVE RESULTATIVE: the underlying object refers to a body part or possession of the underlying subject or to something in immediate contact with it; the underlying object remains an object in the resultative sentence and its subject is interpreted as a possessor or the like, e.g., wŏ dàishang-le màozi 'I have put on a hat' → wŏ dài-zhe màozi 'I have a hat on'

The second distinction is based on restrictions concerning the kinds of situations expressible by resultatives in a certain language. N & J differentiate the "specific resultative meaning" from the "general resultative meaning". The

specific resultative meaning is confined to denoting directly observable states only, i.e. forms corresponding to 'forgotten', 'lost', or 'eaten' etc. are excluded. Some specific resultatives are further restricted to a still narrower sense, namely to denoting temporary, i.e. reversible states. This prohibits forms like 'fried', 'built', 'broken' etc. The resultative in MC is essentially subject to these two conditions (cf. section 3.2.). Still, one does come across a few resultatives expressing irreversible states, e.g.:

- (53) liǎn shang zhǎng-zhe yì kē hēi zhì.

 face on grow-ZHE one CL black birthmark

 'S/he had a black birthmark in her/his face.' Dai (1991:104)
- (54) tā de yǎnjing yíxiàng xiā-zhe. s/he ATTR eye all.along blind-ZHE 'S/he is blind by birth.'

Besides this, -zhe also forms quasi-resultatives. These refer to states not resulting from a preceding action or process, e.g.:

(55) women de cunzhuang wei-zhe dà senlín. we ATTR village surround-zhe large forest 'Our village is surrounded by a large forest.'

5 -zhe as resultative and progressive

The previous section should have made clear that there are instances of *-zhe* which can be analyzed with good reason as progressive uses, but also others which are undeniably resultative. One could now try to determine which function is more basic. Instead, I would like to elaborate on the affinities between the progressive and the resultative, in the light of which a convergence of both functions in one form is not so surprising. For this, I will start with an outline of Johanson's exposition on viewpoint operators.

Johanson (2000:2) reckons there are three dimensions in the domain of viewpoint operators:

- Intraterminality [+INTRA], "envisaging the event within its limits"
- Postterminality [+POST], "envisaging the event after the transgression of its relevant limit"
- Adterminality [+AD], "envisaging the event in the attainment of its relevant limit" (this type seems to be relevant for Slavonic languages only and will not be dealt with further)

Moreover, intra- and postterminals display varying degrees of focality. By focality Johanson (2000:60) means "the concentration (focus) of the psychological interest on the situation obtaining at O [=orientation point, O.R.]". Focal entities convey what holds at a particular O: an event in its course in the case of [+INTRA] or an event wholly or partly past, perhaps with remaining effects or traces, in the case of [+POST]. This "presentness" can be envisaged with different ranges of vision and accordingly, focality is a scalar notion and focality values are relative. Johanson suggests a division into three degrees: high-focal (HF), low-focal (LF), and non-focal (NF), corresponding to the ranges of narrow, expanded, and open vision, respectively. In general, an element of lower focality is semantically broader (allows a wider perspective of the situation pertaining at O) than an element of higher focality. However, as Johanson points out, "it has not been possible to set up situational types in terms of the focality degrees used to describe them" (2000:61).

The relevant entities for an investigation into *-zhe* are focal intra- and postterminals. High-focal intraterminals (+INTRA^{HF}) convey a narrow presentness and refer typically to uni-occasional, i.e. non-repetitive events basically confined to the immediate proximity of O and actually performed there. They are usually restricted to dynamic, agentive actional phrases. All in all they could be subsumed under the label "progressive". The diachronic process of defocalization, i.e. the gradual expansion of the range of vision, converts high-focal intraterminals into low- and finally, non-focal entities. Along with the shift to +INTRA^{LF} the compatibility with non-dynamic, non-agentive actional phrases rises, and reference to repetitive events becomes possible, all this leading to a wider presentness.

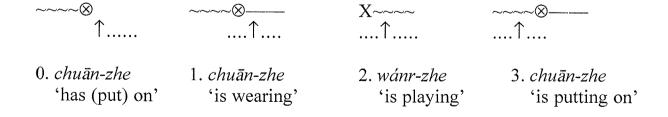
+POST^{HF} items are also strongly O-oriented in that they imply dwelling in a state after the transgression of the relevant limit. Their narrow range of vision prevents them from grasping an event in its totality, i.e. no past phase of the event is 'in sight'. Instead, the event is referred to indirectly through effects, traces, or consequences attributable to it and observable at O. High-focal posttransformatives are usually restricted to transformative actional contents, i.e. [+tf] and [+ti], and correspond to "statives" and "resultatives". Whether a form is understood as conveying the result of an action/process, however, depends on the lexical content. In combination with initiotransformatives, postterminals imply at least the transgression of the initial limit; this can yield a similar reading as with +INTRA^{HF}. The semantic affinity of high-focal post- and intraterminals, i.e. dwelling in a certain situation, can be illustrated by the following diagram (cf. Johanson 2000:146):¹¹

¹¹ An arrow marks the viewpoint, and dots stand for the variable space within which it may be situated. ⊗ marks the crucial transformational limit of transformatives.

Name	+POST ^{HF}	+INTRA ^{HF}
[+tf]	⊗	——⊗
[+ti]	⊗	⊗

As I mentioned at the beginning of this chapter, analyzing *-zhe* as a resultative, i.e. as +POST^{HF}, does not seem to pose any problems. When determining *-zhe* as a progressive, however, questions arise as to its relation with the other progressive *zài*. Reichardt & Reichardt (1990) remark that in this function *-zhe* is gradually being replaced by *zài* in the modern colloquial language. Whether *-zhe* is being pushed down towards a lower degree of focality or whether it is losing its function as a +INTRA item altogether, I am not able to determine. Its combinability with verbs like *yŏu* 'have' or *cúnzài* 'exist' – provided these are in fact static verbs – suggests that *-zhe* already does have a lesser degree of focality than *zài* (cf. **zài yŏu*, **zài cúnzài*).

Ebert (1995) suggests that the current progressive function of *-zhe* might have derived from an earlier purely resultative use. One tentative explanation for this, illustrated below with *chuān* 'put on/wear' (cf. Ebert 1995:200), would be as follows: With two-phase verbs, a resultative can be used to describe practically the same situation as a progressive of the verb in its post-transformative meaning, like English *is hidden* \approx *is hiding* (see stage 0. and 1. below). If this overlap in use leads to blurring the distinction between the two forms, the resultative might, in a first step, extend to non-transformative verbs and be reinterpreted as a (new) progressive (see 2.). In a second step, it would become possible to apply the new progressive to the pre-transformational phase of two-phase verbs (see 3.), hence the ambiguity of *chuān-zhe* (cf. (47)).



Taking into account the etymology of *-zhe* it is, in my opinion, hardly possible to decide whether we are dealing with a change of a telicity marker into a resultative morpheme and later into a progressive, as just outlined, or whether it reflects the development of a locative expression into a durative actional phrase and subsequently into a progressive. In any case, etymological

data are controversial. The character \not can be pronounced in three ways in MC: zhe, $zh\acute{a}o$, and $zhu\acute{o}$. $zh\acute{a}o$ as a primary predicate means 'touch', as V_2 'attain, reach', e.g., $c\bar{a}i$ - $zh\acute{a}o$ 'guess right' ($c\bar{a}i$ 'guess'), $zh\acute{a}o$ - $zh\acute{a}o$ 'find' ($zh\acute{a}o$ 'look for'). $zhu\acute{o}$ means 'touch, come into contact with' as well, but also 'apply, use' as in $zhu\acute{o}$ yǎn 'turn one's attention to' (yǎn 'eye'); $zhu\acute{o}$ does not occur as V_2 . Paris (1981) supports the view that zhe is derived from $zh\acute{a}o$. She claims that it had resultative meaning already in the 8th century. Other authors, among them Mei (1988), assume that zhe has its origin in $zhu\acute{o}$. Norman (1988:123) gives an example for $zhu\acute{o}$ dating from the 6th century; according to him its function is to show location:

(56) zuò zhuó xī qián sit LOC knee in.front.of 'sits in front of his knees'

However, he also remarks that deriving -zhe from zhuó is based on relatively little evidence.

In connection with the discussion of diachronic aspects of -zhe, the situation in the Beijing dialect, which all in all is the base for standard MC (cf. Norman 1988), might be of some interest. Ma (1987) reports for the Beijing dialect (and assumes the same to be valid for a lot of others) that -zhe does not combine with the progressive zài:

(57) * wŏmen zhèng zài qiánjìn-zhe. we right.now PROG advance-ZHE 'We are advancing.'

It is particularly remarkable that, according to Ma, *chuān-zhe* in *tā chuān-zhe dàyī* (see (47)) can be exclusively interpreted as having resultative meaning, i.e. 'has a coat on'. This could mean two things: either that *-zhe* can only refer to the situation after the transgression of the crucial limit, not to the process of putting on the coat, or that *chuān* is not a two-phase verb in the Beijing dialect. A more straightforward example, which makes the difference between standard MC *-zhe* and dialect *-zhe* quite evident, is (58):

(58) tā (zhèng) kāi-zhe mén ne. s/he (right.now) open-ZHE door NE

In MC this sentence is commonly interpreted as a progressive, 's/he is opening the door'. In the Beijing dialect, however, again only the resultative reading is allowed. Ma makes clear that this construction is parallel to $qich\bar{e}$ $k\bar{a}i$ -zhe $m\acute{e}n$ 'the car has the door open', and consequently $t\bar{a}$ is not to be interpreted as actor, but as possessor or the like. He gives as the most accurate translation 'he has the/his door opened' (Ma 1987:19).

Of course, a more thorough investigation into the relation between MC and the Beijing dialect would be necessary to draw any conclusions on the diachronic development of -zhe. However, if a standard, i.e. written language can be assumed to be more resistent to change than dialects used in everyday oral communication the question arises why -zhe in MC should have undergone an expansion to include the progressive meaning but not in the Beijing dialect.

6 Summary

Verbal actionality classes in MC still await detailed research, but the data available give reason to assume that claims about Chinese verbs being polyactional, i.e. undetermined as to their actional content, are incorrect.

As far as the function of *-zhe* is concerned, I have argued that it should be described as an aspectual operator and not as an element modifying actionality. On the one hand, it acts as a resultative or, in Johanson's terms, +POST^{HF} item, on the other hand as a progressive, or +INTRA^{HF}. Given the practically identical meaning of high-focal post- and intraterminals in combination with particular actionality types, especially with [+ti], the convergence of resultative and progressive in one single form seems far from being accidental. However, etymological data do not provide conclusive evidence as to which function developed earlier, and a look at dialects gives rise to further questions concerning the diachronic process.

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A selection theory of Mapudungun aspect

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Abstract

The present paper replies to a recent study (Golluscio 1998) that works with Smith's (1991) model, which distinguishes lexical aspect (aktionsarten) on the one hand and grammatical aspect (aspectual operators) on the other to describe verbal aspect in Mapudungun, an indigenous language of South America. Unlike its predecessor, the theory presented here is characterized by both a semantic representation that does not allow for logical entailments and a more detailed taxonomy of actionality types. The study further shows how a system of imperfective operators with specialized meanings enables the language to pay close attention to aspectotemporal distinctions.

1 Introduction*

Mapudungu(n)¹ is one of the comparatively few South American languages that have not been the object of linguistic attention only recently, the first description dating back to 1606. Although there have been some comprehensive descriptions in this century (Augusta 1903, Moesbach 1962, Smeets 1989, Salas 1992), the bulk of the work on verbal aspect has followed a more or less exclusively semasiological approach. In other words, a lot of effort has been invested in sorting out the meaning and exact position of certain relevant morphemes, but little has been done to show how the aspectual system

^{*} I am grateful to the participants of the 1999/2000 winter term colloquium on verbal aspect at the General Linguistics Department of the University of Zurich and those of the 2000 Zurich workshop on aspect and aktionsart for their valuable comments, especially Walter Breu, Karen Ebert, Johanna Mattissen and Lukas Neukom. Any misconceptions and errors remain my resposibility.

¹ From *mapu* 'land' and *dungu(n)* 'speech, language'; other names of the language are *Mapuche*, *Araucanian*, *Chedungu(n)* and *Tsedungu(n)*. In Argentina, the decreasing number of speakers was ca. 40,000 by 1988. In Chile, it is certain that an unknown but important percentage of the ca. 1,000,000 ethnic Mapuche are fluent speakers of the language; conservative estimates place the figure at around 200,000 (Grimes 1999). Cf. Fabre (1998:720ff) for more details.

would work as a whole, with the notable exception of Golluscio (1998), which applies Smith's (1991) framework to the verbal morphology of Mapudungun.

The present study briefly sketches some elements of the language in Chapter 2 and a summary of Golluscio (1998) in Chapter 3. Chapter 4 points to a couple of issues raised by Golluscio's analysis, and Chapter 5 proposes an alternative framework that distinguishes more actionality types and does so by working with somewhat different basic elements. Chapter 6 discusses some discrepancies between both models, and Chapter 7 closes the paper.

2 Some basic issues of Mapudungun verbal morphology

Mapudungun is a polysynthetic language² that shows productive agglutinative processes like suffixation, reduplication, compounding, and some prefixation. Nominal morphology is relatively simple, with no case markers and possession marked by means of external possessives related to the personal pronouns; there is no obligatory number marking on nouns, although it is customary to find the pluralizing particle *pu* with animate nouns and it is obligatory to mark attributive adjectives with the suffix *-ke* in the plural. On the other hand, verbal morphology is fairly complex. Some of the productive morphemes mark categories like passive, benefactive, negation, spatial direction, person and number, tense, aspect, and mood. The interested reader may consult Salas (1992) or Zúñiga (2000) for further reference. One can easily find long verbal complexes in texts; consider cases like (1a) and (1b) below:³

- (1) a. Rume-küme-wentru-nge-tu-rke-y-ngu.

 very-good-man-NGE-TU-QUOT-IND-3d

 'They say that both of them became very rich men (lit. very good men).' (S 197)
 - b. Rüngkü-kon-fem-tu-a-y-mi. jump-enter-IMM-TU-FUT-IND-2s 'You_s will immediately jump back in.' (S 69)

Some frequent non-aspectual morphemes are listed in (2):

² Mapudungun is certainly polysynthetic in the wide sense of the term: the verbal complex can consist of a large number of morphemes, there is nominal incorporation and polypersonalism, and many concepts expressed by adverbs in European languages are represented by verbal suffixes in Mapudungun. But even when approaching the question in a more principled way (cf. Fortescue 1994), Mapudungun ranks as fairly polysynthetic.

³ The examples are from my own fieldwork unless otherwise stated. Other sources are Golluscio 1998 (G), Catrileo 1996 (C), Salas 1992 (S), Smeets 1989 (Sm), Coña 1930 (Co), Augusta 1916 (Ad) and Augusta 1903 (A).

(2) a. Personal endings (indicative)

1s-n1d-yu1p-iñ2s-mi2d-mu2p-mün3s-Ø(3d-ngu3p-ngün)4

b. Indicative: -i (-y after vowels)

Quotative: -rke
Participles: -el / -lu
Ruptured implicature: -fu

Ruptured implicature: -fuNegation: -laFuture: -aInfinitive: -n

3 Golluscio's (1998) application of Smith (1991) to Mapudungun

Many contemporary approaches to the phenomenon of aspectuality work with models distinguishing aktionsarten (also called actionality types, or lexical situation types) on the one hand and aspectual values or operators on the other. The present chapter sketches Golluscio's (1998) application of Smith's (1991) framework, which constitutes the first study of Mapudungun aspect working with a two-component model.

3.1 Actionality types

Golluscio (1998)⁵ tentatively distinguishes the same five basic actionality types as Smith based on the parameters [±dynamic], [±telic] and [±instantaneous], to which she adds the feature [±bounded]. Thus, she arrives at the categorization in Table 1 below. Golluscio says the dynamicity feature refers to whether there is some change involved; telicity means there is an inherent goal or endpoint in the action or event; the [±instantaneous] parameter refers to the presence or absence of an extension along the temporal axis; boundedness means there are initial and final endpoints in the predicate semantics.

Examples for each type are given in (3) below (Golluscio 1998:37ff):

⁴ The third person marking is normally -Ø. Potential ambiguities are sometimes avoided by means of the 3d and 3p endings.

⁵ I have slightly adapted the orthography of some examples to match the convention usually used nowadays by the Chilean Linguistic Society (*Sociedad Chilena de Lingüística*); in particular, the unrounded high central vowel and its schwa-like allophone will be consistently represented by \ddot{u} instead of \ddot{r} (as in Golluscio) or \eth (as in Augusta and Moesbach), and the velar nasal is written ng instead of η (as in Augusta and Moesbach).

WIAPUDUNGUN ACTIONALITY TYPES ACCORDING TO GOLLUSCIO (1998)								
	dynamic	telic	instantaneous	bounded	Example			
States					nie- 'have'			
Activities	+			***************************************	miaw- 'walk'			
Accomplishments	+	+		+	ngüpütu- 'paint'			
Achievements	+	+	+	+	aku- 'arrive'			
Semelfactives	+		+	+	wirar- 'roar'			

TABLE 1
MAPUDUNGUN ACTIONALITY TYPES ACCORDING TO GOLLUSCIO (1998)

- (3) a. Re che dungu kim-i.

 pure people language know-IND

 'S/he knew Mapudungun (lit. the language of the pure people).'
 - b. Meli antü miaw-i. four day walk-IND 'Four days s/he walked.'
 - c. Ngüpitu-y tañi ruka ta Xwan. paint-IND 3POSS house PART J. 'Juan painted his house.'
 - d. Feymu wula ta aku-y tati pichi wentru. then just PART arrive-IND ART little man 'Then the child just arrived.'
 - e. Wirar-i.
 roar-IND
 'S/he roared.'

3.2 Aspectual operators

Golluscio states that the basic aspectual opposition in Mapudungun is PERFECTIVE versus IMPERFECTIVE (1998:40), the former category being formally unmarked and the several subtypes of the latter being formally marked. Observe her further characterization of the unmarked form (1998:40-41, my translation):

Thus, in Mapudungun, a situation can be presented either as a whole, not durative or in progress, durative. [...] On the one hand, the absence of aspectual markers define the event as 'completive, terminated' — and this emerges clearly in the case of punctual situations like *amun* 'I went' or *ngïllay* 'he bought' —. On the other, the same absence of marking permits

the theme-inherent aspectual meaning to emerge. In the case of state verbs, whose meaning of existence or possession bears the feature 'not momentary, permanent', [they] will manifest the associated features [-dynamic,-bounded] despite their absence of aspectual marking.

As to the imperfective markers, Golluscio distinguishes, among others, the operators (appearing as suffixes in the verbal complex) summarized in Table 2 below, where the labels given by other authors have been included for comparison:

TABLE 2
MAPUDUNGUN OPERATORS
ACCORDING TO SEVERAL AUTHORS

		WHITE TO SEVERAL	710 111010	
	Golluscio (1998)	Salas (1992)	Smeets (1989)	Augusta (1903)
-(kü)le	continuative 1	durative / progressive	stative	stative
-ke ₁	continuative 2 (constant)	habitual / frequentative	'constant feature'	durative / habitual
ke ₂	habitual	•		
-meke 	-me + ke ₁	'spend time V-ing'	progressive	'be busy (V-ing)'
-ka	continuative 3 (obstinative)	continuative	continuative	continuative

The following are examples provided by Golluscio for the different categories:

- (4) a. Awkantu-le-y tañi pichi che. play-LE-IND 1sPOSS little people 'My child is / was playing.' (G 41)
 - b. Küdaw-ke-n.

work-KE-1s

'I work (i.e. I have a job).' (G 42)

c. Müle-ka-y.

be-KA-IND

'S/he still is [sc. somewhere or somehow].' (G 43)

d. Fill antü utra-ke-y ta Xwan. every day rise-KE-IND PART J. 'Juan rises every day.' (G 44)

The *le*-operator is possibly related to *müle*- 'be (located), stay' and has two allomorphs: *-le* after vowels and *-küle* elsewhere. Golluscio characterizes this morpheme as the result of the "grammaticalization of the semantic relationship between the continuative and the stative" (1998:41). In fact, Smeets (1989) and Augusta (1903) call the suffix STATIVE, and Salas (1992) acknowledges its dual nature without committing himself to just one label. Golluscio's cases in point can be observed in (5) below:

- (5) a. Mawtu-y tañi pichi che. sleep-IND 1sPOSS little people 'My child slept.' (G 42)
 - b. Mawtu-le-y tañi pichi che. sleep-LE-IND 1sPOSS little people 'My child is sleeping / asleep.' (G 42)

She also distinguishes a different suffix $-le_2$ which is not inflectional but derivational and yields states when applied to "adjectivo-adverbial themes", e.g. in (6) below. More on this subject is found in the Appendix.

(6) Küme-le-n.
good-LE-1s
'I am fine.' Sp. estoy bien (G 39)

Finally, Golluscio comments somewhat marginally on the following important issues that shall concern us further down:

- a) what she analyzes as a bimorphemic element *-me-ke* ("directional with endpoint" and "ontinuative 2") with the meaning "continuative / progressive" in examples like *küchatu-me-ke-n* (wash-ME-KE-1s) 'I kept on washing' (1998:44), and
- b) the use of the unmarked form to "manifest the inchoative aspect of the action" as "sometimes" opposed to the *le-* or *we-*form which "express the resulting state of the action" in examples like *mawtu-y* (sleep-IND) 's/he sleeps / slept' but also 's/he falls / fell asleep' (1998:45).

4 Brief critique of Golluscio (1998)

Golluscio's study has the obvious merit of being the first one to address an important and neglected area of South American descriptive linguistics. I would argue, nevertheless, that if the issues mentioned in the following sections are approached in a different way it is possible to arrive at a better understanding of how Mapudungun aspect works.

4.1 Actionality types

Golluscio only gives sentences that exemplify each actionality type but does not seem to have arrived at them by applying tests like the usual ones cited in the literature. On the contrary, her comments ("By opposition to the first situation type, I *define* the verbs in Examples (3) through (6) as EVENTS because they manifest a common property, viz. [+dynamic]." (1998:38, translation and italics mine)) suggest that the categorization is based rather on inspection. This need not yield flawed results but can be misleading; many predicates are notorious in that they may belong to different categories in different languages, e.g. 'sit', 'die', 'dress', 'know', etc. Here only independent language-specific tests help to arrive at more robust language-specific categories. Some of the usual tests can be applied in Mapudungun, e.g. compatibility with *kiñe hora* 'for / during one hour' or *kiñe hora mew* 'in one hour' to decide whether a predicate is instantaneous or not, or the interruption ('if you are V-ing and someone interrupts you, have you V-ed?') and continuation tests ('if you have V-ed, can you go on V-ing?') to ascertain its telicity.

Further observe that not all parameters are needed for the distinction of the five aktionsarten. In particular, the feature [±bounded] is redundant since no actionality type is defined by this alone. The feature [±instantaneous], on the contrary, contributes to distinguish activities from semelfactives (both being [+dynamic,-telic]).

More seriously, there are systematic meaning discrepancies with different aspectual operators which are unaccounted for in Golluscio's five-way categorization of predicates. There are verbs whose *meke*-form is equivalent in meaning to their *le*-form and verbs for which both forms differ in meaning. In (7a) *af*- 'end' behaves like the accomplishment example *ngüpütü*- 'paint' given by Golluscio (cf. Table 1 above) but in (7b) *ñam*- 'disappear, get lost' does not:

(7) a. Af-meke-y. vs. Af-küle-y. end-MEKE-IND end-LE-IND 'It is coming to an end.'

b. Ñam-meke-y. vs. Ñam-küle-y. disappear-MEKE-IND disappear-LE-IND 'It is disappearing.'

4.2 The *meke*-form

Whereas Golluscio analyzes this suffix as composed of translocative -me and "constant feature" -ke, Augusta (1903), Moesbach (1962), Smeets (1989) and Salas (1992) treat it as monomorphemic and related to the full verb meke- 'be busy doing something / V-ing'. Golluscio does not provide further evidence to

support her bimorphemic analysis of this suffix, but the entry in Augusta's dictionary (1916) renders *meke*- as meaning both 'be busy V-ing' and 'be always V-ing'. However, since (a) -meke is admittedly less frequent than -le, (b) the grammaticalization path from the full verb meke- to the suffix -meke is plausible, and (c) my informants agreed on excluding a habitual reading (thus privileging the progressive reading) of the meke-form, I prefer to follow the opinion of the majority. It has been labeled "progressive" and "durative". Observe in Example (8) occurrences both as a suffix and as independent verb:

(8) Iñche kutran-tu-**meke**-n. vs. Iñche **meke**-n kutran-tu-n. 1s ill-TU-MEKE-1s 1s be.busy-1s ill-TU-INF 'I am suffering.' 'I am suffering.' (Sm 376)

5 An alternative selection theory of Mapudungun aspect

Needless to say, Smith's theory (1991, 1997) is not the only two-component model of verbal aspect. Similar frameworks have been developed by Breu (1994, 1996, 1998, 2000), Sasse (1991a, b), and Johanson (2000). The particular selection theory I propose for Mapudungun in this chapter has to account for the data summarized in 5.1. Section 5.2 explains how the core of the model works, and Section 5.3 briefly presents some other prominent aspect-related morphology in the language.

5.1 The data

Before proceeding further I have summarized the data presented above that have to be accounted for by any model trying to cope with Mapudungun aspectual categories in Table (3) below. Some predicates appear in the *le-, meke-* and unmarked form (types b, e, and f), but others do not. Moreover, with some verbs the semantic yield of the *le-* and *meke-*forms is equivalent (types b and e), and in one type they differ (f). I have regarded type g as marginal for the present study; more details on this and on the related question whether *-le* is inflectional are found in the Appendix. Further research will show whether this is justified.

5.2 Basic elements: aktionsarten and aspectual operators

Actionality types. One fundamental question is whether a model placing a fair amount of information into the lexicalized predicate semantics and working with rather passive phase and boundary selectors is more powerful than one distributing the tasks conversely, i.e. a theory where the aspectual operators have more meaning to contribute and the aktionsarten are comparatively underspecified. Let us consider a model where a considerable

semantic burden, as it were, is placed on the aktionsarten. Along similar lines as Bickel's (1996) study of aspect in Belhare, I work with the two basic notions of PHASE (ϕ) and BOUNDARY (τ) on the temporal tier of semantic representation. Unlike Bickel, however, I further subcategorize these notions as in (9) below:

(9) a. Phases

- totally static ϕ_{TS} • relatively static ϕ_{RS}
- dynamic

b. Boundaries

- inherent τ
- (• external $\tau_{\rm E}$)

TABLE 3
MAPUDUNGUN PREDICATE TYPES

 $\varphi_{\rm D}$

Type	<i>le</i> -form	<i>meke</i> -form	unmarked form
a	*Wentru-nge-le-y.	*Wentru-nge-meke-y.	Wentru-nge-y.
	man-NGE-LE-IND	man-NGE-MEKE-IND	man-NGE-IND
	'He is a man.'	'He is a man.'	'He is a man.'
b	Lef-küle-y.	Lef-meke-y.	Lef-i.
	run-LE-IND	run-меке-IND	run-IND
	'He is running.'	'He is running'	'He ran.'
c	*Pe-le-y.	*Pe-meke-y.	Ре-у.
	find-LE-IND	find-меке-IND	find-IND
	'He is finding it /	'He is finding it.'	'He found it.'
	He found it.'		
d	Kurü-le-y.	*Kurü-meke-y.	Kurü-y.
	black-LE-IND	black-меке-IND	black-IND
	'It is black / It has	'It is blackening	'It blackened (itr.).'
	become black.'	(itr.).'	
e	Af-küle-y.	Af-meke-y.	Af-i.
	end-LE-IND	end-меке-IND	end-IND
	'It is coming to an	'It is coming to an	'It ended.'
	end.'	end.'	
f	Ñam-küle-y.	Ñam-meke-y.	Ñam-i.
	disappear-LE-IND	disappear-меке-IND	disappear-IND
	'It is lost /	'It is disappearing.'	'It got lost / It
	It has disappeared.'		disappeared.'
g	Küntro-le-y.	*Küntro-meke-y.	Küntro-y.
	lame-LE-IND	lame-меке-IND	lame-IND
	'S/he limps.'	'S/he limps.'	'S/he limps.'
	Nor-küle-y.	*Nor-meke-y.	Nor-i.
	straight-LE-IND	straight-меке-IND	straight-IND
	'It is straight.'	'S/he is straight.'	'S/he is honest.'

The taxonomies in (9) can be compared to the four basic aktionsarten according to Breu (1998, 2000), viz. totally static, relatively static, temporary/activities and totally terminative. I have separated the last one from the other three and added for the sake of completeness an external boundary which is not present in the predicate semantics but externally set either by the context, additional lexical material, or the grammar (I have preferred to label it "external" rather than "arbitrary" (cf. Smith 1997:22ff) to highlight this feature). An inherent boundary is a change, be it initial or final, which is semantically present. Whereas totally static phases correspond to permanent properties or situations (e.g., Russian vesit' 'weigh', Spanish ser alto 'be tall'), relatively static ones are used to depict situations that can but need not be bounded temporally (e.g. Russian (pro)suščestovat' 'exist', Spanish estar enfermo 'be ill'). Dynamic phases may correspond to fairly different situations, e.g. where there is high agentivity involved (e.g. English work) or with weather phenomena (e.g. English rain), but what they have in common is the necessity of a temporal boundary of some kind.

The phases and boundaries presented in (9) above combine to produce the actionality types shown in Table 4 on the next page. The elements in brackets are logical entailments that are not part of the predicate semantics, whereas the other elements are available for the aspectual grammemes to select them; Bickel (1997, 2000) discusses at length why logical entailments have to be banned from semantic representation in order to arrive at coherent selection theories. Breu (1998, 2000) explicitly distinguishes two aktionsarten (his GTER and INCO, corresponding to types VI and VII here) by specifying whether the ensuing relatively static phase is merely implied or present in the predicate semantics. Observe that type IV may or may not have an ensuing phase present as logical entailment, but it consists only of a boundary τ (cf. Bickel 2000:16-17).

As to the activity type (III), I have preferred to characterize it more in the spirit of Breu (1998, 2000) than Sasse (1991a, b) or Bickel (1996) in that (i) there is no inherent boundary specified in the semantic representation and (ii) dynamicity, although arguably orthogonal to the notions of phase and boundary, plays a decisive role.

The different actionality types have been grouped in such a way that some affinities between them are highlighted. Aktionsarten I, II and III may be labeled "phasic" in the sense that semantically they consist only of a phase, either a static $(\phi_{TS} \, / \, \phi_{RS})$ or a dynamic one (ϕ_D) . Actionality type IV consists merely of a boundary τ and might be therefore called "punctual". Finally, aktionsarten V through VII share the property of consisting of both phases and boundaries and could be termed "complex" following Breu (1998, 2000). Type V signifies the entrance into a state whereas type VI corresponds to a process and its outcome. Type VII is equivalent to Breu's "inchoative" and comprises the process, its outcome, and the ensuing state.

TABLE 4
MAPUDUNGUN ACTIONALITY TYPES: TEMPORAL STRUCTURE

		labels	examples
I	ϕ_{TS}	Total state (totally static, TSTA)	wentru-nge- 'be a man'
II	$\phi_{ m RS}$	Relative state (relatively static, RSTA)	müle- 'be' nie- 'have'
III	ϕ_{D}	Activity (temporary, ACTI)	lef- 'run' miaw- 'walk'
IV	$ au\left(\phi_{RS} ight) ag{ au}$	Punctual (achievement, totally terminative, TTER)	pe- 'find' echiw- 'sneeze'
V	$ au$ ϕ_{RS}	Initiotransformative (inceptive-stative, ISTA)	kurü- 'become black' pun- 'get dark'
VI	$\phi_D \tau (\phi_{RS})$	Finitransformative (accomplishment, gradually terminative, GTER)	af- 'end' aku- 'arrive'
VII	ϕ_D τ ϕ_{RS}	Diphasic (inchoative, INCO)	ñam- 'disappear, get /be lost' nüla- '(be) open'

-le, -meke, and their interplay with the actionality types. Let us focus on some of the morphology discussed in Chapters 3 and 4. The aspectual selectors -le and -meke appear to have fairly specialized functions, as described in Table 5 below:

TABLE 5
SELECTED MAPUDUNGUN ASPECTUAL OPERATORS

	Basic meaning	Extension
-le	ϕ_{RS} -selector with a left τ (I, V, VII)	φ _D -selector (III, VI)
-meke	φ _D -selector (III, VI, VII)	
-Ø	default: τ (IV, V, VI, VII), ϕ_{TS} (I), ϕ_{RS} (II) or τ_{E} (III)	_

I - III. Phasic types

• With states, only the unmarked form is compatible with the predicate semantics. One of the examples of Golluscio (1998:38) is *nie-y-ngün ta kulliñ* (have-IND-3p PART animal) 'they had animals', where both *neleyngün and *nemekeyngün would be ungrammatical. The default form selects the only element there is to select, viz. the phase φ. Consider nie-püñeñ- 'be pregnant' in Example (10):

(10) Nie-püñeñ-i, feymew lef-la-y. have-child.of.woman-IND therefore run-NEG-IND 'She did not run because she is pregnant.'(C 22)

Some of these states are not limitable, like *wentru-nge-* 'be a man' and denominal verbs with *-nge* in general, and are therefore represented as consisting of a totally static phase ϕ_{TS} . Others behave alike with respect to aspectual operators but are limitable, like *nie-* 'have' and *nie-püñeñ-* 'be pregnant' and consist of a relatively static phase ϕ_{RS} .

• On the other hand, both the *le*-form and the *meke*-form are grammatical and mean the same with activities like *lef*- 'run', e.g. in *lef-küle-y* = *lef-meke-y* 's/he is running'. The range of applicability of the *le*-form seems to have been extended from relatively static phases with an initial boundary to accommodate dynamic phases like the ones provided by activities within its selection scope. The unmarked form functions as a boundary selector but additionally sets an external boundary (τ_E) which coincides with an endpoint present in logical, but not semantic, representation. Activities can combine with phrases like *kiñe hora* 'during / for one hour'; they can be interrupted (*lef-meke-fu-n* 'I was running' implies *lef-ūn* 'I have ran') and continued. This class includes many verbs of motion like *trekatu-* / *miaw-* 'walk', wander' and *mūpūtū-* 'fly', predicates like *ülkantu-* 'sing' and *rakiduam-* 'think (of sthg.)', and iterativized predicates like *nuf-nuf-tu-* 'sniff repeatedly' (from *nuf-* 'sniff'; cf. further down on *-tu*).

IV. Punctual type

The punctual aktionsart provides only an inherent boundary τ to be selected, and so both phase-selectors yield ungrammatical results with this predicate type. The unmarked form selects the boundary as in *pe-y ti llafe* 's/he found the key'. It is important to note that iterative or habitual readings require specialized morphemes in Mapudungun (stem reduplication + -tu or -ke, cf. Section 5.3). Punctuals cannot combine with phrases like *kiñe hora* 'for / during one hour'.

IV. - VI. Complex types

- Initiotransformatives provide both an initial boundary τ and an ensuing relatively static phase ϕ_{RS} , and so it is natural that only the unmarked form (selecting τ) and the *le*-form (selecting ϕ_{RS}) are grammatical. Other examples include *motri* 'get/be fat', *are* 'get/be hot', *welli* 'become/be empty', *wüywü* 'become/be dizzy', *karü* 'become/be green', etc.⁶
- Finitransformatives consist of a dynamic phase φ_D followed by a final boundary τ , but here both the *le*-form's extension and the *meke*-form are able to select the former; as expected, the unmarked form selects the attainment of the endpoint. Both the interruption and the continuation test distinguish them from activities. An interesting example is *ruka* 'build a house', where the *le*-form cannot refer to the ensuing state where the house has already been built. As in other languages, configurations consisting of a transitive verb and a count object NP typically belong to this class.
- Finally, the diphasic aktionsart is the richest of all in that it provides a dynamic phase ϕ_D , a boundary τ and a relatively-static phase ϕ_{RS} to be selected, and it is here that the operators' specialization becomes apparent: the *meke*-form selects the first phase, the unmarked form the attainment of the boundary and the *le*-form the ensuing state. As with finitransformatives, the interruption and the continuation tests yield different results than with activities. Examples of this actionality type include $n\ddot{u}la$ 'open', $an\ddot{u}m$ -'plant', $an\ddot{u}$ 'sit', $n\ddot{u}r\ddot{u}f$ 'close', $wik\ddot{u}r$ 'break', etc.

5.3 Some other aspectual operators and aktionsarten-related elements

The elements discussed so far are the ones I have studied more closely because I believe them to lie at the center of the Mapudungun aspectual system. However, other morphemes mentioned by Golluscio need to be addressed in a study like this. Many other aspect-related morphemes are not yet well understood and require closer attention in future research.

The suffix -tu. This highly productive suffix (cf. the full verb tu- 'take') turns atelic predicates like wentru-nge- 'be a man' into initiotransformatives like wentru-nge-tu- 'become a man (i.e. rich)'. It also appears on predicates that do not seem to require it (cf. pe- 'find' and pe-tu- 'to find what was lost'), perhaps with some remnant of the meanings 'back' and 'again' still found in other predicates (e.g. aku- 'arrive' vs. aku-tu- 'arrive back'; ayü-w- 'get

⁶ Among the previous studies on the subject, Smeets is the only one who mentions the analytic form with the adverb *petu* 'still' like *petu lügüy* 'it is becoming white' (1989:211) to fill the gap in the paradigm of this verb type, as it were. However, my informants were positive about the odd character of such forms.

⁷ One predicate of this class (*ürfi*- 'drown') seems to show an anomalous behavior. Although not mentioned as such in the literature available to me, my infomants were positive about the fact that the form **ürfi-le-y* 's/he is drowning / s/he has drowned' was ungrammatical. Neither do I know the reasons for this, nor have I been able to find analogous cases.

happy' vs. ayü-w-tu- 'to get happy again'; cf. also (1b)). With many lexemes there is a systematic opposition -Ø/-tu where -tu signifies consumption of some kind, e.g. kofke 'bread' vs. kofke- 'bake bread' vs. kofke-tu- 'eat bread', but sometimes it seems to have a rather general meaning along the lines of 'do with N what is customary', e.g. mamüll 'firewood' vs. mamüll-tu- 'gather firewood'. Further consider the combination of the suffix -tu with the reduplication of the root to derive iterative predicates, as in (11):⁸

(11) Rüngkü-rüngkü-tu-y.
jump-RDP-TU-IND
'S/he made jumps, bounced.' (S 188)

Finally consider that some verbs only appear with the -tu element, e.g. papel-tu-'study' (cf. Spanish papel 'paper') and chillka-tu-'read, write' (cf. chillka 'book, letter').

The suffix -ke. This highly productive and very frequent morpheme has been given different labels, viz. HABITUAL, DURATIVE, FREQUENTATIVE, and 'constant feature'. Golluscio argues in favor of two morphemes - ke_1 ("continuative", 12a) and - ke_2 ("habitual", 12b):

(12) a. Küdaw-ke-n.

work-KE-1s

'I work (i.e. I have a job).' (A 40, G 42)

b. Fill antü miaw-ke-fu-chi wentru waria mew la-y. every day walk-KE-FU-ATTR man city PPOS die-IND 'The man who walked round in town every day has died.' (Sm 330)

Of course, with examples like (12b) the phrase *fill antü* 'every day' is not necessary for the habitual reading. Augusta (1903:40ff) gives many instances of ambiguous forms where both a habitual and a progressive reading are possible. Further observe that, interestingly enough, -ke is combinable with -le (13) and with the full verb *meke*- (14):

(13) lef-i (run-IND) 's/he ran'
lef-ke-y (run-KE-IND) 's/he runs'
lef-küle-y (run-LE-IND) 's/he is running'
lef-küle-ke-y (run-LE-KE-IND) 's/he is always running'

⁸ Iterative predicates can be derived from some lexemes by means of affixing *-nge* to the reduplicated root, but this procedure invariably yields intransitive verbs. The suffixation of *-tu* does not alter the root's original transitivity but permits further transitivization / causativization. Cf. e.g. Salas (1992:188ff) for more details.

```
(14) Fey meke-ke-y ñi pali-fi-el engün ... 3 be.busy-KE-IND 3POSS ball.game-Fi<sup>9</sup>-PCPL 3p 'They are always fighting ...' (Co 27)
```

Although further research is necessary in this area, I believe Golluscio is on the right track; a specialized habitual morpheme -ke seems to have turned into a generalized imperfective in cases like (12a) above, where there is seemingly no difference in meaning between küdawken, küdawmeken and küdawkülen 'I am working'. What remains true, nevertheless, is that a habitual reading requires the suffix -ke on the verb.

The suffix -we. As a free word and part of nominal compounds, we means 'fresh, new, recent', e.g. we ko 'fresh water' and we-che 'young (person)'. The suffix -we also appears on verbs with the meaning 'already':

```
(15) a. Wütre-we-y.
cold-we-IND
'(It is cold outside. Why does she go out?) She is cold already.'
(Sm 340)
b. Ngüküf-küle-we-tu-y.
quiet.down-Le-we-Tu-IND
'It is already quiet again.'
'It is quiet again.' (Sm 341)
```

Note that -we can combine with both a state (15a) and an initiotransformative (15b); in fact, it can appear with all aktionsarten.

Besides the use of -we alone, we find two important combinations, viz. with the negation -la to form what is normally called the CESSATIVE (16a) and with -le to signify 'stay/remain V-ed/V-ing' (16b):

```
(16) a. Iñche küpa-yi-we-la-n

1s want-eat-we-NEG-1s

'I do not want to eat any more.' (Sm 340)
```

b. Kom waria trufken-külewe-y.

all city ash-Lewe-IND

'The whole city has been reduced to ashes (Sp. quedó reducida a cenizas).' (A 43)

The noun *trufken* 'ash' in (16b) can be verbalized either as *trufken-tu*- 'turn into ashes (tr.)' or as *trufken-w*- 'turn into ashes (itr.)', but it is apparent that

⁹ The function of the suffix -fi in nonfinite verb forms is still not entirely clear. Nevertheless, it most probably has to do with argument structure, animacy and the like, and does not seem to show any sensitivity to aspecto-temporal categories.

neither -tu nor the reflexive morpheme -w are obligatory for a reading like the one in (16b). Trufken- is an initiotransformative predicate, and the lewe-form signifies not only that the relatively static phase, i.e. the state 'turned into ashes', holds, but also that it is the result of an action or process which either is present in the context or has been mentioned in the discourse.

The suffix -ka. This morpheme is apparently related to ka 'and; other', which may function as a conjunction in e.g. kiñe waka ka epu kawell (one cow KA two horse) 'one cow and two horses', and as an attribute in e.g. ka lifru eluen (KA book give:me:IMPER) 'give me another book'. Besides, with numerals ka means 'another, more', e.g. ka kiñe eluen kuram (KA one give:me:IMPER egg) 'give me another egg / one more egg'. In combination with a verbal predicate, -ka can mean 'still' (17a) and iteration (17b); sometimes it has become lexicalized, as in (17c) (cf. nütram- 'tell'):

- (17) a. Müle-**ka**-y ruka mew. be-KA-IND house PPOS 'S/he is still in the house.' (A 93)
 - b. katrü- 'cut' katrü-ka- 'make several cuts' ramtu-ka- 'make several questions' (S 191)
 - c. Ñi chaw engu nütram**ka**-y ti werken. 1sPOSS father 3d talked-IND ART messenger 'The messenger talked with my father.' (C 52)

6 Discussion

Is the model outlined in the preceding sections more consistent and more powerful or just more cumbersome than Golluscio's description of the Mapudungun data? Let me now turn to some of the prominent issues in this respect.

6.1 Complex actionality types

Smith's model (the one used by Golluscio) does not posit the initiotransformative and diphasic aktionsarten, but I would argue that they are needed for the description of Mapudungun aspect. Initiotransformatives have been postulated for many languages and are related to the problem of word formation discussed in the Appendix.

The finitransformative actionality type, roughly equivalent to what is traditionally called accomplishment, is shown by Breu (1998, 2000) to be different from the diphasic type and shows reflexes at least in some languages.

Russian aspectual pairs like umirat'/umeret' 'die' and lovit'/pojmat' 'catch' are best analyzed as finitransformatives, whereas Russian prjatat'sja/sprjatata'sja 'hide' and Italian indossare 'put on, wear' are diphasic, because with these predicates a phase selector can apply to either the pre-τ or the post-τ phase (cf. Ebert 1995). If the following phase of Mapudungun predicates like nüla-'open' were an implication or implicature as with af- 'end', it should be defeasible under specific, perhaps even marked, conditions — something I have been unable to show. On the contrary, my informants' grammaticality judgements, the meanings of the le-form and the meke-form, and the texts I have analyzed suggest that the ensuing phases are more robust than mere implicatures. As to logical implications, in Bickel's words, "the semantic representation of a sign is not only poorer than its pragmatic implicatures but also poorer than its logical implications" (2000:3, my translation). Cf. Bickel (1997, 2000) for a thorough argumentation on why logical entailments have to be banned from semantics if the selection theory is to be principled and fully operational; I hope to have shown that, with some predicates, Mapudungun -le selects a phase that is not only implied but actually present in the semantic structure.

Smeets (1989:370) mentions the following verbs which seem to be ambiguous in that the *le*-form can be understood either as resultative or as progressive, i.e. they can be categorized as either diphasic or activities:

- (18) a. Püra-le-y. 'S/he is upstairs. / S/he is climbing'. go.up-LE-IND
 - b. Pire-le-y. 'It is covered with snow. / It is snowing.' snow-LE-IND
 - c. Arof-küle-y. 'S/he is covered with sweat. / S/he is sweating.' sweat-LE-IND

Also note that some (seemingly not very numerous) Russian pairs like *pokryt'/pokryvat'* 'cover' and *okružit'/okružat'* 'surround' are said by Breu to be ambiguous between activities and final-terminatives (1998:69ff). Unfortunately, I have been unable to check any hypotheses concerning these ambiguities, nor have I come across more verbs of this type in Mapudungun.

6.2 The punctual type

Smith posits two aktionsarten which share the feature [-duration], viz. her achievements (PUNCTUALS in the present framework) and her semelfactives. Both also share the feature [-static] or [+dynamic] and differ only in telicity, the former being telic and the latter atelic. In Smith's words, "[t]elic events have a change of state which constitutes the outcome, or goal, of the event. [...]

In contrast, atelic events are simply processes. They can stop at any time: there is no outcome. In other words, atelic events have arbitrary final endpoints" (1997:19). Let us consider some of Smith's examples concerning this distinction (those in (19a) are achievements while those in (19b) are semelfactives):

- (19) a. find, lose, recognize, break a glass, reach the top, arrive, explode a bomb, see a comet
 - b. knock at the door, hiccup, flap a wing, blink, cough, tap, peck, scratch, kick

Note that also Vendler (1967) and Dowty (1979) were aware of this difference, but they categorized English predicates like the ones listed in (19b) as an atelic subtype of achievements and not as a different type. Of course, if predicates like *cough* are not semelfactive in the strict sense of the term (i.e. in case one coughs more than just once), they are activities.

As for the usual phase selectors, it makes no difference whether there is something in the logical representation or not, because elements absent from semantics are not eligible. The yield of an unmarked form or a specialized boundary selector would show no difference either. But Smith argues that achievements may be combined with resultative imperfectives whereas semelfactives cannot, so the question comes down to whether we need to postulate diphasics and finitransformatives as different types. The answer is yes, as I have shown in the preceding section. Table 6 below summarizes the discrepancies between Smith's analysis and mine (I stands for initial endpoint, F for final endpoint, E for single-stage event, Nat for natural (as opposed to arbitrary), R for result and the dots for a phase):

TABLE 6
DIFFERENT TREATMENT OF PREDICATES IN TWO MODELS OF ACTIONALITY

Predicate	Smith's label	Smith's representation	M y label	M y representation
build a house ruka-	accomplishment	I F _{Nat R}	Finitrans- formative	$\phi_D \tau (\phi_{RS})$
cough chafo-	semelfactive	Е	Punctual	τ
find the key pe- ti llafe	achievement	E _R	Punctual	τ (φ)
get / be lost ñam-	achievement	E _R	Diphasic	ϕ_{D} τ ϕ_{RS}

I argue that, at least for Mapudungun, my representations are more adequate than Smith's. With ruka- 'build a house' there is no discrepancy between the two analyses but rather a notational difference. With pe- ti llafe 'find the key', however, no morphosyntactic evidence suggests that it should be given a different semantic representation from chafo- 'cough' since no phase selector is compatible with these predicates. By contrast, with $\tilde{n}am$ - 'get / be lost' both a "dynamic imperfective" (-meke) and a "relatively static imperfective" (-le) are possible and have different readings.

7 Conclusions

Golluscio (1998) was the first study to approach Mapudungun aspect with a two-component model distinguishing lexical and grammatical elements, and the present paper has continued this task in much the same vein. Unlike the framework proposed by Golluscio, the theory I have argued for consistently bans logical entailments from predicate semantics and nevertheless arrives at Breu's seven aktionsarten for Mapudungun. I hope to have shown that such a model outranks a framework like Smith's on grounds of descriptive power.

It is certainly not exceptional for a head-marking language of the Americas to allow a good portion of its morphology to be concerned with aspectotemporal categories, and Mapudungun is one of the many that privileges the imperfective as the marked category. Moreover, it is reasonable to suppose that the several grammaticalization / lexicalization paths have led from suitable lexemes (many of which are still in use as full words) to fairly specialized aspectual operators and other aspect-related morphology that include spatial and argument-related elements as well, the latter not discussed in this study. Needless to say, this presents an interesting picture when compared to e.g. the aspectual system of Spanish (the language's cultural competitor for the last five centuries), most of whose specialized categories are expressed periphrastically instead of morphologically.

This study has attempted to make a contribution to (i) our awareness of the linguistic structures of a not very frequently cited but comparatively well-documented South American language, (ii) our knowlegde about the interaction between lexical and grammatical aspect, and (iii) our understanding of how natural languages work when faced with the challenge of construing reality.

Appendix: Inflectional vs. derivational -le

There is a systematic three-way opposition between le-, nge- and \emptyset -forms for a numerous class of verbs. Most of the roots are color terms or other adjectives, but also others like $pu\underline{n}$ 'night' and $w\underline{u}\underline{n}$ 'dawn'. Example (1) is one of the many predicates showing these forms and meanings ($pu\underline{n}$ - 'get dark', $w\underline{u}\underline{n}$ - 'dawn' and pilu- 'go deaf' behave alike):

```
(1) karü-y (green-IND) 'it became green' karü-le-y (green-LE-IND) 'it is (in a) green (state)' Sp. está verde karü-nge-y (green-NGE-IND) 'it is (permanently) green' Sp. es verde
```

With other adjectives, however, the unmarked form seems to behave differently. Compare the cases in (2) from Smeets (1989):

```
(2) a. nor-i
                      (straight-IND)
                                          'it is straight; it was successful'
       nor-küle-v
                      (straight-LE-IND) 'it is straight, it stands upright'
       nor-nge-y
                      (straight-NGE-IND) 'it is (always) straight'
    b. küntro-y
                      (lame-IND)
                                          's/he limps'
       küntro-le-y
                      (lame-LE-IND)
                                          's/he limps'
       küntro-nge-y
                      (lame-NGE-IND)
                                          's/he is lame (since birth)'
    c. *kishu-y
                      (alone-IND)
       kishu-le-v
                      (alone-LE-IND)
                                          's/he is (temporarily) alone'
       kishu-nge-y
                      (alone-NGE-IND)
                                          's/he is (always) alone'
```

The lexicalization of 'have a positive outcome' as the meaning of *nor*- in the first example does not pose a real problem, but the variation between an unmarked and a *le*-marked form to signify the transitory state with *nori* (2a) and *küntroy* (2b) may suggest that the whole system, especially the treatment of static components, is being disrupted or redesigned — obviously only a second-best hypothesis. Augusta's dictionary (1916) has entries that differ from Smeets' translations. For *nor*- we find *nor-küle*- 'be in a straight position, be correct' and *nor*- 'be honest, be integer, be straight', the former rather a temporary quality of things and the latter rather a permanent character trait (and therefore one might have expected **nor-nge*- 'be honest'). My own data suggest that *nori* means either 'it was successful' or 'it got straight' but not 'it is straight' (for which only *norküley* is used).

For küntro- the situation is slightly different: a permanent trait or habitual reading (Sp. cojear) and the progressive/stative version (Sp. estar cojo) are given for küntro- and küntro-le-. I have failed to elicit a form meaning 's/he became lame' but some of my informants agreed on küntroley (and not ??küntroy) being the way to render Spanish está cojo. In the case of kishu

'alone, self, own' (2c), I do not think it is reasonable to set up a separate class since it is the only instance I have found of an adjective that behaves this way. My general (provisory) conclusion is to regard these three verbs as either not fully understood or anomalous.

But what does this have to do with aspect? In the treatment of the other authors mentioned above, forms like $kar\ddot{u}y$ 'it became green' and $kar\ddot{u}ley$ 'it is green (now)' (Examples (2a) and (2b)) are word forms obtained from the lexeme $kar\ddot{u}$ 'green' via zero-derivation, whereas a form like $kar\ddot{u}ngey$ 'it is (permanently) green' (Example (2c)) corresponds to a different lexeme which is the product of nge-derivation. So -le is an inflectional aspectual morpheme like \emptyset , and -nge is a derivational suffix. According to Golluscio's analysis, on the other hand, there would be three verbal lexemes: a simple one ($kar\ddot{u}$ -'become green') and two derived ones ($kar\ddot{u}$ -le-'be in a green state' and $kar\ddot{u}$ -nge-'be permanently green'), since she postulates two different but clearly related suffixes $-le_1$ (inflectional, forms the continuative 1) and $-le_2$ (derivational, yields state verbs), both with allomorphs -le and $-k\ddot{u}le$.

Yes, but how many lexemes really? As mentioned in Section 4.3 above, Golluscio's approach to what I have analyzed here as initiotransformative predicates forces me to tangentially address the question of word formation in Mapudungun. Of the competing analyses, Golluscio postulates (3a), whereas the other authors that have worked on Mapudungun posit (3b):

(3) a. Trilexemic: karü- 'become green'

karü-le- 'be (temporarily) green' karü-nge- 'be (permanently) green'

b. Bilexemic: karü- 'green' (with the grammatical categories

karü-Ø- 'become green' and karü-le- 'be

(temporarily) green')

karü-nge- 'be (permanently) green'

The trilexemic solution is motivated by the fact that Smith's theory of aspect does not provide an initiotransformative aktionsart among the list of available actionality types. It has to posit not only three lexemes but also two different -le suffixes, one of them inflectional and the other derivational. The latter would derive stative verbs from adjectives (Golluscio 1998:43) while the former is a grammeme labeled "stative/durative". This amounts to saying that there is a systematic homophony between forms like karü 'green (adj.)' and karü-Ø- 'become green (v.)', which of course never surfaces since every verb form shows morphology that is never equal to merely -Ø. Stative verbs would be differentiated as to how stative they are, with the suffix -le rendering less stative predicates than -nge.

In the present framework there is no need to postulate a separate lexeme karü-le- 'be (temporarily) green' (which would be similar to analyzing some forms like English is dawning as derived from dawn while others, e.g. is running, would be part of the verbal paradigm of run). Not only do I postulate two lexemes instead of three, but I also posit only one morpheme -le which is inflectional rather than derivational. Therefore, I argue for homophony between karü 'green (adj.)' and karü-O- 'green (v.)'. As in the trilexemic analysis, the suffix -nge derives totally stative predicates directly from the root karü and not from the verbalized karü-O-. In which respect is this approach less powerful or less consistent than Golluscio's? I fail to see either data left unexplained or inconsistencies in the analysis deriving from a bilexemic solution. On the contrary, I believe both Occam's razor and considerations concerning explanatory power to favor, if not the particular version of a selection theory I have presented in Chapter 5, at least a model that is close to it both in spirit and in some of its details.

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The aspect system of Thai

Mathias Jenny Bangkok and Zurich

1 Introduction

In this paper I will present the verbal aspect system of the Standard Thai language, which is the variety used in the area of Bangkok and also the means of communication and education throughout Thailand. Both the written variety and the colloquial speech of Bangkok are considered in the attempt to establish the aspectual system of the language. Data from closely related languages and dialects are used whenever they are likely to give relevant insight into specific problems or lead to greater clarity in the discussion.

Of all grammatical sub-systems, tense-aspect-modality is probably the most complex and frustrating to the linguist. For one thing, it is an obligatory category without which simple sentences cannot be produced. (Givón 1984:269)

The good news for Thai is that aspect forms no obligatory category in the grammar, i.e. simple sentences can be produced without overt aspect markers, leaving the interpretation to the context. The aspect system of Thai is, however, no less frustrating. Given the fact that there are no morphological hints as to the function of a given word in a sentence and that many words used as TAM markers are also in use as full verbs, the picture one gets is rather blurred. It is due to exactly this non-obligatoriness of overt aspect markers that it is extremely difficult to get a coherent and consistent picture of the system.

Previous descriptions of the Thai verbal system are rare and not readily available. The main work cited here is *A Study of Aspect in Thai* (Boonyapatipark 1983), which will be discussed in section 2.

That is a language with a very poor morphological system. Apart from some kinds of derivation and faint traces of a developing verbal agreement for

¹ In choosing the example sentences for this paper, I have drawn from many different sources, both written and oral, including personal informal communication. The grammaticality of all sentences other than from the written sources presented has been checked with native speakers of Bangkokian Thai.

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number, there are no morphological processes at all. With the morphological means lacking, their functions have to be taken over by lexical and syntactical processes. In the case of the Thai verbal system, tense, aspect, and mood are mainly expressed by auxiliaries and verb serialisation (cf. Bisang 1992). The grammaticalisation degree of the auxiliaries varies. Most auxiliaries still function as free morphemes syntactically, though they are usually bound to the VP intonationally.

The unmarked word order in Thai is SVO, the verb and the (direct) object forming the VP. Nothing can come between V and O, not even TAM auxiliaries. This shows that the auxiliaries do not form a part of the verb proper, but rather of the VP as a whole.

2 The study of the Thai verbal system by Tasanalai Boonyapatipark

The first systematic account of the Thai verbal system is the thesis written by Tasanalai Boonyapatipark (1983). In this 250 plus page paper, the author examines Thai verbs and classifies them into different categories. Boonyapatipark's classification of Thai verbs is mainly based on Lyons (1977) with some adjustments.

Boonyapatipark's classification is based on semantic differences, not formal or syntactic ones, and in some cases appears rather arbitrary. There is, for example, no overt reason for postulating a subcategory for verbs denoting 'having and being' in Thai. Nor is there any reason to make a division between 'bodily sensations' and 'feelings and transitory attitudes'. One important verb class is grouped in Boonyapatipark's 'dynamic situations or states resulting from such situations'. This is the first attempt to account for the class of INITIOTRANSFORMATIVE verbs in Thai. Having proposed this classification of Thai verbs, the author discusses the meaning and function of six 'aspect markers', viz. kamlaŋ, yuu¹, yaŋ, leeu³, khrri and caʔ¹, with the different verb classes, as well as restrictions and possible cooccurrences of these markers.

Figure 1: Boonyapatipark's verb classes²

1. States

Permanent states

qualities:

suun⁴ ('tall'), tiə² ('short'), ?uən² ('fat'), phəəm⁴ ('slim'), suəi⁴ ('pretty'),

lek³ ('small'), yai¹ ('big')

inert cognition/

ruu³ ('know'), khau²cai ('understand'), rak³ ('love'), chuuə² ('believe'),

attitudes:

choop² ('like'), kliət¹ ('hate')

having/being:

mii ('have'), pen ('be'), khroop²khroon ('possess')

Temporary states

inert perception:

hen⁴ ('see'), dai²yin ('hear'), dai²klin¹ ('smell sth'), ruu³surk¹ ('feel')

bodily sensation:

cep¹ ('hurt'), khan ('itch'), puət¹ ('ache')

feelings/ transit.

hiu⁴ ('be hungry'), moohoo⁴ ('be angry'), sio⁴cai ('be sad'),

attitudes:

nuiəi¹ ('be tired')

2. Dynamic situations

Processes

non-accomplishments:

win² ('run'), kin ('eat, drink'), drrn ('walk'),

tham kaanbaan² ('do one's homework')

accomplishments:

tat¹sin⁴cai ('decide'), luxək² ('choose')

Events

achievements:

taai ('die'), set ('finish'), cop ('end'), thum ('reach'), maa thum ('arrive') sədut¹ ('stumble'), khɔ?³ ('knock'), krədoot¹ ('jump'), khwaaŋ² ('throw')

momentary situations:

3. Dynamic situations or states resulting from such situations

with animate subject only:

suəm⁴ ('wear'), sai¹ ('wear'), yunun ('stand'), nan² ('sit') prrt ('open'), pit ('close'), hak ('break'), tok ('fall')

with anim. or inan.subject: with inanimate subject only:

khaat¹ ('be torn'), teek¹ ('burst, break')

Though Boonyapatipark is a native speaker of Bangkok Thai (Standard Thai), some of the examples marked as ungrammatical are very common and perfectly grammatical in spoken Thai. (2.1) for instance is not problematic at all.

(2.1) ?khau⁴

kamlan taai (Boonyapatipark 1983:70)

3hum

PROG

die

This sentence is very well intelligible (and regarded correct) as '(S)he is dying' or '(S)he is going to die'.

² I use IPA symbols to transcribe Thai, indicating the tones according to the indigenous Thai system, i.e. the mid level tone is unmarked, the low tone is marked 1, the falling tone 2, the high tone ³ and the rising tone ⁴. In quoting examples from other sources, I adjust the spelling accordingly in order to facilitate the reading.

The use of *kamlaŋ* with verbs indicating permanent states is, according to Boonyapatipark, not grammatical in most cases. There are some exceptions: "The use of *kamlaŋ* may, however, be acceptable with some verbs of this group [verbs indicating qualities]. For example, the combination of *kamlaŋ* with *ruəi* 'be rich' as in (27) [my (2.2)] below is acceptable."

(2.2) khau⁴ kamlan ruəi
3hum PROG be.rich
'He is rich at the present.'

This sentence is grammatically correct, another possible reading being 'he is going to be rich' or 'he is becoming rich'.

Boonyapatipark tries to force Thai into a system developed for English and similar languages. This is done by marking correct sentences as ungrammatical, choosing the translations that best fit into this system and splitting the postulated categories arbitrarily ("...may be acceptable with some verbs of this group ..."). It is not surprising, therefore, that Boonyapatipark's classification fails the common tests for actionality, the first three of which have been in use since Vendler 1957 (Figure 2). Boonyapatipark has to be accredited, however, with presenting the first attempt to bring some order into the Thai verbal system. Her attempt may not be very successful in some respects, but given the lack of earlier studies to refer to, her thesis must be considered an important step in the study of Thai grammar. Especially in analysing the TAM markers she discusses, she presents important insights and very useful labels, as will be seen later on.

Figure 2 shows Boonyapatipark's classification of verbs tested according to some common tests for establishing verb classes. As the table clearly shows, the verb classes are not evident from the results. Especially striking is the obvious impossibility to establish a class of telic verbs as opposed to atelic verbs. Another problem that is evident in Boonyapatipark's analysis is the English translation, which in many cases does not reflect the semantics of the Thai verb. What Boonyapatipark classifies as "states" is more correctly translated as 'be xx' or 'become xx'. "Non-accomplishments" can have telic readings in a given context without overt marking. It is clear, therefore, that a categorisation of the Thai verbs has to be based on language specific tests, which might (and in fact is very likely to) lead to a very different picture than the one seen in European languages. I will attempt a categorisation below.

Figure 2: Test of Classification according to Boonyapatipark

Verb \ Test	A	В	C	D	E	F	Verb class
suuŋ⁴'tall'	+	+	+	+	+	±	
tiə² 'short'	+	+		_	_	±	qualities
?uən² 'fat'	+	+	+	+	+	±	1
ruu ³ 'know'	-	+	+	+	-	+	inert cognition /attitudes
rak³ 'love'	+	+	+	+	+	+	_
mii 'have'	+	+	+	+	?	土	having / being ³
pen 'be'	+	+	+	+	?	+	
. 4.							
hen ⁴ 'see'	+	+	+	+	-	+	inert perceptions
cep¹ 'hurt'	+	+	+	+	-	+	bodily sensations
khan 'itch'	+	+	+	+	-	+	
hiu ⁴ 'hungry'	+	+	1				Carling.
niu nungry nuiəi¹'tired'	+	+	++	+	-	++	feelings
nuiai tired	+	7-	+	+	-	+	
wiŋ² 'run'	+	+	+	+	+	+	non-accomplishments
kin 'eat'	+	+	+	+	+	+	non-accompnishments
Kiii Out	,	•	•	'	'	'	
luıək² 'choose'	+	+	+	+	+	+	accomplishments
10001				·		,	uocompiisiiments
taai 'die'	-	_	+	_	+	+	achievements
set ¹ 'finish'	-	_	+	_	+	+	
sədut ¹ 'stumble'	+	+	+	+	+	+	momentary situations
kho?3 'knock'	+	+	+	+	+	+	
sai¹ 'wear'	+	+	+	+	+	+	Dyn/States animate S only
naŋ² 'sit'	+	+	+	+	+	+	
pryt' open'	+	+	+	+	+	+	Dyn/States animate
pit¹ 'close'	+	+	+	+	+	+	or inanimate S
1							
khaat¹ 'torn'	•	-	+	+	+	+	Dyn/States inanimate S only
tεεk¹ 'break'	-	-	+	+	+	+	

Tests

- A. if someone x-s and is interrupted, he has x-ed
- B. for two hours, until two o'clock
- C. in two hours, in two years, in a minute
- D. start x-ing
- E. if someone x-s and is interrupted, he has almost x-ed
- F. at two o'clock (±: possible if specific time expression is topic)

³ The verbs *pen* and *mii* are semantically empty, i.e. in many cases they cannot be analysed properly without a NP following them.

3 The Verb Categories in Thai

3.1 Punctual Verbs

A category that can be established by language internal formal means in Thai is the class of PUNCTUAL or MOMENTARY verbs which have no temporal expansion, i.e. consist of only a situation change or transformation. This class is characterised by the non-cooccurrence with the TAM marker yuu^l , which denotes a limited phase ('temporary') (cf. 4.1). Not compatible with yuu^l are verbs like taai 'die', $rabyyt^l$ 'explode', $haai^4$ 'recover (from illness), disappear's, set^l 'finish', cop^l 'end, come to an end'. This class coincides largely with Boonyapatipark's 'achievements'.

The semantic structure of punctual verbs consists of only one point: \otimes . Punctual verbs can be used in attributive position with a resultative reading without overt marking. An expression like *khon taai* 'person die' can be interpreted as 'people die' or 'dead person'.

3.2 Statives, activities, initiotransformatives

The bulk of the remaining verbal lexemes in Thai can at first sight be divided into two major groups that correspond roughly to 'verbs' and 'adjectives' in traditional European grammars. In spite of Bisang's reservations (1992:328), the comparative particle *kwaa*¹ is one formal criterion to define QUALITY VERBS, even if the resulting subcategory is not identical with Boonyapatipark's group of "verbs indicating qualities" and does not always conform to subcategories that can be established on other formal grounds, such as cooccurrence with certain TAM markers.

If the comparative marker $kwaa^{l}$ is used with a verb other than a stative, the stative $maak^{2}$ 'much, many' must be added:

- (3.1) khau⁴ suuŋ⁴ kwaa¹ phii²chaai khau⁴.

 3hum tall COMPAR older.brother 3hum
 'He is taller than his brother.'
- (3.2) a. *phom² tham naan kwaa¹ khau⁴. 1sm do work COMPAR 3hum tham naan maak² kwaa¹ khau⁴. b. phom⁴ **COMPAR** do work much 3hum 1sm 'I work more than he does.'

⁴ Not compatible means that these verbs cannot occur with *yuu*¹ alone. In most cases *yuu*¹ is possible together with a location adverb, which is analyzed differently. (cf. section 4) ⁵ The grammaticality of the expression *haai*⁴ *yuu*¹ 'is recovering' is more than dubious.

It is not ungrammatical to add $maak^2$ in (3.1), but rather unidiomatic. The omission of $maak^2$ in (3.2a) on the other hand leads to ungrammaticality of the sentence.

The verb $suu\eta^4$ in (3.3), as most statives, does not only describe a state (of being tall), but also a continuous process (of growing and becoming tall). In a natural setting, the first interpretation does not make much sense, therefore the second reading is preferred. But compare also (3.4), where only the state is expressed by the quality verb:

- (3.3) khau⁴ yaŋ suuŋ⁴ yuu¹.

 3hum PERS tall TMPR
 ?'He is still tall.' or (better) 'He is still growing.'
- (3.4) khau⁴ phuŋ² cə ?aayu?³ sip¹ khuəp¹, yaŋ mai² too rɔɔk¹.

 3hum just.now PROS age ten year PERS NEG big CEXP

 'He is only ten years old, he isn't (a) big (boy) yet.'

Clearly, the process of 'becoming a big boy' has started, but the relative state of 'being big' has not been reached yet. For *too* with a different interpretation see (4.33).

Some statives are conceived of as having no starting point or no end point. These include expressions like 'be a child', 'young' which have no beginning, but only an end point, or 'to be old' which in a natural setting does not end at any point, but has started at some time. We can therefore divide the statives in three subclasses, viz.

1.	States with only beginning:	/
2.	States with only end point:	/
3.	States with both beginning and end:	//

A fourth group can be added, the totally stative predicates, which describe a property that is not normally subject to change, i.e. excluding both beginning and end points. This group is expressed in Thai mostly by nominals, with or without a copula. Typical examples are expressions like nam^3nak^l 'weight'⁶, $chuuu^2$ 'name', $pen\ chaau\ phut^3$ 'be a Buddhist', $ni7\ ^3sai^4$ 'attitude, character, behaviour' etc. As these predicates do not normally cooccur with aspect markers, they will not be considered in this study.

It has to be noted that beginning and end points here are purely (natural) temporal limits, not crucial boundaries. A simple test for the distinction of the subclasses of quality verbs is the applicability of time expressions like 'since' and 'until' in natural settings. With states excluding the end point, only 'since'

⁶ Only the "weight" of certain things like a car, a stone, etc. is totally stative, of course. When talking about people, the change in weight can be expressed by adding aspect markers.

is applicable, with those excluding the beginning only 'until', while the rest is combinable with both.

- (3.5) ton²maai³ nii³ yai¹ taŋ²tɛɛ¹ (?conthuŋ⁴) pii thii²lɛɛu³. tree this big since (until) year previous 'This tree has been big since (*until) last year.'
- (3.6) khau⁴ tuə tiə² con thuŋ⁴(*taŋ²tεε¹) ?aayu?³ sip¹haa² pii. 3hum body hort until reach since age fifteen year 'He was short until (*since) he was fifteen years old.'
- (3.7) khau⁴ suəi⁴ taŋ²tɛɛ¹ / conthuŋ¹ ?aayu?³ sip¹haa² pii.

 3hum pretty since / until age fifteen year

 'She was beautiful since/until she was fifteen years old.'

These distinctions are important as some of the TAM markers which will be discussed in section 4 are sensitive to the semantic structure of quality verbs.

Usually statives are compatible with specific time expressions only if the time expression is the topic (in sentence initial position) rather than the comment of the sentence:

(3.8) a. toon ?aayu?³ haa² khuəp¹, khau⁴ suəi⁴.

TEMP age five year 3hum pretty
b. ?khau⁴ suəi⁴ toon ?aayu?³ haa² khuəp¹.

3hum pretty TEMP age five year

'She was pretty when she was five years old.'

There are, however, quality verbs that can be used with specific time expressions denoting the beginning of the state:

(3.9) naalikaa pluk¹ dan toon hok¹ moon chaau³. clock wake_{tr} loud TEMP six o'clock morning 'The alarm clock went off at six a.m.'

The verb *day* 'be loud' obviously behaves like an "initiotransformative" verb, a category recognised already by Boonyapatipark. She calls this class "verbs indicating dynamic situations and states arising from such situations" (1984:57) (DYN.STAT). The members of this class are characterised by their semantic structure indicating an event (transformation) leading to a ensuing state. Both the event and the state are expressed by the same verbal lexeme.

- (3.10) khau⁴ lap¹ toon sii¹ thum².

 3hum asleep TEMP four evening.hour
 'He fell asleep at 4 p.m.'
- (3.11) phom⁴ ruu³ toon thii² phom⁴ crr khau⁴ khraŋ reek².

 1sm know TEMPATTR 1sm meet 3hum time first
 'I knew/realised it, when I met him/her the first time.'
- (3.12) ?khau⁴ tuə suuŋ⁴ muuə² ?aayu?³ sip¹hok¹ pii.
 3hum body tall when age sixteen year
 'He grew tall when he was sixteen years old.'

As shown above, many (but not all!) of the quality verbs established through the compatibility with the comparative $kwaa^{l}$ cannot be used in these constructions. Here the time adverb $ta\eta^{2}$ $t\varepsilon\varepsilon^{l}$ 'since' or an auxiliary/aspect marker like the phasal auxiliary $rrrm^{2}$ 'begin, start' or the perfective marker dai^{2} (see 4.2) have to be used instead.

- (3.13) khau⁴ tuə suuŋ⁴ taŋ²tεε¹ ?aayu?³ sip¹hok¹ pii. 3hum body tall since age sixteen year 'He has been tall since the age of sixteen.'
- (3.14) khau⁴ rrrm² tuə suuŋ⁴ muuə² ?aayu?³ sip¹hok¹ pii.
 3hum start body tall when age sixteen year
 'He started being tall when he was sixteen years old.'

According to Boonyapatipark the DYN.STAT verbs are sensitive to the animacy of their subject (see fig. 1). The distinction is especially important in clauses where the temporary aspect marker yuu¹ is present, resulting in different interpretations according to the animacy of the subject. Boonyapatipark's analysis can explain the differences of interpretation of DYN.STAT verbs, a more adequate explanation is to take the semantic role of the subject as determining factor for the interpretation of DYN.STAT verbs in yuu¹-clauses. If the subject is actor, the normal interpretation is "focus on activity", while with undergoer subject it is "focus on state". Many DYN.STAT verbs can take both actor and undergoer as subject, and many subjects (especially animate) can function both as actor or undergoer. In these cases only the context determines whether we are dealing with actor or undergoer subject interpretation.

While in (3.15) the subject can be interpreted only as actor, in (3.16) the context suggests this reading.

- (3.15) khau⁴ prətu yuu¹.

 3hum open door TMPR

 'He is opening the door.'
- (3.16) yaa¹ phuŋ² khau² maa, chan⁴ sai¹ sup² yuu¹.

 PROH just.now enter come 1fam wear shirt TMPR 'Don't come in yet, I'm putting on my shirt.'

To focus on the action with DYN.STAT verbs, the new high focal progressive marker $kamla\eta$ (see 4.1.4) is usually employed. As the subject of sai^{I} can also be a semantic undergoer, example (3.16) is ambiguous and could be expressed more clearly as

(3.17) yaa¹ phuŋ² khau² maa, chan⁴ kamlaŋ sai¹ sup² yuu¹.

PROH just.now enter come 1sf PROG wear shirt TMPR

While a possible comment to (3.16) might be something like 'why can't I come in, if you are wearing a shirt?', (3.17) is unambiguous in most cases (though a reading with focus on the state might be construed).

With undergoer subjects, the aspect marker yuu^{l} focuses on the state following the event.

(3.18) prətuu prrt yuu door open TMPR 'The door is open.'

Another verbal class postulated by Boonyapatipark (1984:54) are 'verba indicating non-accomplishments' or ACTIVITIES. With specific time expressions, these verba are often interpreted as inchoatives, i.e. the time expression denotes the beginning of the activity. The interpretation is determined by the position of the time expression: if it is in topic position, the reading is 'situation going on at time x'; if the time expression is in the comment clause, the normal reading is 'situation starts at time x'.

There is obviously no clear-cut three-way distinction STATIVES - ACTIVITIES - INITIOTRANSFORMATIVES in Thai. We are rather dealing with a continuum on which the individual verbs or verbal expressions are to be located, many verbs sharing properties of more than one class.

The category encompassing statives, activities and initiotransformatives can be called DURATIVE verbs. Durative verbs have a certain duration, which may or may not be limited by temporal boundaries on either or both sides.

With some duratives, the initial limit has more prominence than with others, i.e. it can be focused on more easily. More easily here means that less marked context or overt marking is needed to achieve an inchoative reading ("initiotransformatives"). Others lack prominent limits, appearing as totally

stative, while still other verbs seem to have both initial and final limits of about equal prominence ("activities").

3.3 Telicity in Thai

As seen in figure 2, the telicity of Thai verbs can not easily be determined by using the common tests. Johanson speaks of "linguistic units expressing actions" and Comrie suggests that we should speak rather of "telic situations" than of "telic verbs":

Moreover, provided an appropriate context is provided, many sentences that would otherwise be taken to describe atelic situations can be given a telic interpretation. [...] However, although it is difficult to find sentences that are unambiguously telic or atelic, this does not affect the general semantic distinction made between telic and atelic situations. (1995:54)

It is certainly true for Thai that many verbs can be interpreted as telic or as atelic, depending on the context. While a verb like *khaa*² 'kill' is normally interpreted as telic, it does not necessarily have to be so. In (3.19), the expression *khaa*² tuo taai 'kill oneself, commit suicide' does not necessarily imply that the person really died and has therefore to be reinforced by taai pai cincin 'she really died', in spite of the use of the compound *khaa*² taai 'kill-die', which normally expresses telicity.

klum², lyri 1ε ?³ $k\mathfrak{d}^2$ khaa² tuə (3.19)khau⁴ taai, 3hum depressed CONS kill self die and COMM taai pai cincin real:RDP die 'She was depressed, therefore she committed suicide, and then she really died.' (LR:269)

One factor preventing an unambiguous telic reading is the fact that Thai verbs can both express an 'intention to act' and the 'activity' itself. As aspect is not an obligatory category, the prospective aspect does not have to be expressed overtly, but can be established by the context.

If we change the second part of (3.19) above, we get the reading 'tried to commit suicide':

(3.20) khau⁴ klum², lyri khaa² tuə taai, tεε¹ kɔ² mai² taai.

3hum depressed CONS kill self die but COMM NEG die

'She was depressed, therefore she tried to commit suicide, but she did not die.'

Another candidate for the class of accomplishments that deserves some consideration is the verb *luum* 'forget'. Certainly 'forgetting' takes an amount of time, and it can not be called 'forgetting' if it is not carried out to the end. This seems to make 'forget' semantically a typical accomplishment. Still the tests to establish accomplishments fail with *luum*. It does not make sense to ask 'how long does it take to forget this?' or to say that 'it took him five years to forget'. The problem here seems to be a conceptual one. Although it takes some time to forget, we only realise the moment we have forgotten. We are not aware of the beginning of the process or the process itself. 'Forget' is therefore conceived of as punctual rather than as extended situation. That *luum* in Thai is in fact used as punctual is shown by its incompatibility with the temporary marker *yuu*¹. An atelic (or rather conative) interpretation of *luum* is given in sentence (3.21), where it is again the 'trying to do' that is dominant, not the activity itself:

thau²rai. ko^2 (3.21)phəyaayaam luuum thau²rai make.effort how.much forget how.much COMM mwən⁴ khon drym. **CONT** same original 'However hard I try, however much I (try to) forget, it's still the same as it was.' (from a popular Thai song)

One way to achieve telicity in an expression is by adding a definite object. As Thai grammar does not require an overt object with a transitive verb, the verb can in further references retain its telicity, even if the object is absent.⁷

tan²cai nan⁴sww⁴ phom⁴ ?aan¹ (3.22)lem² nii³ CL_{book} 1sm intend **PROS** read book this nii³, cop¹ haa⁴, tee1 iibccha phwən² $k\mathfrak{d}^2$ wan maa end day this but just.then friend come look.for COMM mai² cop¹. ?aan¹ lxxi CONS NEG end read

'I intended to finish this book today, but then a friend came to see me, so I did not finish it.'

If in the sentence (3.22) ?aan¹ ... cop¹ is replaced by ?aan¹ and ?aan¹ mai² cop¹ by mai² ?aan¹ or mai² dai² ?aan¹, the first part of the sentence could be interpreted as 'I intended to read in this book' and the second part would most likely be understood as 'I didn't read' or 'I didn't get to reading', while (3.22) implies that I started reading but did not finish the book.

⁷ It is common to overtly express nominal phrases only once in a paragraph, both written and spoken, unless some new information is added to them or the listener might lose track of them.

Overt telicity by combination of two or more verbs is very common in Thai. The first verb indicates an activity or an attempt to achieve a result and is characterised by the feature [+volition, + control] while the second one expresses the result and carries the features [-volition, -control]. A detailed description of these "completive" verbs is given in Noss (1964:127ff, cf. p.8f) and summarised in Bisang (1992:338f), who calls them 'resultative constructions'. The sentences (3.23) - (3.24) illustrate these telicising verb compounds.

- (3.23) khau⁴ haa⁴ rot³ mai² crr.

 3hum look.for car NEG find

 'He cannot find his car (although he is looking for it).'
- (3.24) khun kin khaau² mot¹ leeu³ ruuu⁴?

 2hon eat rice be.all NSIT Q

 'Have you already eaten all your food?'

The verbs haa^4 'look for' and kin 'eat' are not telic themselves, but with a V2 adding a final boundary, the whole expression usually becomes telic. Notice that the telicising verb in the compound does not have to be telic itself. crr 'find, meet' is not necessarily telic (i.e. it has readings that exclude telicity) but as V2 it is conceptualised as transformative.

As seen above (3.20), verbal compounds do not always result in telic readings. The context remains the main determining factor. This is due to the fact firstly that we always have to reckon with an implied prospective reading and secondly that in verbal compounds V2 does not necessarily express the achievement of a result itself, but can have purposive meaning, i.e. 'V1 is done in order to achieve V2'. This purposive component can be overtly expressed by hai² 'give, let; CAUS, FIN', but here again the overt marking is not obligatory. This accounts for the atelic reading in (3.20) above of the verbal compound khaa² tua taai 'kill self', which can be interpreted as 'kill self in order to die'. Nothing is said about the result being achieved or not, though in an unmarked context it is implicated that the result is achieved.

We can state that telicity in Thai is not inherent in the verbal semantics except for the punctual verbs, which do not include a period but only a transformation. There are situations corresponding to accomplishments, but an adequate context can always cancel the telicity of these, highlighting only the situation leading to the transformation and sometimes even exclude the transformation. We may therefore postulate different tendencies of durative verbs, namely verbs denoting situations without prominent borders, with equally prominent initial and final borders, with prominent initial borders and with prominent final borders.

The easiest way to determine the semantic tendency of a given verbal expression is by applying it to the sentence ... toon saam³ moon '... at three

o'clock' or ... muo^2 wansuk' '... last Friday'. Compare the default interpretations of the sentences below without marked context.

- (3.25) khau⁴ khaa² wuə muə² wansuk¹.

 3hum kill cow when Friday
 'He killed a cow last Friday.' ⇒ final limit prominent
- (3.26) khau⁴ lap¹ toon sii¹ thum².

 3hum asleep TEMP our evening.hour

 'He fell asleep at three p.m.' \Rightarrow initial limit prominent
- (3.27) $phom^4 kin khaau^2 toon peet^1 moon.$ 1sm eat rice TEMP eight o'clock

 'I eat/ate at eight o'clock.' \Rightarrow both limits equally prominent

3.4 Phasal verbs - verbal phases

Phasal verbs are used to add boundaries and phases to verbal expressions. I include in the class of phasal verbs all verbal auxiliaries that are used in combination with other verbs to add and/or put focus on one phase or point of their semantic structure. In this sense, the group of V2 that have a telicising function forms a subclass of the phasal verbs. Many of the aspect markers discussed in section 4 overlap with or have arisen from phasal verbs. The main difference between phasal auxiliaries and TAM markers is the degree of grammaticalisation. The phasal auxiliaries generally retain their verbal semantics, while the markers are more grammaticalised.

The most typical phasal verbs are 'begin' and 'stop'. In Thai, these are widely used, even in situations where the verbal semantics and/or the context are sufficient to suggest a specific reading:

caak¹ theen³ luuk² khon reek² kwəp¹ lan⁴ di?¹chan⁴ (3.28)pii. ABL miscarry child CL_{hum} first year almost 1sfhon ko^2 ryym² ?iik¹ khran³. tan^2 khan COMM begin womb set.up more time 'Almost a year after I had lost my first child, I became pregnant again.' (PL:11)

The expression $ta\eta^2$ khan 'set up a womb/pregnancy, conceive a child' clearly includes a starting point; the phasal auxiliary $rrrm^2$ here only reinforces the inchoative reading. The same goes for (3.29), with $prrt^l$ 'open' being a typical verb with prominent initial border.

suik¹saa⁴phanphaanit³ ryym² borikaan tan²tεε¹ pyyt1 (3.29)Sueksaphanphanich service since begin open nuin¹ meesaa⁴yon 2543. one April 2000 'Sueksaphanphanich will from April 2000. be open 1st. (advertisement of the opening of a shop in Bangkok)

The opposite of $rrrm^2$ is $lrrk^2$ 'stop, finish, cease', which only indicates that an activity is ending, without reference to its outcome. In other words, the final boundary is reached, independent of whether it is the crucial boundary (transformation) or not.

(3.30) phom⁴ lysk² ?aan¹ naŋ⁴sww⁴ toon/taŋ²tee¹ thiəŋ².

1sm finish read book TEMP/since noon
'I stopped reading at noon.'

In order to add information about the result, we have to change $lrrk^2$ into set^l 'finish' to indicate that a set portion of the reading has been finished, cop^l 'end' if the whole book has been read or mot^l 'all' if all books that had to be read have actually been read.

The phasal verbs therefore not only choose a certain phase of the action, but add a boundary. Aspect markers are added to indicate the role of this boundary, i.e. whether it has been transgressed, will be reached soon, etc. With punctual verbs, $rrrm^2$ indicates the beginning, $lrrk^2$ the end of a habit, suggesting iterative reading.

3.5 The basic verb classes in Thai

We have established on the preceding pages two major verb classes: PUNCTUAL and non-punctual (DURATIVE) verbs. The durative verbs do not form a homogenous class but rather a continuum of verbs with different tendencies of prominent boundaries.

The context, auxiliaries, and aspect markers can set boundaries and phases and focus on them, producing verbal expressions with telic, initio-transformative, stative and punctual interpretations. The three main determining factors setting and choosing boundaries or phases in a given verbal expression are thus

- 1. The context (both linguistic and extra-linguistic)
- 2. Phasal auxiliaries
- 3. TAM markers.

We can conclude that some kind of aktionsart is present in Thai, but it is very underspecified. There are two verbal categories that can be established by language internal formal means, but the pragmatics remain an important factor in determining the interpretation.

The next chapter is dedicated to the main aspect markers in modern Thai and their interaction with the different verb types.

4 The main aspect markers in Thai

In this section I will present the main aspect markers in Thai, together with their meaning, use and restrictions. Some of them have already been dealt with in Boonyapatipark (1983). The markers are arranged in groups according to their use. It must be noted, however, that the categories 'imperfective', 'perfective' and 'perfect' are not clear-cut categories in Thai. The classification of the Thai aspect markers is only partly adequate and applied here for reasons of convenience. Many of the markers under discussion do not correspond in their function(s) to one of these categories alone.

- 1. 'Imperfective' markers
 - a. yuu¹, a postverbal TEMPORARY aspect marker
 - b. pai, a postverbal CONTINUATIVE marker
 - c. yan, a preverbal PERSISTIVE marker
 - d. kamlaŋ, a preverbal PROGRESSIVE marker
- 2. 'Perfective' marker
 - a. dai^2 , a preverbal PERFECTIVE marker
- 3. 'Perfect' markers
 - a. $l\varepsilon\varepsilon u^3$, a postverbal marker for 'NEW SITUATIONS'
 - b. maa, a postverbal PERFECT marker
- 4. The prospective marker
 - a. $ca?^l \sim ca$, a preverbal PROSPECTIVE marker

Of these aspect markers, all but *kamlaŋ* and *ca?*¹ are also used as full verbs in standard Thai or have developed from verbs. Where the use as a full verb is not present in the standard language anymore, it is often found in closely related dialects. Given the fact that most aspect markers still retain their transparent semantics, it is difficult, if not impossible, in many instances to decide whether we are dealing with a verb with its own semantics or with a grammaticalised TAM marker. It also has to be kept in mind that absolute verb classes can hardly be established, i.e. TAM markers and the context can influence the classification of a given verbal expression. Most of the aspect markers are therefore not selective, i.e. they do not only select a part of the

semantic structure of a verb (or verbal expression), but they very often add meaning to it, both modal and aspectual.

4.1 The markers of the 'imperfective' group

The imperfective aspect is characterised by its reference to the internal temporal structure of a situation. The imperfective does not necessarily have to form a homogenic category in a language. To this we might add that there are markers in some languages that only partly correspond to imperfective meaning, while other functions of the same markers are classified rather as perfective or modal than as imperfective. One such example is *pai* (s. below), which covers part of the imperfective, but has other uses with rather perfective meaning.

In Thai, the imperfective is not expressed in a single category, but divided into different subcategories, namely temporary, continuative, persistive, progressive and habitual aspects.

vuu^{l}

yuu¹ as a full verb means 'be at, stay, live, remain at'. As a postverbal auxiliary it has been described as 'present tense' (Thonglor 1978:247) or as 'continuative' marker (Boonyapatipark 1983:99ff.). Noss gives as meaning of the auxiliary yuu^1 "remaining on the scene, unchanged, action continuing, temporary, without necessary future significance" (1964:186). I suggest the label 'temporary aspect'⁸ for yuu^1 , as the temporary component seems to be dominant. yuu^1 indicates that the right limit of the situation has not been reached yet. This accounts for the incompatibility of yuu^1 with verbs denoting irreversible situations without possible end point, e.g. kee^1 'be old' as opposed to num^1 'be young (man)'.

Furthermore, yuu¹ does not cooccur with punctual verbs. yuu¹-clauses are often used to describe the background of a narrative.

(4.1) sion⁴ phuut² siən⁴ khui nai muu¹ khondooisaan⁴ sum² sound speak sound chat group passenger in yuu¹ mwə²rwə ryym² ?ook¹ caak¹ thaa² nan³ TMPRwhen boat start exit ABL jetty that khəi²khəi² niəp² pai. gradually quiet go 'Voices chatting when the boat left the jetty gradually faded.'9 (LC:1; ML:1)

⁸ Cf. Bickel (1996:113ff) for discussion of a form with similar function in Belhare.

⁹ In the examples from 'Many Lives' where appropriate I use the English translation by Borthwick (1996).

In (4.1) the situation at one specific point in time ('when the boat left the jetty') is described, and at that point the talking and chatting, that is likely to have started some time earlier, goes on, but a possible endpoint is conceivable (and actually reached here).

 yuu^{I} occurs with expressions of a specific point in time in topic position, as in (4.2). In (4.3), the period covered by yuu^{I} is 'a very long time':

- kap¹ (4.2) muj²waan toon baai¹ phom¹ moon. tham yesterday TEMP afternoon o'clock 1sm do with khaau²¹ yuu rice **TMPR** 'Yesterday at 1 p.m. I was cooking.'
- yuu¹ naan (4.3) tat¹sin⁴cai thiidiəu kwaa¹ cə mun⁴ thoorəsap¹ TMPRlong.time very before PROS dial telephone decide khunyin⁴ saa⁴raai¹. pai go look.for ladv Sarai 'It took her a very long time to make up her mind and call lady Sarai.' (LR: 86)

More restricted, if not impossible, is the use of yuu^{l} with broader expressions of time like 'yesterday', 'last year', etc., as can be seen in the ungrammaticality of examples (4.4) and (4.5).

- (4.4) *mwə²waan phom⁴ ?aan¹ naŋ⁴sww⁴ **yuu¹**.

 yesterday 1sm read book TMPR

 'Yesterday I was reading.'
- (4.5) *pii thii²lɛɛu³khau⁴pen khruu **yuu¹**. year previous 3hum be teacher TMPR 'Last year, he was a teacher.'

Both sentences are acceptable only if an adverbial expression is added:

- (4.6) mwə²waan phom⁴ ?aan¹ naŋ⁴sww⁴ **yuu¹** baan² thaŋ³ wan. yesterday 1sm read book TMPR/stay house INCL day 'Yesterday I spent the whole day reading at home.'
- (4.7) pii thii²lεεu³khau⁴pen khruu **yuu¹**, tεε¹ toon nii³ ?ook¹lεεu³. year previous 3hum be teacher TMPR but TEMP this exit NSIT 'Last year, he was a teacher, but now he quit.'

The use of yuu^{l} with future reference is not very common, but not excluded, as seen in (4.8)

(4.8) thaa² khun mai² protuu baan², phom⁴ сə 2hon NEG open door house 1sm **PROS** naŋ² yuu¹ than³ ccr khuuun. **TMPR** INCL sit wait night 'If you don't open the house door, I am going to sit and wait for you all night.' (LR:470)

Another use of yuu^{l} is with expressions of habituality, with or without overt habitual marker. In this case, yuu^{l} denotes a habit that is restricted in time and holds for sure only for the period described.

(4.9) mee² seem⁴ ko² khoon4 bon¹ thum⁴ complain about mother **POSS** S. COMM thuk³ wan. khwaam-yaak²con yuu¹ prəcam pen every day NML-poor permanent **TMPR** be 'Sem's mother continued to complain daily of her poverty.' (LC:46, ML:28)

pai 'go'

pai 'go' is widely used as a full verb denoting a motion away from the point of reference, usually the now and here for the speaker. As an orientation verb after the main verb it expresses a motion away from the speaker and towards a goal, which it introduces. pai can be considered either transitive (as in (4.10), where the use of pai is obligatory) or intransitive (in (4.11)).

- (4.10) khau⁴ dywn **pai** rooŋriən.

 3hum walk go school
 'He walks to school.'
- (4.11) khau⁴ ?οοk¹ **pai** taŋ²tεε¹ thiəŋ².

 3hum exit go since noon
 'He left at noon.'

The original meaning of *pai* is always present in its function as TAM marker. Its semantic scope as TAM marker varies from 'continuative' (i.e. away from the present moment into the future) to 'completed' and 'away from speaker or his interest'. *pai* combines with all verb classes, though its application is restricted in some combinations, especially where a spatial movement towards the speaker is involved.

pai as continuative marker. In the function of a continuative marker, pai is often accompanied by too^{l} 'connect, link, continue'. In (4.12) pai could be replaced by yuu^{l} without an obvious change in meaning.

(4.12) khunyin⁴ saa⁴raai¹ nin² **pai** khruu² nun¹. lady Sarai still go(CONT)moment one 'Lady Sarai remained silent for a moment.' (LR:730)

Unlike yuu^{l} , pai can express an extension of time into the future. In (4.13), the use of yuu^{l} would lead to ungrammaticality:

(4.13) hai² nak³riən ?aan¹ naŋ⁴suuu⁴ **pai** (*yuu¹) ?iik¹

CAUS students read book go(CONT) more
yii²sip¹ naathii.
twenty minute
'The students have to keep reading in their books for another twenty minutes.'

But compare the very similar sentence in (4.14), where both pai and yuu^{l} can be used. The interpretation is not quite the same, though. While yuu^{l} describes the situation as completed, past, pai may indicate a continuance into the future.

(4.14) nak³riən ?aan¹ naŋ⁴suttu⁴ **yuu¹/ pai** ?iik¹ yii²sip¹ naathii. student read book TMPR / CONT more twenty minute 'The students kept reading for another twenty minutes.'

In sentences with yuu^{l} as a full verb, pai is usually the only option to express a continuing situation:

(4.15)a. *khau⁴ yuu¹ mwəŋ thai **yuu¹** rwəi²rwəi²
3hum stay country Thai TMPRcontinuously
b. khau⁴ yuu¹ mwəŋ thai **pai** rwəi²rwəi².
3hum stay country Thai go(CONT)continuously.
'He is/keeps staying in Thailand (for the time being, until some change comes).'

With duratives without prominent limits, pai usually expresses an increasing degree of the situation or introduces a starting point of the situation. In (4.1) above we saw the expression $siay^4$ nan^3 $khoi^2$ $khoi^2$ $yiap^2$ pai 'the voices gradually faded', lit. 'the voices gradually went silent'. In this sentence the degree of 'silence' is increasing. In (4.16), pai indicates the beginning of the state:

(4.16) muse khruu khau maa nai hon rien, nak rien ko when teacher enter come in classroom student COMM niep pai thanthii.

quiet go at.once
'When the teacher entered the classroom, the students went quiet at once.'

Even if *pai* and/or *thanthii* are absent, the meaning remains unchanged. The context makes it clear enough (or suggests it clearly enough) that the students had been chatting before the teacher entered and stopped the moment he came in. It is important to notice in this connection that the context, also extralinguistic, can determine the exact interpretation of a given situation, adding aspectual values that are not present in the verbal semantics.

pai as marker of action away from centre of interest. This use of pai is rather modal than aspectual, though it cannot be clearly separated from other uses of the TAM marker pai. A typical example is given in (4.17), which contrasts with (4.18), where the other orientation verb maa is used instead. (4.17) implies that the speaker is not going to listen to what the addressee is going to say, whereas in (4.18) he will listen to it. In (4.17), the sound goes away from the hearer's ears, therefore pai is the obvious choice here.

- (4.17) yaak¹ phuut² ?ərai kɔ² phuut² **pai** thơ?¹.

 DES speak what COMM speak go IMPER

 'If you want to say something, go on, speak!' (LR:573)
- (4.18) pai nai⁴ maa? phuut² maa lyri.
 go where come speak come EMPH
 'Where have you been? Tell me right away!'
- In (4.19) the first instance of *pai* indicates continuative, whereas the second one implies rather that the action is away from the centre of interest, in this case Vibhat. The expression lap^{l} pai also denotes the completion of the event, therefore taking rather perfective meaning.
- dai² ?iik¹ (4.19)koomeet² khruu² diəu, khau⁴ khui **pai** K. chat go(CONT)get more moment single 3hum wi?³phaat² noon khit³ ?ərai ko^2 thin³ hai² lap¹ pai asleep go leave CAUS V. lie think what COMM ?ərai ruəi²puəi¹ yuu¹ taamlamphaŋ too1 connect what aimlessly stay alone 'Komet went on chatting for a moment and then fell asleep, leaving Vibhat lying alone, thinking aimlessly.' (LR:85)

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In past time contexts, *pai* is often replaced by *maa*, which expresses a kind of perfect (cf. below). As seen in (4.17) and (4.18), *pai* can be used in imperative (and prohibitive) contexts. It is rarely used in negated contexts.

yaŋ

As a full verb, *yaŋ* has been replaced in Standard Thai by *yuu*¹ 'be at, stay' and *mii* 'there is, have', but it is found as a full verb in some related languages such as Aiton in Assam.

In Thai, $ya\eta$ has a wide range of meanings, including 'still, yet, anyway; towards; have you ... yet?, not yet (as answer)'. Here its use as a 'persistive' aspect marker will be discussed. As such it is closely related in use to the temporary marker yuu^{l} , with which it often combines.

As persistive marker, yay expresses an old situation that still holds at the time of reference. It is therefore the opposite of $leeu^3$ which expresses a new situation (cf. below). In this function yay is not readily compatible with punctual verbs and duratives expressing situations without possible right limit, like kee^{l} 'be old'. It does not make sense to speak of a state as still holding, if there is no possibility for it to end. 'He is still old' sounds odd at the very least. Where yay occurs with verbs of these restricted classes, its natural interpretation is 'anyway'. In this case the clause is usually preceded by the comment marker ko^2 .

(4.20) thun⁴ cə drrn chaa³, kɔ² **yan** thun⁴ baan yuu¹. although PROS walk slow COMM PERS reach house TMPR 'Even though he walks slowly, he still reaches the house.'

With other verb classes, *yaŋ* expresses that the situation remains unchanged for the time being:

- (4.21) khau⁴ yan tham naan yuu¹ thii² drym.

 3hum PERS do work TMPRLOC original
 'He still works at the same place (as before).'
- (4.22) saam⁴sip¹ **yan** suəi⁴.

 thirty PERS pretty

 'At thirty, she is still beautiful' (Lyrics from a popular Thai song)

The interpretation as 'unchanged situation' also holds in negative sentences, as can be seen in (4.23).

(4.23) khau⁴ yaŋ mai² maa lyri.
3hum PERS NEG come EMPH
'He hasn't come yet.'

The negative $yan \ mai^2$ freely combines with durative (4.24) and punctual (4.25) verbs, but is not used with duratives that lack a conceivable starting point or state preceding them.

- (4.24) swo² two nii³ **yaŋ** chai³ dai² yuu¹, **yaŋ** mai² kau¹. shirt CL_{body} this PERS use POT TMPR PERS NEG old 'This shirt is still good, it isn't old yet.'
- (4.25) $\text{keeu}^2 \text{ bai}$ $\text{nii}^3 \text{ yan } \text{mai}^2 \text{ teek}^1.$ $\text{glass } \text{CL}_{\text{round}}$ this PERS NEG break 'This glass isn't broken yet.'

The negative construction yaŋ mai² in (4.24) must be analyzed as 'the state of not being old persists' or 'it is still the case that it is not old'. The scope of the negative mai² in Thai is always only the verb or verbal compound immediately following it, while the scope of yaŋ includes the whole clause following it. In other words, yaŋ cooccurs with negated verbal expressions, but it is not negatable itself.

yay can not be used in imperative and prohibitive clauses.

kamlaŋ

One of the few TAM markers that have no verbal origin is *kamlaŋ*, a loan from Khmer. The development of *kamlaŋ* is obscure. In Khmer, *kɔmlaŋ* 'strength' is the nominalisation of the stative verb *khlaŋ* 'strong, loud'. In Thai, the nominal form *kamlaŋ* is used in the sense of 'strength, power'. Very recent is its use as a progressive marker. It is not found in older literature and in the dialects it is considered Bangkokian influence (cf. Rungrueangsri 1991:78). Many educated Thais see *kamlaŋ* as newly introduced means to translate the English continuous forms, with which it shares many features and of which it is a standard translation. Today *kamlaŋ* competes and cooccurs with the 'real Thai' TAM markers *yuu*¹ and *ca?*¹, which it tends to replace in some modern styles.

Most typically, *kamlaŋ* occurs with verbs denoting dynamic situations and processes, but its use is not restricted to these. There are actually only very few verbs in Thai that do not cooccur with *kamlaŋ*, e.g. ruu^3 'know sth.', $ruu^3 cak^1$ 'know so.' and *luum* 'forget'. A possible explanation for this restriction is that these verbs lack a conceivable process that *kamlaŋ* can focus on.

The marker *kamlaŋ* focuses on a shorter, more specific period that *yuu¹*. It is therefore not compatible with underspecified time expressions or extended periods of time and can not have a habitual reading. The focus with *kamlaŋ* is clearly on the present moment, and it usually implies a dynamic (cf. Greek *dynamis* 'power, strength', *kamlaŋ* 'id.') rather than a stative situation. Whenever used with verbs denoting otherwise rather stative situations, the

implication is that the situation holds only for the very restricted period under consideration.

(4.26) phom⁴ **kamlaŋ** yaak¹ maa tham ŋaan thii²nii² baaŋ².

1sm PROG DES come do work here also
'Right now, I would like to come and work here, too.' (LR:344)

The focus on a dynamic process is particularly obvious with durative verbs with prominent left limit ('initiotransformatives'). Whereas *yuu*¹ focuses on the state, *kamlaŋ* rather chooses the action leading to the state. In (4.27) the focus on the process is reinforced by the V2 *chaa*³ *chaa*³ 'slowly'. Both (4.28) and (4.29) are theoretically ambiguous.

- (4.27) prətuu baan² **kamlaŋ** prət¹ chaa³chaa³. door house PROG open slow:RDP 'The house door is opening slowly.'
- (4.28) rot³mee **kamlaŋ** cɔɔt¹ naa² rooŋriən.

 bus PROG park front school

 'The bus is parking in front of the school building.' (less natural:

 'The bus is parked right now in front of the school building.')
- (4.29) khau⁴ kamlaŋ sai¹ kaaŋkeeŋ yuu¹.

 3hum PROG wear pants TMPR

 'He is putting on his pants.' (rare: 'He is wearing pants right now.')

With punctual verbs, *kamlaŋ* or *kamlaŋ* cə indicates that the event is imminent, similar to the use of the English continuous form. The focus is on the process leading up to the event.

(4.30) ton²maai³ nii³ **kamlaŋ** taai. tree this PROG die 'This tree is dying/going to die.'

With duratives lacking prominent limits, *kamlaŋ* usually expresses a limited period for which the state holds, implying that it has not been before and will not be so later, i.e. it adds initial and final limits to the verb, similar to the English use of the continuous form. In some contexts with duratives that otherwise have a rather stative interpretation, *kamlaŋ* results in a reading as 'increasing degree of state at the moment under consideration', while in other contexts it merely limits the state temporally. Compare the different interpretations of the duratives with *kamlaŋ* in (4.31) - (4.34)

- (4.31) thaai¹ ruup² reu noi¹ si?¹, **kamlaŋ** loo¹ (yuu¹).

 take picture fast little IMPER PROG handsome TMPR

 'Hurry up, take the picture now, I'm just being handsome.'

 [temporary state]
- (4.32) ?au², maa kin khaau² kan, keen **kamlan** roon³ (yuu¹). INTJ come eat rice REC curry PROG hot TMPR 'Hey, come and eat now, the food is hot.' [temporary state]
- (4.33) dek¹ **kamlan** too ko² ton² kin khaau² yr?³. child PROG big COMM must eat rice a.lot 'The child is growing up, so he has to eat a lot.' [increasing degree]
- (4.34) loon¹ **kamlaŋ** suəi⁴, phuu² chaai ko² lyyi choop².

 3f PROG pretty person male COMM CONS like

 'She is being pretty, therefore men like her.' [temporary state]

 'She is getting pretty, therefore men like her.' [increasing degree]

Whereas in (4.33) only the interpretation as 'getting taller, growing up' is possible, in (4.34) we have two alternative readings, given the fact that 'be pretty' is a state that may end some day, while 'be tall, big' is bound to remain unreverted for the rest of one's life.

kamlan and yuu¹

Boonyapatipark dedicates a whole chapter of her study to the similarities and differences between the two forms (1983:107 ff.). She comes to the conclusion that the difference is one between "progressive" (kamlay) and "continuative" (yuu^{l}). I accept Boonyapatipark's distinction, but prefer labeling yuu^{l} as "temporary" rather than "continuative" aspect marker.

Although they are, at first sight, similar in meaning and are often both treated as progressive markers, *yuu^l* and *kamlaŋ* exhibit some important differences. For instance, *kamlaŋ* is not compatible with time expressions like 'until, up to'. Only *yuu^l* can be used in these constructions.

(4.35) phom⁴ (*kamlaŋ) rəə yuu¹ con thuŋ⁴ thiəŋ².

1sm (PROG) wait TMPR until reach noon
'I've been waiting until noon.'

As noted above, with durative verbs with prominent initial limit, *kamlaŋ* focuses on the dynamic event (cf. (4.28) above), while *yuu*¹ focuses on the ensuing state, though the alternative readings can be construed with an adequate context.

- (4.36) rot³ coot¹ yuu¹ naa² baan².

 car park TMPR face house

 'The car is parked in front of the house.'

 less natural: 'The car is parking in front of the house.'
- In (4.37), kamlay is used in combination with yuu^{l} to indicate a dynamic situation that holds only for a restricted time (but reoccurs every day).
- khun mεε² lau² waa² thuk³ wan di?¹chan⁴cə khui
 PREF mother tell SUB every day 1fhon PROS chat
 khon diəu muən⁴ kamlaŋ len² yuu¹ kap¹ khrai baaŋ khon.
 CLhum single same PROG play TMPRwith who some CLhum
 'My mother told me that every day I would chat alone, just as if I were playing with someone.' (PL:23)

With punctual verbs, only $kamla\eta$, but not yuu^{l} can be used. The verb ruu^{3} 'know', on the other hand, is not compatible with $kamla\eta$, but very well with yuu^{l} , while both $ruu^{3} cak^{l}$ 'know so.' and luuum 'forget' are compatible with neither. These restrictions need further investigation.

4.2 The 'perfective' marker

The perfective aspect views the situation from outside as a unit, without considering its internal structure. Typically the perfective markers focus on limits (situation changes) rather than on the state or situation. This marker covers only parts of the perfective spectrum. Other auxiliariers with (partly) perfective function include the ingressive marker *khun² maa* and the relinquitive marker *wai³*.

dai^2

As a full verb, dai^2 means 'get, receive'. It is used as postverbal auxiliary expressing potentiality or successful outcome of the activity expressed by the main verb. This use, which can be seen in (4.39) is a grammaticalisation of its meaning 'get'.

- (4.38) khau⁴ dai² yrn phoo² duion la?³ haa² phan baat¹.

 3hum get money father month DISTR five thousand Baht 'He gets five thousand Baht from his father per month.'
- (4.39) khau⁴ ?au naŋ⁴sutut⁴ dai².

 3hum take book get(>POT)

 'He can take the book.'

The use of dai^2 as V2 has been expanded to verbs the semantics of which are not related to the meaning 'get', resulting in a purely potential reading:

(4.40) khau⁴ paiduu naŋ⁴ dai².

3hum go look movie POT

'He can go to the movies.'

In preverbal position, the meaning of dai^2 is rather different. Usually it is described as a marker for "past tense" (Thonglor 1987:247; Royal Institute:310; Bisang 1992:349). The exact use of the preverbal marker dai^2 needs more detailed investigation. It is clearly not restricted to past tense contexts, as its cooccurrence with the prospective marker cal^2 shows:

(4.41) book¹ na?²lε?¹ dii, cə **dai²** ruu³ wai³ maŋ².

tell EMPH good PROS get know RLNQ some

'It's just as well if you tell me, so I can keep it in mind.' (LR:492)

In this example, dai^2 seems to express a possibility to do something, rather than the successful execution of the action, which is expressed by the postverbal dai^2 .

The use of the preverbal dai^2 is especially interesting with durative verbs with prominent initial limit, where it makes a distinction between the action and the ensuing state. dai^2 regularly refers to the action, not the state. Compare the different meanings of the sentences in (4.42)

(4.42)a. kap¹ khaau² ?un¹ yaŋ? with rice warm Q

'Is the food warm yet?', 'Have you warmed up the food yet?'

b. $?un^1$ $l\epsilon\epsilon u^3$. / yan mai^2 $?un^1$. warm NSIT PERS NEG warm

'It's warm already.' / 'It's not warm yet.'

c. dai^2 ?un¹ leeu³. / yaŋ mai² dai^2 ?un¹.

get warm NSIT PERS NEG get warm

'I have warmed it up already.' / 'I haven't warmed it up yet.' 10

As the use of dai^2 with verbs with prominent initial limit shows, dai^2 chooses the first boundary of the situation, not the state. Choosing the initial situation change is probably the main function of dai^2 , adding a connotation of potentiality. If the initial limit is not a prominent one, dai^2 adds prominence to it merely by choosing it, as can be seen in sentences with verbs with a rather stative meaning.

¹⁰ These interpretations are also possible in (4.42b), but not vice versa.

(4.43) khəyan⁴ riən na?³, cə **dai**² keŋ¹.

diligent learn EMPH PROS get clever

'Study diligently, so you'll be clever.' ('in order to get clever')

 dai^2 is very frequent in negated sentences. The exact function of $mai^2 dai^2$ as opposed to the simple mai^2 is not clear (cf. Bisang 1992:349). Note that dai^2 is sometimes used in prohibitive clauses, especially in poetic or sentimental contexts, but it does not occur in imperative clauses. dai^2 with negated verbs is especially common in connection with the prospective marker cai^2 as in cai^2 dai^2 mai^2 maa 'so I won't have to come'.

4.3 The 'perfect' markers

The perfect is an aspect category that expresses a past situation with present relevance. Comrie speaks of an aspectual category 'perfect' (1995:56ff) but divides it into 'perfect of result', 'experiential perfect', 'perfect of persistent situation' and 'perfect of recent past'. Of these types, Thai expresses the 'experiential' regularly with the marker *khrri*, while the orientation verb *maa* 'come' is used to express the 'perfect of persistent situation' and 'recent past', and $l\varepsilon\varepsilon u^3$ is used, among other functions, to cover the 'resultative'.

In Johanson's terminology, the 'perfect' forms part of the class of 'postterminality', which is, however, less restricted than the 'perfect' (Johanson 2000:177). The label 'postterminal' probably covers the functions of the following markers more adequately than 'perfect', although the use of 'terminal' is a potential source for misunderstandings due to its closeness to terms like 'terminative', which imply a crucial right limit.

leeu3

One of the most discussed TAM markers of Thai is $l\varepsilon\varepsilon u^3$, which is used in a wide range of functions. Earlier studies of the Thai verbal system describe $l\varepsilon\varepsilon u^3$ in a variety of ways.¹¹

In his Shan and English Dictionary, Cushing describes the corresponding Shan verb/auxiliary in the following way:

yau⁵ v. * yiu⁵ to be done, finished; v.part. denoting the past; also the completion of the beginning of an act, as, maa⁴ yau⁵ 'he is coming.' (Cushing 1914:528)
 A particle with similar function is also found in Burmese. Okell describes it as follows:

pi/pa - Verb sentence marker [...] indicates arrival at the point of fulfilment in relation to a given time, hence translatable as 'is V-ing now, has V-ed, is V-ed by now'. [...] pi is used with verbs when the action or state they express is regarded as having a point of fulfilment or realisation which is approached by degrees with the passage of time. Further, this progress is considered in relation to a certain point of time, usually the time of speaking. pi indicates that at or before this time ('by now') the point of fulfilment has been reached. (Okell 1969:382f)

Boonyapatipark treats the TAM marker $l\varepsilon\varepsilon u^3$ as "a marker of perfectivity" (1983:158) and states that

 $l\varepsilon\varepsilon u^3$ indicates that a crucial amount of some activity has been carried out, a crucial point of a situation has been reached (not necessarily the completion point), i.e. a change to or arrival at a new situation has come about, at the time of reference. (ibid.)

She arrives at three different functions of $l\varepsilon\varepsilon u^3$, which are quoted and summarised by Bisang (1992:358):

- 1. Full verb 'finished'
- 2. TAM marker
 - a. Completive
 - b. Inchoative
 - c. Imminent
 - d. New situation.
- 3. Conjunctional verb (sequential marker)

A summary of earlier treatments of $l\varepsilon\varepsilon u^3$ is given by Boonyapatipark (1983:149ff).

 $leeu^3$ as a full verb. As a full verb, $leeu^3$ is not used in Standard Thai anymore, except for some idiomatic expressions. That $leeu^3$ does not have full verbal character anymore is shown by its incompatibility with the negation marker mai^2 : * $yan mai^2 leeu^3$ 'not finished yet'.

leeu³ as TAM marker. The original meaning of $leeu^3$ as 'finish', though not in current use anymore, is still known to native speakers. Many of its present functions are more or less easily explained on the basis of this original meaning. Generally $leeu^3$ denotes the new (but expected) situation after a limit has been transgressed (hence the label 'new situation' 12). In unmarked contexts, it is the most prominent limit of the verbal expression that has been transgressed. The limit that has been passed can be purely temporal, transformative or quantitative, as will be seen below. Although $leeu^3$ needs a limit, it does not itself focus on this limit, but on the ensuing state of affairs. Therefore $leeu^3$ is not compatible with specific time adverbials. Where it cooccurs with time expressions like 'at 3 o'clock' (usually in topic position), the statement is that at this time the situation has come into being. The transgression of the limit itself can not be selected with specific time adverbials in $leeu^3$ -clauses.

¹² An alternative term would be 'transgressive' marker, indicating that any limit has been transgressed.

The interpretation as 'completive' is the most natural one with punctual verbs. As the event does not have temporal extension, $l\varepsilon\varepsilon u^3$ here indicates that the event (transformation) has taken place.

(4.44) khau³ thoo maa book¹ waa² thuŋ⁴ chiəŋmai¹ lɛɛu³.

3hum telephone come tell SUB arrive Ch. NSIT

'He called to say that he is in Chiangmai now.'

The same holds for situations with a prominent final limit, where $l\varepsilon\varepsilon u^3$ usually refers to the completion of the situation:

- (4.45) khau⁴ tham kaanbaan² set¹ **lεεu³**.

 3hum do homework finish NSIT

 'He has finished his homework.'
- (4.46) phom⁴ haa⁴ yrn crr leeu³.

 1sm look.for money find NSIT

 'I have found the money (I was looking for).'

With durative situations that do not suggest a telic reading, $l\varepsilon\varepsilon u^3$ usually refers to the completion of either the act itself or of its beginning, resulting in translations that sound like 'progressive' in English.

- (4.47) khau⁴ tham naan leeu³.

 3hum do work NSIT

 'He has worked.' or 'He is working now.'

 (= 'He has started working.')
- (4.48) chan⁴ mai² khit³ mii rɔɔk¹, khrɔɔp²khruə, phrɔ?³ chan⁴ mii 1sfam NEG think have CEXP family because 1sfam have yuu¹ lɛɛu³.

 TMPR NSIT

 'I don't intend to have a family, because I've got one already.'
 (LC:145; ML:88)

If a verbal expression includes a prominent initial limit, $leeu^3$ usually indicates that this limit has been transgressed.

(4.49) khau⁴ naη² to?³ lεεu³.

3hum sit table NSIT

'He is sitting at the table (now).'

In sentences including a quantitative expression, $l\varepsilon\varepsilon u^3$ indicates that this quantity has been reached or transgressed by the time of reference, as in (4.50).

Notice that the position of $l\varepsilon\varepsilon u^3$ is either after the verb phrase (verb + object), or after the quantifier phrase (numeral + classifier). The difference is one of emphasis.

(4.50) phom⁴ kin hεεmbyγkγγ² **lεεu**³ soon⁴ chin³/ soon⁴ chin³ **lεεu**³ lsm eat hamburger NSIT two CL_{piece} two CL_{piece} NSIT 'I have eaten two hamburgers (so I am full now).'

The use of $l\varepsilon\varepsilon u^3$ is restricted in contexts where the event occurs later than expected. (4.51) is ungrammatical if we speak of the Monday following the Saturday he promised to come.

(4.51) *khau⁴ book¹ waa² co maa wansau⁴, lɛ? wancan
3hum tell SUB PROS come Saturday and Monday
khau⁴ maa **lɛɛu³**.
3hum come NSIT
'He said that he would come on Saturday, and he came on Monday.'

The inapplicability of $l\varepsilon\varepsilon u^3$ here is due to the fact that there is a word denoting events that occur later than expected, $phu\eta^2$ 'just now', which would be used in this case. $l\varepsilon\varepsilon u^3$ does not indicate a 'precoctive' event, although its standard translation into English as 'already' might suggest this. If someone says at 7 p.m.

(4.52) phom⁴ kin khaau² **lεεu³**.

1sm eat rice NSIT

'I have eaten.', 'I am eating now.'

there is no necessary implication of his eating occurring earlier than expected. Even after landing at Bangkok airport with a delay of over an hour, the Thai announcement on Swissair flights is normally

(4.53) saai⁴kaanbin səwis³?ɛɛ dai² nam than² suu¹
airline Swissair get lead 2hh ALL
thaa²?aakaat¹səyaan kruŋtheep² riəp²rəɔi³ lɛɛu³.
airport Bangkok perfect NSIT
'Swissair has brought you now to Bangkok airport.' (Swissair flights to Bangkok)

This announcement merely states that the new situation of having arrived is fully here now, independent of expectations about the time.

We have treated yan as a marker expressing that an old situation persists, that no change has occurred yet, although one might be expected. $l\varepsilon\varepsilon u^3$, on the other hand, indicates that a change has taken place and a new situation has

arisen. In this function $l\varepsilon\varepsilon u^3$ is the functional opposite of the persistive marker $ya\eta$, which is shown very neatly in questions like (4.54).

```
(4.54)a. khau<sup>4</sup> maa (lɛɛu³ ru;u⁴) yaŋ?

3hum come (NSIT or) PERS

'Has he come yet?' or 'Is he here yet?'

b. maa lɛɛu³./ yaŋ (mai² maa).

come NSIT / PERS (NEG come)

'Yes.' / 'No.'
```

Denoting a situation after a situation change ('new situation'), $l\varepsilon\varepsilon u^3$ is incompatible with verbs referring logically to original situations that are not preceded by any other situation. A sentence like * $khau^4$ pen dek^l $l\varepsilon\varepsilon u^3$ 'he is a child now' is not possible in a natural setting (though very well so in a supposed science fiction novel, where people are born old and grow young). The contrastive factor of 'new situation as opposed to old situation' is rather dominant, so that $l\varepsilon\varepsilon u^3$ -clauses rarely introduce new information, but express only that an expected situation has started or fully developed. Its use is thus mostly restricted to the change into an expected situation, although a few other examples can be found. The sentence (4.55) can only be uttered, if the arrival of Chai was expected by at least the speaker himself. (4.56) can be used to express surprise about Chai's earlier than expected arrival, not about his coming as such.

- (4.55) dii na?³, chai maa **lεεu**³. good EMPHChai come NSIT 'Good, Chai has come now.'
- (4.56) pleek¹dii na?³, chai ko² maa **leeu**³. strange good EMPH Chai COMM come NSIT 'How strange, Chai is already here.' *'How strange, Chai has come, too.'

The new situation has arisen definitely, though it is not necessarily the completion of an action. A helpful translation is 'it is now the case that ... (it was not the case before)'.

As the change into the new situation has been completed, $l\varepsilon\varepsilon u^3$ often also has a connotation of 'irreversible situation'. It is this connotation that is expressed in sentences where obviously new information is conveyed in a $l\varepsilon\varepsilon u^3$ -clause, as shown in (4.57) and (4.58).

- mai² ruu³ ruuən²lyyi, waa² (4.57)maaliiman nan yan PREF Mali PERS NEG know matter EMPH **SUB** $m\epsilon\epsilon^2$ naam³ lεεu³. taai man com mother 3sdrown water die **NSIT** 'Mali doesn't even know yet that her mother has drowned (and died).' (PL:127)
- (4.58) tεε¹ wi?³phaat² kɔ² lεε hen⁴ ru;?³dii siə⁴ **lεεu³**.
 but V. COMM look see R. IRVS NSIT
 'But Vibhat had already seen Ruedi (it was too late for her to hide).'
 (LR:211)

In (4.58), the irreversibility of the situation is reinforced by the marker sio^4 (lit. 'waste, get lost, break down').

In WH-questions, the use of $l\varepsilon\varepsilon u^3$ is restricted. It occurs only in questions about a quantity that has been reached by the time of asking. The quantifier here sets a limit on which $l\varepsilon\varepsilon u^3$ can focus. As WH-words like *khrai* 'who' are focal themselves, $l\varepsilon\varepsilon u^3$ can not put additional focus on the limits of the verbal expression.

- (4.59)a. *khrai maa leeu³?

 who come NSIT

 'Who has come?'

 b. maa kan kii¹ khon le
 - b. maa kan kii¹ khon leeu³?

 come REC how.many CL_{hum} NSIT

 'How many people have come so far?'
- (4.60)a. *khun ?aan¹ ?ərai lɛɛu³?

 2hon read what NSIT

 'What have you read?'
 - b. ?aan¹ kii¹ naa² **leeu³**?

 read how.many page NSIT

 'How many pages have you read so far?'

In imperative clauses, $l\varepsilon\varepsilon u^3$ has to be replaced by $di\partial u^4nii^3$ 'now' or some similar expression. In prohibitive sentences, lik^1 'more, further' is used instead of $l\varepsilon\varepsilon u^3$.

In negated clauses, $leeu^3$ retains its reading as 'new situation has arisen'. The interpretation of mai^2 kin $leeu^3$ 'not eat $leeu^3$ ' is 'the new situation is: I don't eat.'. Depending on the context, different translations result in English. If the speaker has already eaten something, the natural translation is 'I don't eat anymore (I did before)'. If he hasn't started eating yet, we get 'I don't want to eat anymore (I lost the appetite I had before)'. In this case, kin 'eat' again suggests prospective interpretation.

The most puzzling property of $l\varepsilon\varepsilon u^3$ is probably that in many instances it can have future reference (Boonyapatipark's 'imminent' reading). In this case it is usually, but not necessarily, combined with the prospective marker $cal^{1/2}$ and/or an adverbial referring to the future.

(4.61)diəu⁴ wansau⁴ man ko² klap¹ maa leeu³. pai Saturday 3s COMM return come go khit³thon⁴-khit³thum⁴ man thammai? diəu⁴ ?iik¹ wan soon4 (rhyme-)miss why 3smoment more day two klap¹ maa wan man ko² COMM return come NSIT 'On Saturday he will come back. Why do you miss him now? In only one or two days, he will be back.' (PL:60)

The adverbial $diau^4$ '(in a) moment' is often used to transpose a situation into the near future. The use of $l\varepsilon\varepsilon u^3$ here reinforces the (emotional) nearness of the return of the person. This undertone of $l\varepsilon\varepsilon u^3$ can be noted frequently, though it is not part of its semantics. The most plausible explanation of expressions where $l\varepsilon\varepsilon u^3$ is used in the sense of 'near future, imminent event' is again that 'prospectivity' does not have to be marked overtly, as seen above. A possible translation of (4.61) would then be 'it is the case now (it was not so before) that he is coming back soon...'. We have here another piece of evidence for the 'prospective phase' of verbal expressions.

leeu³ as sequential marker. If $leeu^3$ stands between two verbal expressions, the normal reading is 'A is finished, B follows', i.e. as sequential marker. Also intonationally a restructuring of the sentence has taken place, $leeu^3$ being usually preceded rather than followed by a pause. This development is shown in examples (4.62) through (4.64), with changing position of intonational pauses indicated by commas.

- mwə² dai² (4.62)pai**leeu³**,khwaam-ruu³suuk¹ thii² ?at¹ roon³haai² when get cry go NSIT NML-feel ATTR stuff nen² yuu¹ nai cai khoi² banthau lon compressed **TMPRin** heart gradually relieve DIR_{down} dai² maak². POT much 'After she had cried, the feeling that had been stuffed in her heart gradually grew easier.' (LR:328)
- (4.63) thak³sinaa naa² dεεη **lεεu³** siit².

 T. face red SEQ pale

 'Thaksina's face first turned red and then white.' (LR:326)

 $\text{num}^1, \text{leeu}^3 \text{ ko}^2$ nin^2 yuu¹ ?iik¹ khruu² (4.64)looi vuuun L. TMPR more moment one SEO stand still roon³ waa²: "?ai² swo⁴ thoi⁴". khuin² təkoon exclaim shout INGR SUB PREF bandit retreat 'Loi stood still for a second, then shouted, "Bandit retreat!" (LC:34: ML:21)

After it is established as a sequential marker, $l\varepsilon\varepsilon u^3$ can stand in sentence initial position as in (4.65):

(4.65) **leeu**³ thammai cuu¹cuu¹ man thung⁴ com naam³taai dai²
SEQ why suddenly 3s reach drown water die POT la?² niə²?
EMPH EMPH
'And how can she so suddenly come to drown?' (PL:127)

Conclusions for $leeu^3$. Leaving away the very marginal use of $leeu^3$ as a full verb, we get two main functions, which cannot be clearly kept apart, viz. $leeu^3$ as a TAM marker and as a sequential conjunction. The four interpretations listed by Boonyapatipark for the TAM marker $leeu^3$ can be united under the broad cover term 'new situation', from which the other readings can be deduced by contextual means. There seems to be no difference in the interpretation of $leeu^3$ with the different verb classes as postulated by Boonyapatipark. The context, linguistic as well as extra-linguistic, remains the main factor of decision.

Using the postulated structure of Thai verbs, we can state that $l\varepsilon\varepsilon u^3$ indicates that any boundary has been passed and focuses on the ensuing state. It corresponds to Johanson's 'postterminal' marker, whereas it must be stressed that we are not talking here of critical boundaries or transformations. The context is the main factor determining which limit is the one that has been passed. To unambiguously indicate that it is the final boundary that is in focus, usually a completive V2 such as set^l 'finish' or a definite object is added. A phasal auxiliary like $rrrm^2$ 'begin' clearly puts focus on the initial limit.

If no overt marker is present, the normal interpretation is dependent on the semantics of the verbal expression. The reading as imminent future probably has its origin in the above mentioned inherent notation of 'intention' or 'prospectivity' of an action, which can result in readings as 'imminent action, imminent event'. The interpretation of *khau*⁴ *phuut*² *leeu*³ as 'he is going to speak right now' would then be explained as 'it is now a fact that he has the intention to speak'. The use as a sequential marker can be explained as 'final boundary has been passed', i.e. a new situation/event can follow.

maa

The orientation verb *maa* 'come, motion towards centre of attention' is used in the temporal perspective to express that a situation extends towards the centre of interest, i.e. the present time. It therefore acquires a perfect reading in many instances. It has to be noted though, that the spatial dimension, whenever available, is the dominant one. In the temporal dimension, *maa* expresses a situation that has started at some point in the past and has present relevance, though it does not necessarily have to persist at the present time. Some illustrating examples are given in (4.66) and (4.67) below.

- (4.66) luuk² tham ?ərai **maa**? swə² pwən² mot¹. child do what PERF shirt dirty all 'What have you done, son? Your shirt is all dirty.'
- (4.67) seem⁴ ryym² ruu³cak¹ phin **maa** tεε¹ yaŋ dek¹.

 Sem start know Phin PERF since PERS child

 'He had known her since they had played together as children.'

 (LC:46; ML:28)

maa is compatible with specific time expressions like 'at noon' as well as with 'since ...', i.e. maa can focus both on the situation change and the ensuing situation. If the verbal expression lacks prominent limits, the use of maa is restricted. It is in this case compatible only with time expressions like 'since ...' and 'for ... time' but not with specific time expressions.

- (4.68) khau⁴ ruəi **maa** taŋ²tεε¹ (*tɔɔn) tham ŋaan bɔɔrisat¹ nan³.

 3hum rich PERF since (TEMP) do work company that 'He has been rich since he started working for that company.'
- (4.69) lon¹ suəi⁴ maa naan leeu³.

 3f pretty PERF long.time NSIT

 'She has been pretty for a long time.'

The interpretation as an orientation verb is preferred in sentences like (4.70):

rww⁴ plaau¹?" ?ərai mai¹mai¹ **maa** hai² (4.70)"wan nii mii duu new:RDP come FIN day this have what look or **NEG** mai² "mii, tee¹ dai² ?au maa." NEG but take get come "Have you got anything new to show me today?" "Yes, I do, but I didn't bring it along." (LR:335)

As with most (or probably all) TAM markers, it has always to be kept in mind that for native speakers of Thai, we are dealing here with one morpheme with different uses, not with a group of homophonous morphemes. The translations and glosses often obscure this fact, as no handy cover term is usually available in English. In its use as perfect marker, *maa* cannot occur in imperative and prohibitive clauses.

4.4 The prospective marker

The prospective is the future analogue to the perfect. According to Trask (1996:223), the prospective "differs from other aspects of the future in that it does not necessarily express either a prediction or an intention". Comrie (1995:64) states that the prospective is a form "where a state is related to some subsequent situation", that is the present situation carries the seeds for the subsequent situation, without necessarily being imminent or near future. The 'futurity factor' of the prospective is relative, i.e. we are not talking about absolute future time reference.

$ca2^{l}$

The origin of $ca?^l$ (and its colloquial preclitic form co, which is used in normal speech) is not clear. A more formal variant is cak^l , which occurs frequently in older texts. One might think of a connection with Burmese sa^l , spelt <ca>, 'begin, start', which has also been borrowed into Mon where it is used mostly as an auxiliary with ingressive meaning.

Thai $ca?^I$ is not used as a full verb, and it does not have verbal characteristics. The standard Dictionary of the Royal Institute lists it as 'verbal auxiliary' (*kham chuəi² kəriyaa*), not as 'auxiliary verb' (*kəriyaa chuəi²*) like, for example, $təy^2$ 'must'. The semantic range of $ca?^I$ is wide, including the notion of 'future, intention, supposition, plan, habituality'. In this $ca?^I$ is not unlike the English 'will, would', by which it may well have been influenced¹³. A possible cover term for $ca?^I$ might be 'irrealis' as very often it does not refer to an actual situation. In the present study I prefer Boonyapatipark's label as 'prospective aspect' (Boonyapatipark 1983:215ff), as this seems to most adequately cover the functions of $ca?^I$. The marker $ca?^I$ freely combines with a large number of other TAM markers, often without any conceivable change in meaning. Like the other TAM markers, $ca?^I$ is not obligatory in Thai sentences.

The prospective function of $ca?^{l}$ is particularly evident in the following sentences, the third of which does not refer to future tense:

¹³ It is not absurd to see some English influence in the Thai aspect markers, as popular literature in Thailand started only at the beginning of the 20th century, when translations of English novels were published. Other English influences in Thai syntax include probably the progressive marker *kamlaŋ* and the extended use of the (originally only adversative) passive (cf. Foley 1997:415).

- (4.71) nuuk³ buuə¹ khuun²maa **cə** khaai⁴siə⁴ ko² dai². think bored INGR PROS sell IRVS COMM POT 'If I get bored of them, I can always sell them off.' (LR:76)
- thaa²haak¹ dai² khun phon, co thaan thii² (4.72)pen miə pen PROS be wife PREF P. be wav kaau² khau² pai sap³som⁴bat¹ suu kamməsit¹ thii² ton nai step DIR_{in} go ALL ownership ATTR self in treasure yuu¹ thuk³ wan. nuik³ yaak¹ dai² think DES get TMPRevery day '[S]he thought that getting to be Phong's wife would be a step towards possession of the wealth she hankered after.' (LC:91: ML:55)
- bεεp¹ nii³ khuun² (4.73)heet¹kaan сə $kxxt^1$ thuk khran³ mannerthis PROS be.born **INGR** every time thii² phom klap¹ baan².phom⁴ lau² yuu¹ kin сə phuut² PROS stay ATTR 1sm return house 1sm drink alcohol speak khui kap¹ lun duuk¹. con chat with uncle until late.night 'These events would occur every time I came home. I would sit and drink whisky, chatting with the old man until late at night.' (PL:58)

In the above examples the prospective is explained by the fact that first a certain situation has to occur ('I feel bored', 'be Phong's wife', 'I came home') which then leads to a subsequent situation ('I can sell', 'attain ownership of the riches', 'I sit and drink').

In other examples a firm determination is expressed:

(4.74) phruŋ²nii³ chan⁴ co rak³ khun tələət¹ pai.
tomorrow 1fam PROS love 2hon whole CONT
'Tomorrow, I will love you forever.' (from a popular Thai song)

The prospective marker does not occur in imperative and prohibitive clauses, but is combinable with negated verbs, resulting in readings like 'will never'.

4.5 Combinations of aspect markers

Combinations of two or more aspect markers are possible. Figure 14 shows the possibilities of combinations. It has to be noted that up to four markers can be combined to express a situation.

M2	yuu ¹	pai	yaŋ	kamlaŋ	dai ²	leeu³	maa	ca?1
M1								
yuu¹	-	-	-	-	+	+	-	-
pai	-	-	-	-	-	+	-	-
yaŋ	+	+	-	+	+	_	+	+
kamlaŋ	+	-	-	-	+	+	-	+
dai ²	+	+	-	+	-	+	+	-
leeu ³	-	-	-	-	-	-	-	-
maa	-	•••	-	-	-	-	+	-
ca? ¹	+	+	-	+	+	+	-	+

Figure 3: Combinability of aspect markers

M1 stands for the first marker in the combination, M2 for the second one. From figure 3 it is evident, for example, that $kamla\eta$ and $ca?^l$ combine only as $kamla\eta \ ca?^l$ V, but not as * $ca?^l$ $kamla\eta$. dai^2 as second member of a compound is usually possible if it stands in postverbal position, where it has potential value.

The most common combinations have been mentioned in the discussion of the main aspect markers above. Some of the possible combinations of aspect markers have acquired unpredictable idiomatic meanings. These are presented in the following paragraphs.

$vuu^1 l \varepsilon \varepsilon u^3$

One of the most frequent combinations is $yuu^{l} l \varepsilon \varepsilon u^{3}$, which deserves special attention. Besides its expected meaning, this combination very often indicates that a situation is inevitable. In (4.75), the interpretation can be deduced from the components:

(4.75) khau⁴ saaŋ² baan² yuu¹ lεεu³.

3hum build house TMPRNSIT

'He is now building a house.'

In (4.76), on the other hand, the interpretation is idiomatic:

naŋ⁴ kan mai? thaa² liəŋ³ kɔ² (4.76)pai duu movie REC 0 if invite COMM look go yuu¹ leeu. pai TMPR **NSIT** 'Shall we go to the movies together?' 'If you invite me, of course I'm going.'

The expression $pai\ yuu^l\ leeu^3$ here has future reference, indicating the intention of the speaker. We have here a clear example of a verb expressing an intention rather than an actual activity. We can analyse the clause as 'it is now the case that I intend to go'. It is interesting to notice that $yuu^l\ leeu^3$ can cooccur with verbs that are not possible with yuu^l alone, i.e. punctual verbs. The normal reading in this case is again 'of course, inevitably' with a strong connotation of imminence, which may or may not be indicated by $c\partial$:

(4.77) rəwan na?³, luuk²poon¹ (cə) teek¹ yuu¹ leeu³, careful EMPH balloon PROS burst TMPR NSIT 'Be careful, the balloon is going to burst any moment!'

The combination yuu^1 $l\varepsilon\varepsilon u^3$ obviously has gone some distance towards lexicalisation and should probably be treated (and glossed) as a distinct morpheme.

maa leeu³ vs. pai leeu³

The perfect indicates that a situation has occurred in the past and remains relevant in the present. This is in Thai usually expressed by the combination of maa and $l\varepsilon\varepsilon u^3$. The present relevance is overtly indicated by the use of maa, which denotes a 'motion towards the centre of interest', both spatially and temporally. In a sentence like (4.78), maa indicates that the direction of the act of giving was towards the speaker, therefore is relevant.

(4.78) khau⁴ hai² naŋ⁴suuu⁴ **maa lɛɛu³**.

3hum give book come NSIT

'He gave me/you a book.'

The use of *pai* instead of *maa* maintains the perfect reading, but it cancels the relevance of the act to the speaker. The act of giving was directed away from the speaker, i.e. the object given is gone, as in (4.79).

(4.79) phom⁴ hai² naη⁴sutuu⁴ **pai lεεu³**.

1sm give book go NSIT

'I gave you/him a book.'

In both examples, the orientation verbs have spatial as well as temporal function. In other cases, only the temporal factor is relevant, as seen in (4.80a, b).

(4.80) a. khau⁴ kin khaau² maa leeu³.

3hum eat rice come NSIT

'He has eaten.' (\Rightarrow he is full now)

b. khau⁴ kin khaau² pai lεεu³.
 3hum eat rice go NSIT
 'He has eaten.' (⇒ the food is gone)

Here again the use of *pai* indicates that the event has occurred and its result is not relevant to the speaker anymore, except maybe for the disturbing fact that there is no food left for him to eat.

5 Conclusion

We have shown that the verbs of Thai do have some traits of aktionsart, though most of the aspectual burden is carried by the context and by verbal compounds/auxiliaries. The verbal semantics are underspecified, with only two formally distinct classes, viz. PUNCTUAL and DURATIVE verbs. There is a category of stative verbs which can be established by language internal formal means, but it seems to be of restricted relevance in a discussion about aspect in Thai, as in most cases the statives behave like other non-punctual verbs. Restrictions in the cooccurrence of aspect markers with verbal expressions are in most cases purely pragmatic ones and can be removed if an adequate (if sometimes unnatural) context is created. The basic structure of Thai verbs that has been proposed is

$$(/)$$
----- $(/)$ for durative verbs, and \otimes for punctual verbs.

What are called initiotransformatives in other studies do not constitute a separate class, but rather a group of duratives with prominent initial limits. An adequate context can suggest initiotransformative-like readings for most verbal expressions. The same goes for telicity, which is established by the context of the situation described rather than the verb itself.

We have seen that the aspect markers do more than just select a given phase or boundary of the verb structure. Like phasal auxiliaries they can add phases and/or boundaries to the verbal expression and very often they have a modal connotation as summarised in fig. 4.

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marker	punctual verb	durative verb		
vuu	(not available)	situation going on at point of		
eference,		right limit not reached yet		
Vari	away from centre of interest,	continuing action, away from		
p <i>ai</i> centre	away from centre of interest,	continuing action, away from		
	completion, irreversible	of interest		
yaŋ	iterative; 'still, anyway'	persisting situation		
kamlaŋ	event imminent	situation in progress		
dai	get to, potential	get to, inchoative-potentia		
leeu³	event has taken place or is	(new) situation has started		
	imminent	or ended or is imminent		
maa	event has occurred, still	situation has started or		
· 	relevant	occurred, still relevant		
$ca2^{l}$	prospective	prospective		

Figure 4: Summary of Thai aspect markers

Aspect is not an obligatory category in Thai, i.e. no overt aspect marking has to be present in a given sentence. This, together with the open verb structure, often leads to ambiguity which can be removed by contextual means, both linguistic and extra-linguistic.

I have restricted the discussion of the Thai aspect system in this study to the formal means, i.e. the aspect markers and verb categories. Further investigation is needed especially in the field of pragmatics. As the imperfective is generally associated with background information and the perfective with actual events, we may expect that in Thai the common distinction of topic and comment be used to express aspectual differences. In this connection the 'comment marker' $k\sigma^2$ deserves special attention. This marker has probably developed from an older topic marker by reinterpretation and new intonational structuring. Typical translations of $k\sigma^2$ are 'therefore, then, too, still, anyway'. As a comment marker, $k\sigma^2$ introduces a new situation even if this is not indicated by any other formal means. Examples are given in (5.1) and (5.2).

maa noon kap¹ nuu⁴, leeu³ ruŋ² khuin² (5.1) yuu¹yuu¹khau⁴ ko² come sleep with 1shon SEQ stay:RDP 3hum COMM dawn DIR_{un} foon³, khau⁴ ko² nooη³saau⁴ khau⁴ pai nuu⁴ lyyi top' younger.sister 3hum go accuse 3hum COMM CONS slap 1hon khian² nuu⁴. 1shon hit 'He just came and slept with me, and next morning his sister went off and told, so [Khun Nai] slapped and thrashed me.' (LC:97; ML:59)

 $yuu^1 ko^2$ (5.2) thii² kamlan lap¹ thəluin² tuə khuin² ATTR PROG asleep TMPRCOMM start.up body DIR_{un} sut¹ reen. [...] thandainan³ rwə khloon strength at.that.moment extreme boat COMM rock thaan nun¹ duəi² kamlan klap¹ maa ?iik¹ thuən¹ sut1 wiən¹. INST power return come more way one weight extreme swing 'Sleepers woke, startled. [...] and at that moment, the boat flung back the other way under the full weight of gravity.' (LC:2; ML:2)

Like most aspects of Thai grammar, the use and function of the comment marker, also regarding the expression of aspectual distinctions, needs more indepth study. There might very well turn out to be a more important distinction than the primary aspect markers and verb categories along the lines of topic/given situation and comment/new situation. We can, of course, not postulate that the verbal expression in the comment clause always indicates a perfective situation. The contrary is seen in (5.3), where the old situation of 'being asleep' persists in spite of the dynamic action expressed in the topic clause.

(5.3) phom⁴ pluk¹ khau⁴ lεεu³, tεε¹ khau⁴ kɔ² mai² yɔɔm tuɪuɪn¹.

1sm wake_{tr} 3hum NSIT but 3hum COMM NEG willing wake_{itr}

'I tried to wake him, but he wouldn't wake up.'

As the classical Thai literature for many centuries consisted only of poems with very restrictive rules for rhymes using a very condensed language, overt aspect marking is found only rarely in classical texts. In the more verbose spoken language, ambiguity is, whenever felt necessary, removed by using overt markers or adverbials. Only with the introduction of secular prose in the form of short stories and novels written in a language closer to the spoken idiom at the beginning of the 20th century did Thai writers start feeling that the use of overt markers with more or less consistency was necessary. As the genre of secular literature arose under Western influence, it is not surprising that some europeanisms have found their way into the Thai language by this way, starting from the formal written language and later expanding into the spoken language (cf. footnote 13).

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Tense-aspect flip-flop and a somewhat elusive gram type

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Abstract

A remarkable feature of Kiranti languages (Tibeto-Burman, Eastern Nepal) is that there are markers which indicate past in one language, nonpast in another. Moreover, there are certain tense-aspect forms that seem to have both perfect and progressive meaning. I shall first discuss the possibility of explaining the flip-flops and the ambiguous forms on the basis of aktionsarten and a reinterpretation of resultatives. When taking into account negative forms (section 4) it seems more adequate to postulate a different gram type (in the sense of Bybee & Dahl 1989, Bybee et al. 1994). In section 5 I shall present some related data from Burmese and Mandarin. In the next section I try to work out the difference between a perfect and the gram type we are dealing with, for which I use the preliminary term NEWSIT. The last section brings us back to where I started. My hypothesis is that the tense-aspect flip-flop can best be explained as originating from a reinterpretation of a NEWSIT marker.

1 Flip-flops

Two of the southern Kiranti languages have a suffix -e, which follows all person and number markers. In Athpare it indicates past, in Camling nonpast/imperfective (see Ebert 1997b:26). The following examples illustrate the identical morphological build-up of Camling nonpast and Athpare past forms. For full paradigms and details of formation see Ebert (1997a,b).

(1) a. CAMLING NPT cf. PT khat-e 'he goes' khata khata-c-e 'they (d) go' khata-ci go-d-NPT tyok-u-m-e 'we see it' tyok-u-m see-3P-1/2pA-NPT

b.	ATHPARE F	PT	cf. NPT		
	khad- e	'he went'	khat-yuk		
	khad-a-c-e	'they (d) went'	khat-ci-ci (<*-ci-t-ci)		
	go-PB-d-PT		go-d-NPT:[copy]		
	nis-u-m-e	'we saw it'	nis-u-m-t-um		
	see-3P-1/2pA	-PT	see-3P-1/2pA-NPT-[copy]		

Stem + a constitutes a past base (PB) in Athpare, a finite base in Camling (cf. NPT khata-ce). In Bantawa, for example, a following the stem is the (only) past marker. In all cases this a is elided by a following vowel.

Some languages, spreading from the north to the southeast of the Kiranti area have a suffix -t, sometimes following person markers, sometimes the stem. This suffix stands for past tense in Thulung and Khaling, for nonpast in Athpare (see 1b) and Dumi. Without going into details, the flip-flop can be demonstrated with some examples from Dumi and Thulung.

(2)	a.	DUMI NPT yəm-t-ini beat-NPT-3p	'they will beat him'	cf. PT yəmd-ini
		a-yum- t- əsi 1eP-beat-NPT-d	'they _d will beat me'	a-yum-əsi
		yəm-ki-t-a beat-1p-NPT-e	'we _{pe} will beat him'	yəm-ka beat-1pe
	b.	THULUNG PT yal-mi- d -i beat-3p-PT-[i]	'they beat him'	cf. NPT yal-mi
		yal-ŋi- d- i-ci beat-1s-PT-[i]-d	'they _d beat me'	yal-ŋi-ci
		yal- t -o-ko beat-PT-[o]-1e	'we _{pe} beat him'	yal-ku

A zero-marked form is a past in Camling¹ and Dumi, a nonpast in Thulung, Khaling, Limbu and Bantawa. Figure 1 gives an overview of the past and nonpast markers in eight out of the thirty Kiranti languages (with their relative geographical position).

¹ Actually the Camling past form is morphologically identical with the Bantawa past form. But as root + a is also the base for the nonpast in Camling, a cannot be regarded as a past marker. Cf. for details Ebert (1997b: 24f).

Δ Mt. Everest

Khaling, Thulung

PT: **-t** NPT: **Ø**

Dumi
PT: Ø
NPT: -t

Limbu PT: √+a/ε NPT: **Ø**

Camling PT: $\sqrt{+a}$ - \emptyset NPT: $\sqrt{+a}$ -e

Bantawa PT: √+a NPT: Ø

Belhare PT: √+he NPT: -**t**,-yuk

Athpare PT: √+a -e NPT: -t,-yuk

Figure 1: Past and nonpast markers

The question I shall pursue here is: How can a marker come to indicate such contrary notions? I shall concentrate on Camling and Athpare, but also mention some forms from Belhare and from Limbu. For a somewhat fuller picture, the tense and aspect forms relevant for the discussion are presented in Table 1.² Note that, except in Limbu, perfect and progressive are not distinguished in negation, a fact to which I shall come back in section 4.

TABLE 1 ASPECTOTEMPORAL MARKERS

	Camling	Athpare	Belhare	Limbu
PT	-Ø	-e	-he-	-a- / -e-
NPT	- e	-t-, -yuk	-t-, -yuk	-Ø
PROG	-uŋs- \sim -õs-	-kett-	-hett-	$-a\eta/-ro + AUX$
	(-ŋas-)		-kett- (motion)	
PERF	-ŋas-	-ese	-se \sim - ηe	-aŋ + AUX
"negPROG"	NEG.CONV	NEG -kett-	NEG -kett-	NEG -an/-ro + AUX
	+ -ŋas-			
"negPERF"	f1	tt	H	NEG.CONV + AUX

² For detailed accounts see Bickel 1996, Ebert 1997a:41-62, 1997b:24-29, van Driem 1987:148-183.

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2 Aktionsart

When dealing with Kiranti languages, one notices that often a past or a perfect is used where we translate with a present. This can mostly be ascribed to the aktionsart of the verb, which differs from that of the English translation equivalent. Explicit aktionsart tests have been carried out only for Belhare by Bickel (1996) and to a much lesser extent for Camling by myself. Sometimes we can infer the aktionsart from use in context. Most Kiranti languages have no or at most a handful of stative verbs. States, also those described by adjectives in English, are usually conceived as the result of the entrance into the situation. Thus Athpare *ims*- means only 'fall asleep' (not 'sleep'); *mitt*- means 'come to want'. The state of sleeping or wanting has to be described with a resultative-perfect (3a). Sometimes, especially before a nominalizer and in subordinate clauses, the past is used (3b).

- (3) ATHPARE
 - a. ims-ese 's/he sleeps' mitt-ese 's/he wants'
 - b. ka-sak was-e-n-i? a-sak was-ese.
 your-hunger come.up-PT-NML-Q my-hunger come.up-PERF
 'Are you hungry?' 'Yes.'

The Limbu verbs *limd*- 'sweet' and *soos*- 'itch' refer to the moment of perception, which has often passed when the sensation is communicated. If the translations given in van Driem (1987:89-91) are exhaustive, these verbs have only ingressive aktionsart, i.e. they mean 'come to taste sweet, be perceived as sweet', etc.

(4) LIMBU PT NPT limd-ε 'it tastes / tasted sweet' lim 'it will taste sweet' soos-ε 'it itches / itched' soo 'it will itch'

For other verbs, van Driem gives two translations for the nonpast form. These verbs are ingressive-phasal, i.e. they have both the change of state and the resulting situation as part of their lexical meaning (symbolized \otimes ----).

(5) lakt-ε 'it is / was boiling' lak 'it is boiling / will boil'

There is no generally accepted term for these verbs. The abbreviation ISTA (inchoative-stative or ingressive-stative) used by Breu and Sasse (e.g. Sasse 1991) has gained some currency among German-speaking scholars. Breu changed to "inceptively stative" in a later publication (1994). I have used "two-phase verbs" in Ebert (1995), a term taken from Arabic and Turkic linguistics.

'come to the boil / boil' is one of the verbs that we encounter again and again in Asian languages with initiotransformative aktionsart. Others that typically belong to this group are 'fall asleep / sleep', 'put on / wear', 'grasp / hold', 'mount / ride', postural verbs like 'sit down / sit', and a verb for 'become / be'. For some of the verbs which are typically ingressive or initiotransformative we get the following correspondences between Athpare and Camling.

(6)	ATHPARE	CAMLING	
	lis-e (PT), lis-ese (PERF)	hiŋ-e (NPT)	is'
	lis-e	tir-e	'must'
	tug-e, tug-ese	tik-e, tuk-õse (PROG)	'it hurts'

The Athpare verbs behave as would be expected for ingressives: the present situation is referred to by a perfect or a past. But if Camling -e is a nonpast / imperfective marker, we must be dealing with stative or activity verbs in this language. Perhaps these morphological equivalences can lead us toward an explanation of how the tense flip-flop originated.

3 A possible scenario

The following development seems plausible:

- -e originally marked a resultative;
- Camling ingressive verbs changed aktionsart; i.e. the postterminal phase, to which the resultative applied at an earlier stage (I), was reinterpreted as a phase that is part of the lexical meaning (II).

A verb form like *tike* could then be understood as resultative of the ingressive meaning component 'come to hurt' or as actualis (probably independent of temporal reference) of the stative meaning component 'hurt'. Such developments are attested for a number of languages. The ingressive meaning may become marginal or disappear totally, e.g. Swahili *-lala* 'fall asleep' \rightarrow 'sleep' (Drolc 2000:102), German *sitzen* 'sit down, sit' \rightarrow 'sit'. Think also of

English *is tired*, which has a resultative form, but is lexicalized as a stative predicate. This step was not taken in Camling, at least not with the verb *tik*-. The past form *tika* is used for expressing pain just after it was perceived.

Of the two interpretations of *tike* in stage II, the actualis interpretation won out and later developed into an imperfective; a new actualis (progressive) form was introduced. In Athpare, the putatively resultative form in -e developed along the well-known path, attested in numerous languages, towards a perfect and then a past.

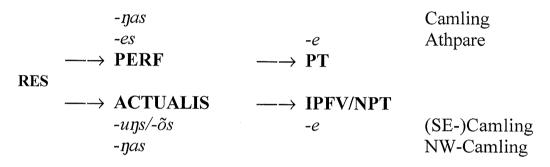


Figure 2: A possible scenario

Interestingly, the Camling periphrastic form with the second verb *ŋas*- 'keep' goes in both directions. It is used as a resultative, referring to the resultant state (7a) and — less often — with perfect meaning, referring to an event in the past (7b).

(7) CAMLING

- a. khupsa-pana m-chu-ci jhara chya-**ŋasa**-ko raicha barahari-wa. get.up-TEMP her-hand-ns all tie-RES-NML REP rope-INST 'When she got up, her hands were all tied up with a rope.' (Jh2.62)
- b. ira hubuma khaŋ-ŋas-yu-ko hola.
 one rainbow see-RES-3P-NML maybe
 'Maybe she has seen a rainbow.' (Nir1.267)

Moreover, some speakers of the northwestern Camling dialect use it as a progressive.

(8) NW-CAMLING a. de ta-ŋal-e-ŋas-e? what 2-do-NPT-PROG-NPT 'What are you doing?'

b. hakapo chacamaci Aspa sunpuwa-da wana-**nasa-**c-e. two boys now tree-LOC climb-PROG-d-NPT 'Two boys are climbing the tree just now.' (LSN 3.3)

The grammaticization as a progressive is only in its beginning. It is documented in several sentences of the Linguistic Survey of Nepal (LSN) questionnaires, from which (8a,b) are quoted, but it does not occur in the narratives I collected in the northwestern Camling area.

In many cases what at first seemed to be a progressive turned out to be a resultative. This is especially evident with examples from the southeastern dialect, which has a fully grammaticized progressive marked by $-u\eta s$ or $-\tilde{o}s$. The ηas -forms in the following examples from southeastern narratives can therefore only be resultatives.

(9) SE- CAMLING

- a. kap-ghicro-da a-ma sor bo nabd-e-nas-e. your-neck-LOC my-mother louse PART stick-NPT-RES-NPT 'A louse is sticking [= is stuck] to your neck, mother.' (Bal1.38)
- b. khana mina bo ta-khus-yi—**nas-**yo? you person PART 2-hide-3P-RES-3P:NPT 'Are you hiding [= have you hidden] someone?' (Bal6.76)

I have chosen these examples because they can be translated into English by a progressive or by a resultative-perfect,³ due to the initiotransformative character of the English verbs. Thus the affinity of the two meanings becomes plausible.

The progressive in the northwestern dialect could have developed via reinterpretation of resultatives. On the other hand, the *nas*-forms are used also with continuative meaning, e.g. *lodyu-nasyu* 'he kept telling', and the development from continuative to progressive is a plausible path, too.

4 Negative forms

We have seen that one of the Camling periphrastic forms translates both into a resultative-perfect and a progressive. When we look at negated periphrastic forms across Kiranti languages, we realize that these notions systematically go together. Most descriptions of Kiranti languages deal with negative forms simply as negations of positive forms. But the negative systems are organized differently (to various degrees in the individual languages). In Camling and

³ The possessive resultative interpretation of (9b) might be a bit difficult to get; but take: *She always has a bottle of whisky hidden in her desk.*

Athpare one single negative form correlates with positive resultative and progressive.

(10) CAMLING

ta-khat-e-ŋas-e 'you are gone'

2-go-NPT-RES-NPT

ta-khat-**uŋs**-e 'you are going'

2-go-PROG-NPT

mi-khai ta-ŋas-e 'you are not gone / are not going'

NEG-go 2-TAM-NPT

The negated form can be understood literally as 'you remain without going'. Athpare and Belhare have negative forms with the aspectivizer verb kett-. It is not attested as a full verb in those languages, but Limbu has the cognate kett-'attain'. The Athpare negative corresponds in form to the progressive (11a); (11b) and (c) show the same form in the negation of a perfect and a past.⁴

(11) ATHPARE

a. chons-u-gett-u sell-3P-*kett*-3P 's/he is/was selling it'

> chons-u-n-**gett**-u-n-na sell-3P-NEG-*kett*-3P-NEG-NML 's/he is not selling / hasn't sold it'

- b. khan Kalkatta a-khad-ese-n-i? maina, khat-ni-ŋ-get-ni-ŋ-na. you C. 2-go-PERF-NML-Q no go-NEG-1s-kett-NEG-1s-NML 'Have you been to Calcutta?' 'No, I haven't.'
- c. khan biha a-lis-e-n-i? li-ni-ŋ-get-ni-ŋ-na you marriage 2-become-PT-NML-Q become-NEG-1s-kett-NEG-1s-NML 'Are you married?' 'No.'

Belhare uses *kett*- as a progressive marker only with a subgroup of motion verbs (Bickel 1996:131f; 2000). In the negated form, *kett*- translates as 'yet'.

 $^{^4}$ k becomes voiced in a voiced environment; consonant clusters are reduced before a consonantal suffix. Negative clauses are as a rule nominalized in Athpare (cf. Ebert 1997a:54-62) — (11b) is the translation of a Nepali sentence with two perfects: $tim\bar{t}$ kalkatta ga-eko chəw? $\bar{a}h\bar{a}$, ahile pani ga-eko chəyna.

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(12) BELHARE
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a. khat-**ke** 's/he is going (now)' go-*kett*

b. kam n-cok-**ket**-ni 's/he is not yet working / has not worked yet' work NEG-do-*kett*-NEG

According to Bickel *kett*- selects the initial or the only boundary; hence his term "inceptive". To my understanding this would yield the meaning 'he is setting out'. A plausible alternative seems that *khat-ke* means 'he has set out, has started walking'. By pragmatic inference this yields the interpretion 'he is going'. Such postlimital verb forms can develop into imperfectives or real progressives, especially with motion verbs. The negative form states that an expected situation has not yet come into existence at reference time.

Negative forms which level out aspecto-temporal distinctions are also found in other Kiranti languages, though they do not seem to be as systematized as in the ABC languages (Athpare, Belhare, Camling). For Thulung, Allen (1975: 88) reports a converbal negative form. To the question 'Have you eaten?' one can answer in the negative only with *mi-pe-thina*⁷ *bu-na* (NEG-eat-CONV be-1s), and not with the regular past form *mi pewwa*. The Limbu form described as "negative perfect" in the grammar is often used in the negation of a past form.⁸

(13) LIMBU

- a. khεŋε? maːki kɛ-deːs-w-iː? mɛŋ-deː-ʔeː waː-ʔɛ.
 you(s) maize 2-sow-3P-Q NEG-sow-CONV be-1s:NPT
 'Did you sow the maize?' 'No, I didn't.'
 (van Driem 1987: 180)
- b. poiks-ε-i: mε-boiks-ε-ŋ-ŋi:? mεm-boiŋ-?ei wai. become-PT-Q NEG-become-PT-NEG-Q NEG-become-CONV be 'Is it [the egg] done or not?' 'It isn't.' (180)

Limbu does have regularly negated past forms, as (13b) shows. What are the conditions, then, for the use of the converbal negation? I think that the negation in (13a) and (b) has to be understood in the sense of 'not yet'. The person will sow the maize later, and the egg will be done. Indeed, five of the

⁵ The term "inceptive" is used in African linguistics for tense-aspect forms with the meaning 'already'; cf. Schadeberg (1990), Neukom (1995:89). I find the term rather unhappy, as it is likely to be understood as marking the beginning of a situation ('he started to ...').

⁶ This development has occurred in Arabic; cf. Ebert (2000:770) for Maltese.

⁷ The suffix *-thina* is obscure. The form does not occur anywhere in the Thulung texts; the negative converb of subordinate clauses has the shape NEG-STEM-sa.

⁸ In fact, I found not a single occurrence in the Limbu grammar where the converbal form negates a perfect.

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fifteen examples presented in the grammar <u>are</u> translated with the help of *not* yet. In most others yet could be inserted, as in (13a,b), where it would even yield a better translation.

Under certain circumstances, which remain unclear so far, the Limbu converbal form can negate a progressive. In the texts in the appendix to the Limbu grammar I found the following sentence:

(14) mund-ε-ro way-ε-i **mεm-**muŋ-**?e:** way-ε-i? run-PT-SIM be-PT-Q NEG-run-CONV be-PT-Q 'Was it [the watch] working or was it not?' (361)

According to van Driem (1987:158), the construction -ro + war (as in (14)), a "spatially defocused continuous", lacks a negated counterpart and uses negated simplicia instead. This statement is clearly contradicted by (14). Though apparently rare, this negative fits nicely into the overall pattern.

The negative forms raise some doubt on the validity of the scenario envisaged in the previous section. One would have to assume that all the periphrastic negatives started out as resultatives and developed in two directions. But do they really have two meanings?

I found two types of formations in compound negatives, which have a broader scope than corresponding positive forms. The Limbu, Thulung and Camling forms consist of a negative converb followed by an auxiliary; Athpare and Belhare have a compound verb construction with the second verb *kett*- (< 'attain'). The two types are atemporal in different ways. The negative converb is neutral as to sequentiality or simultaneity, which are marked in positive converbal forms. In the periphrastic formation a negative converb combines with a tense-marked auxiliary. A literal reading would be 'is/was without V-ing', 'is/was without having V-ed'.

The Athpare and Belhare forms — both the asserted and the negated ones — contain no tense markers and apply in any temporal context. They express that the situation is 'attained' or not 'attained' at reference time. The different translations as perfect or progressive are due to the structure of English; there are no two meanings in Athpare or Belhare. With the original meaning of *kett*-in mind, it is easy to see how the combination with an ingressive verb yields the reference to a resulting situation. The Athpare positive forms focus on this situation, leaving an actualis ("progressive") reading. In Belhare, this step was carried out only for a subgroup of motion verbs.

In both groups we sometimes find an additional meaning component which we can translate by *yet*. This component is strong in Limbu and Belhare, but not in Athpare. Due to the scarce information it is not possible to draw any conclusions about Thulung and Camling. ¹⁰

my text corpus. The Thulung form does not show up at all in the texts I consulted.

⁹ Either true converbs or finite marked verbs followed by a simultaneous or sequential suffix. ¹⁰ The Camling negative form, though produced freely in interrogation, occurs only twice in

5 Looking around

Looking for similar phenomena in other Sino-Tibetan languages I came upon Burmese pi, which is used when an event or state "is regarded as having a point of fulfilment or realization which is approached by degrees with the passage of time" (Okell 1969:383). Others have called it a "past" or a "perfect" marker. To my mind the best description is presented by Allott: "pi shows that a different situation, indicated by the verb, has really been reached" (1965: 290). This seems to be the positive counterpart of the Kiranti negative forms.

pi is a sentence final particle in opposition to other final markers, mainly te for realis, me for irrealis, and hpù in negative statements. It is often translated with the help of already or now.

(15) BURMESE

- a. bamasakà totoleì ta?-pi.
 Burmese quite.a.bit know-pi
 'They know quite a bit of Burmese already.'
- b. leì-hsé-koù-hkú-hni?-hma-toùñ-ká lu?la?yeì yá-**pi.** four-ten-nine-unit-year-in-while-from independence get-*pi* 'We already had [got] independence in 1949.' (Okell 1969:385)

pi indicates that a goal or a certain limit has been reached. With activity verbs "the point of fulfilment is an activity" (Okell 1969:383).

(16) hpa?-**pi** 'he is reading now, he has begun to read' hsu-**pi** 'it is boiling now, it has begun to boil'

The *pi* forms imply that the situation described was in some sense expected. *hsu-pi* 'it is boiling (now)' would be said if one has been waiting for it. A more neutral way of expressing the fact is *hsu-nei-te* (boil-stay-REALIS). We can summarize that *pi* is a marker indicating a new situation which was somehow expected.

Descriptions of Mandarin sentence-final le and the examples given in the literature are similar to those presented for Burmese pi. Li et al. (1982) have summarized its meaning as "current relevance in relation to reference time". They argue that le can be seen as a variant of the category perfect, sharing its core meaning. But many uses are difficult to reconcile with the notion of perfect in European languages, e.g.

¹¹ There is a verb pi 'finish', from which pi probably developed. pi itself is used in compound verbs as a telicizer, parallel with a number of other auxiliaries; cf.

we-**pì**-pi 'he has bought one now' hpa?-lai?-pi 'he has read it through'

(17) MANDARIN

a. wǒ zhīdao le.

I know *le*

'Oh, yes, now I know.' [speaker went to a wrong room first and now remembers]

b. Xiǎo Huáng kuài yào lái **le.**little H. fast will come *le*'Little Huang is about to arrive.' [so hide the gifts!]
(Li et al. 1982:37)

As with Burmese *pi* there is often an expectation involved; cf. the following minimal contrast:

(18) a. women er-shí-sì-ge. 'We are 24.' [to a waiter] we two-ten-four-CL

b. women èr-shí-sì-ge le. 'We are 24 now.' [in the bus after waiting for the last two, who were still missing] (Li et al. 1982:29)

The criterion "current relevance in relation to a reference time" seems too vague to define a perfect. It is unclear how uses like those in (17a,b) and (18b) could be reconciled with the minimal consensus that with the perfect reference time is different from event time (cf., among others, Bybee et al. 1994:54). It seems doubtful whether sentence final le is an aspecto-temporal marker at all. Its position at the end of the sentence is different from that of e.g. perfective le and the experiential perfect marker guo, which follow the verb. The term "perfect" seems unhappy also in the light of an example like (18b), which does not even contain a verb.

6 Already, perfect and NEWSIT

The forms in question are often translated with the help of *already* or *not yet*. Perfect and *already* go together well, of course (cf. Bybee et al. 1994:54). Often the particle does not really add any information to the perfect. But *already* combines with all sorts of verb forms, not just with perfects. And as we have seen, Burmese *pi*, Mandarin *le* and the Kiranti negative forms in section 4 translate into various tense-aspect forms, not just perfects. Let us see, whether a closer look at the notion of ALREADY can help us in our understanding of the Kiranti forms and possibly also of the Burmese and Mandarin particles.

The particle *already* (like its counterparts *still*, *yet*) is notoriously difficult to describe (cf. Löbner 1989, König 1991:139-153 for some recent accounts).

Let us first look at English *already* and its German translation *schon*. These particles apply (in their 'aspectual' readings) to a state after and often close to a boundary. With telic predicates, for example, *already* and *schon* together with a perfect express that the final boundary has been transgressed before reference time.

- (19) a. She has already written the letter. / Sie hat den Brief schon geschrieben.
 - b. She had already written the letter. / Sie hatte den Brief schon geschrieben.

With activities, which are conceived as having both an initial and a final temporal boundary, *already* applies, with different tenses, to a phase after either boundary.¹²

- (20) a. We are already eating. / Wir essen schon.
 - b. We have eaten already. / Wir haben schon gegessen.

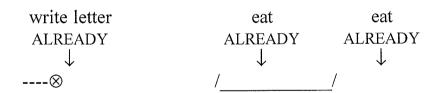


Figure 3: ALREADY and aktionsart

The negation of already, not yet, applies to a phase before either boundary.

- (21) a. We are not yet eating. / Wir essen noch nicht.
 - b. We have not yet eaten. / Wir haben noch nicht gegessen.

There is also a presupposition that (the hearer knows that) the situation Σ did not hold at some time shortly before reference time t_R . The interrelation between ALREADY, its counterpart STILL and negation can be summarized as in Table 2.

¹² be writing a letter behaves like an atelic actional phrase: She is already writing the letter. This fact may be of some consequence for the unclear status of the English progressive.

TABLE 2
ALREADY and STILL

ALKEADT and STILE					
	presupposition	assertion			
ALREADY p <i>already</i>	$\neg \Sigma$ at $t < t_R$	change: Σ at t_R			
ALREADY ¬p not anymore	Σ at t < t _R	change: $\neg \Sigma$ at t_R			
¬ALREADY p not yet	$\neg \Sigma$ at $t < t_R$	no change			
STILL p still	Σ at t < t _R	no change			
STILL ¬p still not	$\neg \Sigma$ at $t < t_R$	no change			
¬STILL p no longer (?)	Σ at t < t _R	change: $\neg \Sigma$ at t_R			

Already indicates that a new situation has come about, but not yet (i.e. ¬ALREADY p) denies this. A corresponding new situation marker is not anymore (ALREADY ¬p). As becomes clear from Table 2, already signals a change, whereas still signals that there is no change. The expression of continuation (no change) is different from negating the operator already. European languages are not very systematic in expressing the six possibilities. Whereas the difference between not yet and still not (i.e. lingering in a prelimital stage) seems clear enough in English, the opposition between not anymore and no longer is less so. Morphologically German noch nicht seems to express still not, but it is the translational equivalent of English not yet (¬ALREADY), whereas still not is German noch immer nicht.

Burmese admits of more consistent expressions. A negated verb + pi indicates the new situation of ALREADY $\neg p$. Persistence of a situation is expressed by the auxiliary $th\grave{e}i$.

However, this neat system does not show up in the colloquial style, where instead of NEG-V-pi we find an expression with the auxiliary *tó*, used in the same position as *thèi*.

¹³ For a detailed account see van der Auwera (1998).

(23) a.	thwà- pi mä-thwà- pi	'he has gone now' 'he isn't going anymore' (literary style)
b.	mä-thwà- tó- hpù NEG-go-AUX-FIN	'he isn't going anymore' (colloquial)
cf. c.	mä-ti- thèi -hpù NEG-play-AUX-FIN	'he won't play yet' (Okell 1997:75, 81)

The choice between ALREADY and STILL depends on expectations. In using ALREADY the speaker seems to imply that the change was expected to occur at t_R or shortly thereafter. Most authors assume that the event takes or took place earlier than expected. The validity of this claim has been questioned by Klein (1994:146) on the basis of examples like (24)

(24) Anne was already in the bathtub, as I had expected.

The apparent contradiction dissolves when we realize that the expectation can be the speaker's or that of the cultural environment. In every speech community there are standard times for events to occur. (20a-b) are, without further context, odd at different times of the day. In Switzerland (20a) would not normally be uttered by people eating their lunch at 2 o'clock. And (24) would probably not be uttered if the speaker did not in some sense think that it was early for a bath, or that Anne was quick to get there. So there is an expectation involved.

Expectation of the event is also implied by Burmese pi and Mandarin le, but there is not always the sense of 'relatively early'. Often $at\ last$ is a suitable translation, which is the contrary of 'relatively early'; therefore, 'early' cannot be a feature of the prototype. The common denominator of ALREADY, pi and le is that they mark a new situation which is in some way expected. I will tentatively call them **NEWSIT markers**. I hold that the resulting verb forms or phrases are **not perfects**. The perfect is a postterminal form. It is therefore not applicable to statives, nor to atelic verbs in general. It is totally excluded for events taking place at reference time. These restrictions do not hold for the NEWSIT forms, which can apply to any situation following a limit, whether inherent or temporal, whether initial or final. In a language without tense, NEWSIT + activity verb ($we\ ALREADY\ eat$) has two possible interpretations (see Figure 3). This is, to my mind, the origin of the tense-aspect flip-flop.

¹⁴ I am speaking of the gram type, not of forms called "Perfect" in individual languages, which sometimes have developed much broader uses.

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7 Back to where I started

My hypothesis is that Athpare and Camling *e was originally a NEWSIT marker. Tense is a recent phenomenon in Kiranti languages. Several layers can be detected in the morphology of verbal systems of different Kiranti languages. I restrict myself here to closely related southern and southeastern languages and to affixes related to tense-aspect.

layer I: stem + alayer II: -e, -t

layer III: periphrastic formations

The Camling past forms have only the suffix a of layer I, which is moreover also present in some nonpast forms (cf. (1a)). In Limbu ($a \sim \varepsilon$) and in Bantawa it is a past marker, in opposition to the unmarked nonpast forms. ¹⁵ It is not very likely that this was its original function. The same a (underlying the same elision rules) appears in the imperative — even in northwestern Kiranti languages, which have no past marker a. I suppose that earlier Kiranti had no tense at all, but systems more similar to what we find in Burmese.

The next layer contains additional markers. The NEWSIT marker *e (or some earlier form of it) was added to the end of the person-marked verb. The form developed temporal connotations (possibly under the influence of Indo-Aryan) leading in Athpare to a past paradigm, in Camling to an actualis and then to an imperfective and nonpast interpretation. The history of -t remains to be investigated.

Perfect and progressive markers constitute layer III. The forms are mostly periphrastic and have different shapes in closely related languages.

The notion of NEWSIT is still there in Kiranti languages, though not in the paradigms that developed from *e. It shows up in negative forms, which tend to be more conservative. In some languages the meaning component not yet is prominent. It seems natural that a NEWSIT meaning develops from verbs like 'finish' or 'attain' and that a persistive meaning (still) develops from verbs like 'keep', 'stay'. The data from Kiranti are far too scarce for a clear statement, but at least in Belhare we have the meaning component 'already' / 'not yet' (<'attain'). Working with Kiranti languages is often like prehistoric digging. There are numerous layers, and the latest are adaptations to Indo-Aryan. What one finds are often only scattered sherds of earlier patterns. However, indepth investigations, like Bickel's analysis of Belhare, could bring more to light. Kiranti negative paradigms also have to be compared to negation patterns in other South Asian languages; at least some Dravidian languages show a

 $^{^{15}}$ Due to the elision of a before a vowel suffix, about half of the forms of the past and nonpast paradigms are identical in both languages.

¹⁶ I have tried to show this for inverse systems (Ebert 1993, 1997b:21-24) and for nonfinites (1999).

strong preference for a perfect form in the negation of a past (cf. Ebert 1996:22).

NEWSIT is a more widespread gram type, at least in Asia. Jenny (this volume) independently arrives at the same conclusion for Thai $l\varepsilon\varepsilon u^3$, again a "perfect" marker according to some authors (cf. Howard 2000). After the presentation of this paper at the workshop, Dahl provided me with unpublished data from the Papuan language Kuot, on which Eva Lindström is presently working; Kuot seems to have a NEWSIT marker, too. The "inceptives" of Bantu languages (cf. Schadeberg 1990) should perhaps also be reconsidered in this light.

This paper is a first attempt at coming to grips with flip-flop phenomena in Kiranti languages, and it lead me to the postulation of a new gram type. Details and individual differences still need to be investigated, as does the theoretical status of the markers involved. But whatever evidence or counterevidence linguists will come up with, to call the NEWSITs "perfect" does not further our understanding of these forms.

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Languages without tense and aspect

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1 Introduction

Is a human language without tense and aspect possible?

It is commonly assumed that tense and aspect have an essential role to play in language, in the sense that these categories encode information that is crucial for the proper functioning of discourse. The attention paid to them in most grammars seems to confirm this assumption, and most people find it hard to imagine a language that lacks these categories completely. In my 1985 survey of tense and aspect systems, all languages that I studied had at least some markers that fit the characterization of the "cross-linguistic tense-aspect categories" I was looking at. Quite a few languages did lack inflectional tense-aspect marking, but in those cases there were always at least some periphrastic constructions instead. In Bybee et al. (1994: 119), another typological survey of tense, aspect and modality, it is mentioned more in passing that at least one of the languages in the sample, !Kung (!Xu) seems to lack tense and aspect marking altogether.¹ Indeed, the source, Snyman (1970), does state the following (p. 146):

Unlike many other languages the !Xu verb is not inflected nor can it form tenses by means of auxiliary verbs. The time and the degree of completeness of the action are established by means of adverbs.

Regrettably, however, there are no connected texts in Snyman's book and it is therefore a bit difficult to verify these statements. In addition, a grammar of a closely related (or maybe even identical) language, Ju|'hoan, Dickens (ms.), mentions at least two tense-aspect markers, koh, an optional past marker, and ku, an imperfective marker showing that an action is "continuous or habitual or unfinished". The latter, to judge from the examples in the grammar, is used fairly systematically. A morpheme ku does figure in Snyman's treatment (p.

¹ In this connection, Bybee et al. (1999:119) talk of Car – a dialect of Nicobarese – as a language which lacks inflectional and periphrastic tense-aspect but has at least one derivational affix characterized as 'completive'. However, their source for Car – Braine 1970 – also mentions a "continuative" suffix *-haka* used with non-intrinsic states and the like.

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148) but it is frankly acknowledged that "all attempts to establish the function or meaning of this frequently used pre-verbal element failed". Thus, the evidence available so far does not give reliable support for assuming that !Kung, under whatever name, is a language without tense and aspect.

In this paper, I shall instead look at some other languages that lack or come close to lacking tense and aspect as grammatical categories. The languages in question belong to an area that has been more or less a white spot on the linguistic map for a long time, namely the part of New Guinea iconically named Vogelkop or Bird's Head.

All the languages of the Bird's Head are so-called 'Papuan' (also known as 'non-Austronesian') languages, the genetic unity of which has never been demonstrated. Most of them are traditionally subsumed under the grouping "West Papuan languages", the nature of which is also under dispute. In the words of Reesink (1998, 604), the languages of the Bird's Head are characterized by "lexical diversity and structural similarity". Among structural properties shared by all or some of the languages in the area Reesink mentions SVO word order and prepositions, verb sequencing (serial verb constructions), sentence-final negatives², an instrumental verb prefix, an inclusive-exclusive distinction and dual marking in pronouns, and gender. Most pertinently for our concerns here, however, Reesink (1998: 618) notes the absence of "Tense-Mood-Aspect marking on the verb" as a general feature of Bird's Head languages³, although with a "possible exception" concerning future marking in the East Bird Head's language, which I shall return to later. Another highly relevant feature is general presence of what Reesink calls a sentence-final "phasal aspect marker".

2 TMA non-marking in Maybrat

As a result of a large-scale research project conducted by Dutch linguists, grammars of a number of Bird's Head languages have appeared at the turn of the millennium. Below, I shall concentrate on one of those languages, Maybrat, also referred to as Mai Brat, Ayamaru, Ajamaru, and Brat, as described in Dol (1999), which, in addition to the grammatical description also contains fairly long transcripts of narratives and conversations in Maybrat.

Verbal morphology in Maybrat, like in other languages in the area, is fairly simple: forms consist of the verb stem and, in most cases, a prefix marking the

² It may be noted that sentence-final negation, particularly in SVO languages, is quite a rare phenomenon (Dahl 1979). Reesink mentions that it is also found in the Austronesian languages in the Cenderawasih Bay (directly south-east of the Bird's Head).

³ The group that Reesink is referring to is somewhat vague in his text; he repeatedly uses expressions like "all these languages" and "the languages under consideration" without making it clear whether he is talking about all languages in the Bird's Head area or only a subset of them.

person and number of the subject (some verbs do not take prefixes). The same prefixes are also used as possessor markers on nouns and as agreement markers on "adjectival verbs" used attributively. They are thus by far the most salient element of Maybrat inflectional morphology. There are a few ablaut-like verb stem alternations correlated with subject marking. Dol mentions one improductive derivational affix -i- that creates transitive verbs out of intransitives. A process that may be somewhat more relevant to tense and aspect is reduplication, which I shall return to below. In general, however, it seems safe to say that Maybrat lacks inflectional and derivational tense and aspect – thus confirming Reesink's generalization about "lack of TMA affixation".

A somewhat trickier question is whether Maybrat also lacks periphrastic tense-aspect constructions. In support of a positive answer to the question, it can readily be seen that a wide variety of contexts in which such constructions might be expected to show up entirely lack any kind of morphemes which might be interpreted as temporal or aspectual markers.⁴

Thus, the following sentences illustrate reference to on-going activities in the present (where English has present progressive) and generic/habitual statements, respectively.

- (1) tuo t-awe ku y-hai awiáh mi y-awià
 I 1s-say child 3m-die taro so.that 3m-cry
 'I think the child is hungry so that he is crying.' (1999: 136)
- (2) Wuon rae mati m-ait pofit m-siar Wuon people and then 3u-eat ginger 3u-many 'In Wuon the people eat lots of ginger.' (1999: 254)

In the following two sentences from a narrative we can see that present and past states are expressed in the same way, without any marking:

- (3) y-me m-hai awiah. "t-akut Siwa k-tuo t-hai awiah." 3m-mother 3u-die taro. 1s-boy Siwa EMPH-I 1s-die taro 'His mother was hungry. "My child Siwa, I'm hungry." (1999:330)
- (4) shows a series of events in a narrative, equally non-marked. This could, however, be seen as an example of a serial verb construction, which will be discussed below.

⁴ As is not entirely uncommon in reference grammars, a large part of the examples in Dol (1999) are translated using the English simple present. This makes it rather difficult to determine what temporal and aspectual interpretation is intended. The running texts at the end of the volume do not have this problem.

- (4) Y-aru pron y-wian aya. 3m-cut bamboo 3m-scoop water Y-ama y-ros ø-sawiah aya m-pe. 3m-come 3m-stand ø-cook water 3u-boil 'He cut a bamboo and scooped water. He came and got up and cooked the water until it was hot.' (1999:331)
- (5)-(6) show a predictive and a modal reference to the future again without markings.
- (5) tuf ru m-api m-ama
 three bird 3u-big 3u-come
 'In three days the big aeroplane (lit. the big bird) will come.' (1999:123)
- (6) p-mo Mosún fe p-mo ora à?

 1p-go Mosun NEG 1p-go garden Q

 'Shall we go to Mosun or shall we go to the garden?' (1999: 203)
- In (5), the time reference is indicated simply by the numeral *tuf* 'three', interpreted as 'three days'. Compare (7), which is the corresponding statement about the past:
- (7) ti tuf ru m-api m-ama
 ago three bird 3u-big 3u-come
 'Three days ago the big aeroplane (lit. the big bird) came.' (1999:124)

Notice here *ti* 'ago', which removes the potential ambiguity between past and future time reference. Dol glosses *ti* as "PAST", which may give the impression that it is some kind of tense marker. However, this is the only example in the book where this morpheme is used, suggesting that it is in fact specific to this kind of temporal adverbial expression and that 'ago' is a more appropriate glossing.

Finally, it may be noted that imperative sentences do not differ morphologically from indicative ones, as is illustrated by (8). There is a special prohibitive marker *mai* which is different from the usual sentence negation *fe* (this is cross-linguistically extremely common).

(8) n-ait! 2-eat 'Eat!' (1999:207)

- (9) n-ait re
 2-eat please
 'Eat please!' (1999:207)
- (10) n-aut ara mai
 2-climb tree PROH
 'Don't climb the tree!' (1999:208)

3 Temporal adverbs

Let us now turn to some potential counterexamples to the claim that Maybrat and the other Bird's Head languages have no tense and aspect.

The section on adverbs in the chapter on word classes in Dol (1999) contains two sub-sections called "Temporal adverbs" (p. 122-124) and "Aspect adverbs" (p. 125-126). Similarly, the section on adverbials in the chapter "The Clause" contains two sections labeled "Time" (p. 169-172) and "Aspect" (p. 176-181).

"Temporal adverbs" include words such as is 'yesterday', orie 'today, now', tian 'formerly, in the past', pose 'a long time ago'. A few examples of complex time adverbials such as Hari Minggu tuf 'in three weeks [lit. after three Sundays]' are also given. There is a widespread idea (reflected in the quotation from Snyman 1970 above) that languages that lack grammatical tense somehow compensate this by an extended use of time adverbials. On the whole, this idea has no empirical foundation but rather builds on a mistaken view of the functions of adverbials on one hand and tense morphemes on the other. Tense morphemes relatively seldom give information about the location of states and events in time that is not derivable from the context, and are in fact largely communicatively dispensable. The Maybrat texts in Dol (1999) do not, in general, contain more time adverbials than would be expected in any language, and their existence does not really pose a threat to the claim that Maybrat does not have tense and aspect. A relatively frequent phenomenon in narratives, however, is what Dol refers to as "coordinators" indicating sequentiality, which I shall return to below.

4 "Aspect adverbs"

Quoting the common definition of aspect as referring to the internal temporal structure of an event, Dol says that in Maybrat, "aspect is expressed through adverbs" (1999:125), and enumerates the following "aspect adverbs" in Maybrat: fawen 'long time', oh 'already', sai 'just', twat 'always', u 'again', wia 'before', yoyo 'continuously', tipuo 'immediately, straight away', fares

'still', ewa 'often, always', tipuo 'immediately, straight away'. Some examples:

- (11) ait y-atak twat he 3m-angry always 'He is always angry.' (1999:176)
- (12) ku ø-kiniah y-awia yoyo
 child ø-small 3m-cry continuously
 'The small child cries continuously.' (1999:177)

As can be seen from the list, the delimitation of aspect adverbs from the temporal ones is not always self-evident. Apparently, the decisive criterion is syntactic: time adverbs are said to always occupy the first position in the sentence, whereas aspect adverbs come after the verb and the object⁵ (except *tipuo* 'immediately' which also occurs sentence-initially)

In spite of Dol's claim that aspect is expressed by adverbs in Maybrat, there is little to suggest that the words enumerated so far have any grammaticalized function as aspect markers; rather, they are used in roughly the same way as the adverbs in English that are used as their glosses. There are three possible exceptions to this claim: *fo*, *oh* and *fares*.

Fo is the only aspect adverb for which a gloss is used that is not an adverb in English. Fo is said to be related to a homophonous proximal demonstrative and is glossed as 'INCEP' for 'inceptive' or 'beginning to', thus a function for which one would rather expect an auxiliary. Cf. (4) above,

(13) au m-amo aya fo she 3u-go water INCEP 'She is beginning to go to the water now.' (1999:178)

Oh 'already' attracts suspicion in view of the fact that grammaticalization of words meaning 'already' into tense-aspect markers is known from other languages. Thus, in many languages words meaning 'already' are also used when English has a perfect. In the material that I used in my 1985 book such uses could be found at least for the following languages: Afrikaans, Javanese, Indonesian, Karaboro, Bugis Makassar, Sundanese, Yoruba⁶.

In fact, oh is mentioned by Reesink as a marker of 'phasal aspect':

⁵ At least, this is what is said in the chapter on word classes (p. 125). In the chapter on clause syntax (p. 176), however, it is stated that aspect adverbs may also precede the object, with a possible change in scope relations.

⁶ Although *already* is mentioned as a source for perfects in Dahl (1985), the phenomenon escaped my notice in most of the languages enumerated here.

"All these languages have a sentence-final phasal aspect marker, translatable in most cases as 'already': Moi se, Tehit wale, Maybrat oh, Abun re, Mpur pa, Hatam tu/su, Sough hop, Meyah fob." (Reesink 1998: 617)

Words meaning 'already' typically show up in two types of context: in sentences describing states or on-going activities at the point of reference, as in *John is here already*, and combined with verbs referring to an event that precedes the point of reference, as in *John has arrived already*. However, in both cases, the focus tends to be on a situation at the point of reference, as can be seen from the near-equivalence of the sentences just cited. The difference between the two constructions lies in whether the situation is directly indicated by the verb (as in *John is here*) or given as the result of a previous event (as in *John has arrived*).

Maybrat oh is not different in this regard – we find both types of cases:

- (14) pi Hermanus y-anes oh man Hermanus 3m-old already 'The man Hermanus is already old.' (1999, 161)
- (15) ku m-ait po-iit oh child 3u-eat thing-eat already 'The child has eaten already.'
- (16) au m-amo aya oh she 3u-go water already 'She's already left for the river.' (1999, 178)

In the strongest 'reading' of *already*, it conveys the meaning that the situation described is expected to hold but only at a later point in time. (We are astonished that John arrived so early.) But in the following sentence the arrival of the other guests is not implied to be unexpectedly early, it is merely contrasted against our own late appearance:

(17) We were half an hour late for the party. The other guests had arrived already.

Likewise, in an example like the following, what is important is that you need not read a book twice:

(18) I won't buy that book because I have read it already.

It is not too far-fetched to assume that the grammaticalization of 'already' into perfect-like markers goes via examples like the ones above. However, as

argued in Ebert (this volume), the markers in question usually have a wider distribution than an analysis as perfects would imply – sometimes they seem to mean little more than suggesting that something has not always been the case. It may be more adequate to treat them as a separate gram type ("NEWSIT").

The question now is whether the "phasal aspect markers" found in the Bird's Head languages in general and in Maybrat are examples of this gram type. We may note, to begin with, that the fact that a "new situation" is described is not sufficient for Maybrat *oh* to be used. See e.g. (3) above, which would seem to be more or less a paradigm case.

If grammaticalization from 'already' has taken place, we would expect it to be used in situations where *already* is not appropriate in English. Most examples with *oh* in Dol (1999), however, are translated using *already*. For the examples given without a context, it is hard to judge to what extent such a translation is warranted, but there is at least one place in the connected texts where *already* seems somewhat out of place in the translation:

(19)fai m-api pria m-akus fai m-api oh 3u-big all 3u-leave 3u-big already woman woman m-poh kpor kaka m-ana 3u-white back 3u-head bend 'A very old woman, she was left behind, the woman was already old, her hair was white, her back was stooping.' (1999:332)

Interestingly enough, there is a very similar example from Hatam. The context is also a narrative, about a snake which magically became young after having been old:

(20) wou di-no wer andig su-a snake REL-3s near old already-QUOT 'That snake had been rather old.' (Reesink 1999:144)

There are a number of further examples from Reesink (1999) where *su/tu* is used without a counterpart in the English translation. Some of them are somewhat cryptic:

- (21)cin je-ni ji-kwei sop leu munggwom-nya ikieba tu pair 2p-this2p-come from child-p woman toddler already 'You two women you come. Because the children have already grown up.' (Reesink 1999:170)
- (22) ... njinta tam nye tu
 food suppress 1p already
 '...we're fed up with the food' (Reesink 1999:171)

- (23) nye-ni mpe di ni-mahan tu...
 we-this time REL 1pe-adolescent already
 'when we were growing up...' (Reesink 1999:207)
- di-ma (24)lene da-ni cem wer mang tu already then 1s-this also 1s-get near many 'Then I too got some [pigs], a few.' (Reesink 1999:208)

Still, for both Maybrat and Hatam, the evidence that 'already' has really been grammaticalized as something like NEWSIT is somewhat scanty. In Abun, another of the languages mentioned by Reesink as having a "phasal aspect marker", the grammar (Berry and Berry 1999:123) explicitly treats the morpheme in question (re) as a perfect marker, as in

- (25) Fredik mu mo Dom F. go LOC D. 'Fredik went/is going to Dom.'
- (26) Fredik mu mo Dom re
 F. go LOC D. PERF
 'Fredik has gone to Dom.' (is still there)
- (27) Fredik mu mo Dom mo re
 F. go LOC D. LOC PERF
 'Fredik has been to Dom.'

In the last example, the addition of the locative particle *mo* is said to yield an experiential interpretation. *Re* is also used, however, in the sense of 'already' with statives, as in

ré Fredik ré kem mo-ré re (28)su LOC-DET **PERF** with DET lives **DET** F. 'now this Fredik already lives here.' (Berry and Berry 1999:72)

In addition, Abun has another aspectual particle, *it*, with a related meaning. Berry and Berry give the following minimal pair for *re* and *it* (glossed 'completive aspect'), which they say both translate into Indonesian *sudah*:

(29) an ma re he arrive PERF 'He has arrived.' (1999:124) (30) an ma it
he arrive COMPL
'He has finally arrived.' (1999:124)

Already is used when a change has unexpectedly taken place at a time when it was not expected. The mirror-image would be when you expect a change and it does not take place. This is the niche of words like English still and yet and Maybrat fares, Hatam yo and Abun tó (glossed as 'incompletive aspect' in Berry & Berry 1999:126). Combined with negation and event verbs, the latter may convey meanings equivalent to English negated perfects, e.g.

(31) MAYBRAT

m-e pitis fe fares 3u-give money NEG yet 'She hasn't given money yet.' (Dol 1999:181)

(32) HATAM

lene ni-ngat mbrei hi big-yo then 1pe-see foreigner other not-yet 'And we had not yet seen any foreigner.' (Reesink 1999: 73)

(33) ABUN

men yo mu nde tó 1p NEG go NEG INCMP 'We are not going yet.' (Berry & Berry 1999:126)

Also here it is questionable if any significant grammaticalization can be demonstrated.

Dol concludes the section on aspect adverbials in Maybrat by saying that the verb *m-arak* 'it is empty' "can also function as an aspect adverbial meaning 'after'". In the example given, *m-arak* looks more like a clause connector, but this may depend on the translation.

(34)pae m-atiah ania m-arak 3u-make.love twosome each.other 3u-empty m-e amah pae m-amo twosome 3u-return 3u-go house 'After the two have made love, they return to the house.' (1999, 178)

M-arak also functions as an ordinary adjectival predicate, as in *Tapam rae m-arak* 'the land was empty of people'.

5 Sequentiality marking

In Maybrat there are a number of different constructions in which two or more verbs or verb complexes are combined to form one sentence, ranging from clear cases of clausal coordination to tighter serial verb constructions. At least two phenomena are of potential relevance for the topic of this paper. One is the expression of sequentiality by designated clausal coordinators, another is the potential emergence of periphrastic constructions with aspectual meanings.

Dol mentions three coordinators "that can express sequentiality", *mati*, *na* and *m-nan*, with which the ordering of events is always iconic:

- (35) p-mo aof mati p-fat aof
 1p-go sagotree and.then 1p-fell sagotree
 'We are going to the sagotree and (then) we will fell the sagotree.'
 (1999: 252)
- (36) m-aút na m-kai apàn 3u-climb and.then 3u-meet snake 'They climbed and then they found a snake.' (1999: 256)
- (37)ana m-amo Sorong they 3u-go Sorong pefo ù m-nan ana m-e m-ama here again 3u-enough 3u-return 3u-come thev 'They are going to Sorong. After that they will return and come here again.' (1999:258)

In the texts, however, the Indonesian loan *terus* is equally frequently used in this function:

(38) kiyit finia m-ai terus hamit cloth woman 3u-hit and then bundle 'Women hit the cloths and then they put them in a bundle.' (1999:311)

Mati can also follow an NP, as in ex. (2) above and then probably has the function of a topic marker.

It may be said that the sequential coordinators help to create the temporal structure of the discourse in a way similar to tense markers. Many languages have special verb forms or special markers that are used in narratives to indicate sequence. It should be noted, however, that the Maybrat sequential coordinators are not grammaticalized in the sense of being obligatory. (35) is equally grammatical without *mati*:

(39) p-mo aof p-fat aof
1p-go sagotree 1p-fell sagotree
'We are going to the sagotree and (then) we will fell the sagotree.'
(1999: 252)

Maybrat has a variety of constructions that may be characterized as "serial verbs". At least some of these may have aspectual import. Thus, position verbs like *-ros* 'stand', *-hu* 'stay' and *-hren* 'sit' combine with other verbs in examples like the following, which are analogous to progressive constructions in various other languages:

(40) ø-hren y-kias po-mna ø-sit 3m-tell NOM-tell.tale 'He sits and tells a tale.' (1999: 84)

It is somewhat difficult to judge exactly what the role of this construction in the language is – there are hardly any examples in the texts. Considerably more frequently one encounters another serial verb construction, in which the first element is a verb of motion, e.g. -amo 'go' or or -ama 'come', as in (41):

(41) y-pat Tenau Kosetiah y-ama y-hu Tenau Rarír 3m-from Tenau Kosetiah 3m-come 3m-live Tenau Rarir 'From Tenau Kosetiah he came to live at Tenau Rarir.' (1999: 280)

This may be seen as a device to express ingressive events – and consequently some kind of perfective aspect – in an unambiguous way. What is unclear is whether there is any bleaching of the meaning of the motion verbs. It does seem that these verbs are sometimes used rather redundantly in the texts. On the other hand, at least one of the most frequent verbs in the serial verb constructions, *-ros*, is used ambiguously in the sense of 'stand' and 'get up', which means that it does not really distinguish the "progressive" and the "perfective" cases.

6 Repeated verbs

Repetition of a verb or verb stem with an iconic interpretation is common, and takes two different forms, full repetition and stem reduplication. Full repetition means that a verb is repeated together with its person prefix in order to indicate an action with a long duration, as in:

(42) ana m-amó m-amó m-amó m-amó they 3u-go 3u-go 3u-go 3u-go 3u-go 'They go for a very long time.' (1999: 277)

Reduplication (Dol 1999: 64), where only the verb stem is repeated, appears to have a more lexical character, although its semantics is rather similar. It is sometimes accompanied by vowel alternations:

- (43) *m-fok* 'they fall spontaneously': *m-fok-fok* 'they roll'
- (44) krox 'they make a loud noise': krox-krax 'they make a long loud noise'

7 Future marking

As noted above, Reesink (1998) mentions future marking in the East Bird's Head languages as a possible exception to the absence of TMA marking in the Bird's Head languages. Thus Meyah has forms such as di-Vm-ofij [dumofij] 'I will help' where Vm would be a future marking prefix (Gravelle 1999). Reesink says that Sough does as well, and possibly Hatam (which is not usually regarded as belonging to the EBH group). In Hatam, according to Reesink (1998: 618), the morpheme mV- is found before the inflected verb, that is, before the subject prefix, in constructions like (45):

(45) gi-no i-hig ser yoni m-i-ndo bi-nyeni NOM-3S 1p-ask guard they POST-3p-show to-us 'If we inquire, they will show (it) to us.'

Reesink (1998: 619) says that it is possible that this morpheme has been borrowed from Meyah "without incorporating it in the verb". In Reesink (1999: 55), however, further details are given, which seem to indicate that the distribution of the morpheme is rather restricted. Although there are some examples such as mi-di-kwei 'I will come' where an interpretation as a future marker is possible, Reesink says that mV- "is not a clear future tense marking, since many sentences referring to a future event do not use it at all", and that its function in (45) and (46) suggests a gloss such as "posterior marking":

(46) noni yaimidyai mang bibor bi-nyeni mi-ni-kerjan he get work much very to-us POST-1pe-work 'He gave us a lot of work to do.'

There are apparently also examples that suggest that mV- may have a nominalizing function (ibid.). The borrowing hypothesis seems a bit implausible under those circumstances.

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8 Conclusions

The result of the survey of possible tense-aspect marking devices in Maybrat is that at best, a couple of them can be seen as borderline cases, and lacking further information, it is somewhat difficult to judge their status. In addition, the notion of "grammaticalized tense-aspect" may not be sufficiently well delimited in itself. What are the criteria for saying that a morpheme that is translated as 'already' is a grammaticalized tense-aspect marker? Intuitively, English *already* is not grammaticalized, so we would probably at least require that the marker in question has a considerably higher frequency than that word. But even if a morpheme has the wider definition of marking a new situation, it is not obvious that it falls under the traditional definitions of tense (e.g. "grammaticalisation of location in time", Comrie 1985: 1) and aspect (e.g. "different ways of viewing the internal temporal constituency of a situation', Comrie 1976: 3).

Whatever decision will finally be reached on the borderline cases, it appears safe to say that Maybrat seems to do quite well without traditional core tense-aspect categories such as past, future, perfective and imperfective. Although some compensatory mechanisms are found to make up for this "deficit", their use appears to be fairly restricted. This demonstrates that by and large, tense and aspect, as grammatical categories, are dispensable. In this context, it should be pointed out that this seems to be a general property of those grammatical categories that have inflectional expression in some language – for any such category, there is always some language that simply ignores it. As for tense and aspect, this may be less obvious than for others such as case and number, although it can be seen from the surveys in Dahl (1985) and Bybee et al. (1994) that it holds at least for the individual "gram types" (future, past, progressive etc.). The relative rarity of languages such as Maybrat suggests that tense and aspect do belong to the more pervasive ones among grammatical categories.

We saw that Reesink included the lack of inflectional TMA among the areal properties characterizing the Bird's Head languages. His own description of Hatam suggests that it is comparable to Maybrat in lacking any clearly grammaticalized tense-aspect markers. The impression one gets of Abun, on the other hand, is that sentence-final particles are used in a more systematic fashion than in Hatam and Maybrat. Whether this difference between the languages is real or rather depends on the way the grammarians have chosen to represent the facts remains to be seen. Forthcoming descriptions of the languages in the area will hopefully give a clearer picture of the limits of the "no tense and aspect" phenomenon.

Casting the net more widely, it is obvious that there is a fairly large geographical region, comprising at least Indonesia and large parts of South East Asia, in which inflectional tense-aspect is more or less entirely lacking and periphrastic marking is relatively weakly developed. The languages discussed

in this paper may only be the extreme cases of a general tendency in this part of the world. However, it is noteworthy that in this respect they differ rather sharply from the other languages in the controversial Papuan grouping, which have in general been associated with rather complex tense-aspect systems, exhibiting among other things well-developed remoteness distinctions. In the standard presentation of Papuan languages, Foley (1986) gives the following statement about tense systems:

"The simplest possible tense system is that exemplified by Japanese, Yidiny ... or possibly English, in which events prior to the time of speaking (past) are contrasted with those simultaneous with or posterior to it (non-past). No known Papuan language has such a simple system." (p. 158)

This statement, which was written before the Bird's Head languages were properly described, may, when read in retrospect, serve as an example of the dangers of areal generalizations. There may still be surprises lurking off the beaten track.

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Turkic double verbs in a typological perspective

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1 Syntactic properties of Turkic double verbs

The aim of this paper is to outline some typological properties of Turkic double-verb constructions.¹ I confine the subject to constructions consisting of two verbs, although there are Turkic languages of which serialization of more verbs is typical; see, for instance, Schönig (1998) on South Siberian Turkic.

I will first present Turkic double verb constructions and compare them with corresponding Russian, Bulgarian, Swedish and Hungarian ones. Double-verb constructions have, in many languages, served as a locus-for-change for grammaticalization processes giving birth to a number of actionality and viewpoint categories. I do not include here structures based on nominal forms of the lexical verb, such as infinitives, because these are not typical of Turkic.

1.1 Postverbs

The first type of double-verb constructions is construed as a combination of the converb form of a lexical verb and a following grammaticalized verb conjugated according to its position in the clause. See, for instance, the following example:

(1) Noghay

Murat qaγït-tï bir kesek zaman qara-p tur-dï. Murat paper-ACC a short time look.at-CONV stand-PT 'Murat was looking at the paper for a short time.'²

In the expression *qarap turdī* in (1) both verbs can have lexical meanings. The meaning is ambiguous between a simple serial reading, such as 'looked and stood' (2) and a modifying one, according to which the converb modifies the meaning of the second, i.e. 'looking s/he stood' /'stood looking' (3).

Zürich: ASAS-Verlag. Pp. 175-187.

¹ Double verbs are also called compound verbs, paired verbs, postverb constructions, serial verbs, descriptive verbs, etc.

² I thank André Hesselbäck, Birsel Karakoç and Helena Bani-Shoraka for discussing with me Mari, Noghay and Persian examples.

(2) Semantic relation of serial reading: lexicalV & lexicalV

(3) Semantic relation of modification: $lexicalV \Rightarrow lexicalV$

(⇒ designates the direction of modification)

The verb *tur*- is also used in Noghay as a so-called postverb, i.e. an auxiliary expressing a grammatical meaning, actionality (Aktionsart) or as the result of further grammaticalization, viewpoint. This Noghay verb is a viewpoint operator designating intraterminality (see Johanson 2000). Accordingly, *qarap turdi* in (1) can be, and normally is, interpreted as 'was looking'. The grammaticalization of the postural verb has led to a reversed order of modification:

(4) Grammaticalized postverb construction: $lexicalV \leftarrow postV$

Whereas the lexical converb *qarap* 'looking' modifies the following lexical verb *turdī* 'stood' in reading (3) 'looking s/he stood', the postverb *turdī* 'stood' modifies the meaning of the lexical verb *qarap* 'looking' in reading (4)'standing s/he looked' = 'was looking' (cf. Driussi 1993 for corresponding Cheremis constructions).

1.2 Hypotactic and paratactic constructions

In the Noghay example (1), the first verb is a non-finite form of the verb qara'look', namely a converb based on the suffix -(I)p. Thus, the construction manifests a subordinative syntax, the converb segment being syntactically dependent on the following verb form. Its meaning is, however, as shown above, ambiguous between a serial (2) and two different types of modifying readings (3) and (4).

In many Turkic languages, such CONVERB+V-constructions may alternate with the parataxis of two verbs bearing the same finite or non-finite suffixes. The variation seems to be free; no study has, however, been carried out to confirm this assumption. See the Uzbek example (5), in which the postverb $q\mathring{a}l$ - is used to specify the transformative reading of the lexical verb:

(5) UZBEK

Oχlà-di gål-di

fall.asleep/sleep-DI.PT remain:POSTVERB-DI.PT

'S/he fell asleep'. (Boeschoten 1998:365)

³ Accent can disambiguate the construction. See Demir 1993.

The same type of actional modification expressed by two finite verbs is to be found also in Standard Turkish and in Anatolian dialects, see Demir (1993).

(6) Turkish

Unut-muş git-miş-im.
forget-POSTTERM.PT go-POSTTERM.PT-1s
'I have apparently totally forgotten it.'

Such paratactic constructions may exhibit the same semantic ambiguity as the ones based on the converb form of the first element. The order of the two verbs is significant and cannot be reversed. The lexical verb and the grammaticalized verb are adjacent; normally only some particles, such as *da* 'also' and the interrogative particle *mi* can intervene.

1.3 Preverb construction

There is another, less frequent, much less typical construction in Turkic. I will illustrate it with the help of Turkish examples. The verbs *tut*- 'take hold of / hold' and *al*- 'take' are used in a grammaticalized sense to denote 'start doing, do suddenly, unexpectedly'.

(7) Turkish

Tut-up çık-tı. take.hold.of-CONV leave-PT 'He left (with a sudden decision).'

The grammaticalized meaning of the verb *tut*- 'get hold of' in this construction is to denote that the event is 'unexpected' or 'not appropriate'. A Turkish dictionary defines this use of *tut*- in the following way:

(8) "Bir tümcede eylemden önce ve eylemin kipinde ya da ortaç durumunda kullanıldığında o eylemin anlattığı işin çok beklenmediğini, umulmadağını ya da pek uygun düşmediği halde yapıldığı anlatır." (Püsküllüoğlu 1995)

'When it preceds a verb, either in the same morphological form as the following verb or as a converb, it expresses that the action described by that verb is unexpected, not counted with or not regarded to be carried out in an appropriate way.'

Example (7) observes the semantic ambiguity typical of other Turkic double verb expressions, i.e. the lexical readings (2) and (3) and a postverb function (4). The direction of modification is, however, different, since the grammaticalized verb *tut*- precedes the lexical verb. Thus in addition to the postverb construction (4) one also has to reckon with a preverb construction (9)

in Turkic.

(9) Grammaticalized preverb construction: $preV \Rightarrow lexicalV$

Even this preverb construction, which I will call the 'take-and' construction, has a paratactic version, in which both verbs bear the same suffixes.

(10) Tut-tu çık-tı.
take.hold.of-PT leave-PT
'He left (with a sudden decision).'

Turkic postverbs and preverbs represent two different grammaticalization processes. The syntactic properties of the typical Turkic postverb constructions are summed up in (11).

- (11) Properties of the Turkic postverb constructions
 - a. The order of the two verbs is fixed.
 - b. In some languages more than two verbs can be serialized.
 - c. The original lexical meanings of the grammaticalized verbs are not transparent any more.
 - d. The two verbs must be adjacent (except for some particles, which may intervene).

The 'take-and' type preverb constructions have partly different syntactic pro-perties.

- (12) Properties of the Turkic preverb constructions
 - a. The order of the two verbs is fixed.
 - b. Only two verbs can be serialized.
 - c. The original lexical meanings of the grammaticalized verbs are still transparent.
 - d. The two verbs need not be strictly adjacent; see (13).
- (13) Tut-up sor-ma-ya başla-dı. take-CONV ask.questions-INF-DAT begin-PT 'All of a sudden he started to ask questions.'

The typical Turkic postverb constructions have functioned as a locus-forchange where new viewpoint / aspectual categories arise. Preverb constructions, on the other hand, often undergo lexicalisation processes.

(14) dur-up dinle-meden stand-CONV take.a.rest-CONV.WITHOUT 'nonstop'

(15) Al-dı yürü-dü. take-PT walk-PT 'S/he has gotten rich quickly.'

In the following I will discuss the properties of double verb constructions in some other European languages. Whereas Russian and Bulgarian double verbs share some properties with Turkic postverb constructions, Hungarian and Swedish ones are similar to Turkic preverb constructions.

2 Double verbs in Russian and Bulgarian

Weiss (1992, 1995, 2000) discusses the properties of Russian double verbs. According to him, colloquial Russian employs a number of these constructions.

- (16) сид-ит дума-ет sit-PRES:3s think-PRES:3s 'S/he is thinking.'
- (17) пош-ла лег-ла go-PT:f go.to.bed-PT:f 'She went to bed.'

Weiss (2000) enlists the following properties being characteristic of these constructions:

- (18) a. Only one of the elements is accented, in unmarked case it is the second one,
 - b. common argument structure,
 - c. same morphological marking, either finite or non-finite.

The future auxiliary *budu* etc. precedes the construction and cannot be repeated:

(19) Ты (у меня) буд-еш сиде-ть молча-ть. you by me will-2s sit-INF keep.silent-INF 'You will sit and keep silent (by me).'

The order of the elements can be changed without changing the meaning:

(20) Ты бы лег-ла пош-ла. you if go.to.bed-PT:f go-PT:f 'You would go to bed.'

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(21) Рассказывай садись. tell:IMPER sit:IMPER 'Sit down and tell about it.'

The complement of the lexical verb may precede the auxiliary verb:

(22) Она на нас сто-ит смотр-ит. she at us stand-PRES:3s look-PRES:3s 'She is (standing and) looking at us.'

It is, in principle, possible to serialize more than two verbs:

- (23) Говор-ят хорошая картина.
 say-PRES:3p good movie
 Пойд-ем сход-им посмотр-им.
 go-PRES:1p leave-PRES:1p see-PRES:1p
 'They say, it is a good movie. Let us go, leave and see it.'
- (24) ходи-л се-л пи-л чай и смотре-л телевизор walk-PT sit down-PT drink-PT tea and watch-PT TV 'He went, sat down, drank some tea and watched TV.'

The meaning of the constructions vacillate between denoting two events and one event. In the latter case the meaning of one of the verbs is 'desemantized' and the desemantized verb, e.g. *sidet'* 'sit', *xodit'* 'walk', *pojti* 'go', modifies the meaning of the lexical verb. Thus the properties of the Russian constructions can be summed up as follows:

- (25) The syntactic properties of the Russian constructions
 - a. No conjunction between the two verbs,
 - b. the preferred order is AuxV LexV, but the order can be reversed without changing the meaning,
 - c. more than two verbs can be serialized,
 - d. in analytical constructions the auxiliary may not be repeated,
 - e. the complement of the lexical verb may precede the auxiliary verb,
 - f. the lexical verb can be a converb.

The fact that the order of the lexical verb and the grammaticalized verb is reversible in Russian is interesting because the order of the two segments is usually fixed in other languages. Converbs can be used in many of these constructions. The question arises whether these properties may be explained by presuming that Turkic postverbs have served as models, i.e. that they were copied from Turkic, maybe also via Finno-Ugric. It is a well-known fact that many languages, e.g. Mari, have copied Turkic postverbs (for the Mari /

Cheremis double verbs see Driussi 1993). In Cheremis, as in Turkic, the converb normally precedes the postverb, but Driussi mentions that the converse order also occurs (1993: 63-64).

Bulgarian double verbs exhibit another feature typical of Turkic constructions. The original lexical meaning of the grammaticalized postural verbs is not transparent any more, as shown by Kuteva (1999).

(26) BULGARIAN

Sedi i čisti po cjal den v kăšti. sit:PRES:IPFV:3s and clean:PRES:PFV:3s along whole day in home 'She cleans the house all day long. / She habitually cleans the house all day long.' (lit. 'sits and cleans') (Kuteva 1999:195)

This property is very much reminiscent of the Turkic postverb constructions. Kuteva does not discuss this question.

3 Double verbs in Hungarian and Swedish

Both Hungarian and Swedish possess semi-grammaticalized double verb constructions based, for instance, in Hungarian on the verbs *fogja* 'takes' or the reflexive forms *fogja magát* 'takes him/herself' and *kapja magát* 'gets her/himself', in Swedish on *ta* 'take'. Postural verbs are used to express actional modifications, e.g. durativity. Motion verbs add other types of semantic modifications. Examples (27)-(29) illustrate the use of the verb 'take' to denote an ingressive, sudden, unexpected event:

(27) Hungarian

Kap-ta magá-t és el-men-t. get-PT:DEF:3s self-ACC and away-go-PT:3s 'All of a sudden s/he left.'

(28) SWEDISH

Jag ta-r och gö-r det. I take-PRES and read-PRES it 'I will simply do it.'

(29) HUNGARIAN

Fog-ta és megcsinál-ta. take-PT:DEF:3s and do-PT:DEF:3s 'S/he (took the initiative and) did it.'

Postural verbs express durativity in (30)-(33). (33) may also imply irritation.

(30) HUNGARIAN

Ül és mesél. sit:PRES:3s and explain:PRES:3s 'S/he is telling (stories).'

(31) SWEDISH

Han sitt-er och läs-er. he sit-PRES and read-PRES 'He is reading.'

(32) Han håll-er på och läs-er. he hold-PRES on and read-PRES 'He keeps on reading.'

(33) HUNGARIAN

Áll és csodálkozik. stand:PRES:3s and wonder:PRES:3s 'S/he is wondering.'

The motion verb denotes that the event will take place in the future in (34), negative affectedness in (35), that the event went on and on in (36). The reverse order of the same verbs in (37) expresses that the subject behaved in a pushy way.

(34) HUNGARIAN

Megy / szalad és feljelent. go:PRES:3s run:PRES:3s and denounce:PRES:3s 'S/he will denounce you.'

(35) Hungarian

Jön (nekem) és panaszkodik. come:PRES:3s I:DAT and complain:PRES:3s 'He will complain (and this will affect me in some way).'

(36) SWEDISH

Han gick på och prata-de. he go:PT on and talk-PT 'He went on talking.'

(37) SWEDISH, reverse order

Han prata-r och gå-r på. he talk-PRES and go-PRES on 'He keeps on talking (in a pushy way).' In Hungarian, there is often a conjunction between the two verbs. It is, however, not obligatory:

(34') Megy feljelent.
go:PRES:3s denounce:PRES:3s
'S/he will denounce you.'

The grammaticalized verb precedes the lexical one, and this order cannot be reversed without changing the meaning. The two verbs share the subject. More than two verbs cannot be serialized. The complement of the lexical verb may precede the auxiliary verb only if it is topicalised. Interestingly, the transitive verb *fogja* 'takes' must be in the definite conjugation even when the object is indefinite:

(38) Fogja és ellop egy könyv-et. take:PRES:DEF:3s and steal:PRES:INDEF:3s a book-ACC 'S/he simply steals a book.'

In Swedish, there is usually a conjunction between the two verbs. The preferred order is when the grammaticalized verb precedes the lexical verb. The order cannot be reversed without changing the meaning, compare the Swedish examples (36) and (37). The number of verbs is maximally two. The two verbs have a shared subject, the complements of the lexical verb cannot precede the grammatical verb. The grammatical verbs *ta* 'take' and *hålla på* 'keep on' cannot take any object. The original meanings of the grammatical verbs *sitte* 'sit', *stå* 'stand' are still transparent.

4 A sketch of a typological frame

TABLE 1
DOUBLE VERB CONSTRUCTIONS IN TURKIC LANGUAGES

Types of double	Meanings of the segments	Meaning of the	Syntactic type	Examples
verbs		construction		
Postverb	lexicalV +	← modifying	hypotactic,	(1)
	grammaticalV		first segment is a	
			converb	
	lexicalV +	← modifying	paratactic	(5), (6)
	grammaticalV			
Preverb	grammaticalV +	⇒ modifying	hypotactic,	(7)
	lexicalV	, ,	first segment is a	
	iomodi v		converb	
	grammaticalV +	⇒ modifying	paratactic	(10)
	, 0	-7 modifying	paramone	(**)
-	lexicalV	:	1	

Whether the syntactic construction is hypotactic or paratactic is not of crucial importance in Turkic. This is due to the fact that the semantics of the construction is not dependent on the syntax; cf. Csató & Johanson (1993). As shown above, a hypotactic construction can have both a serial (lexicalV & lexicalV) and a modifying (lexicalV \Rightarrow lexicalV) reading; see (2) and (3) above.

This also applies to Russian. According to Weiss (1995), the paratactic double verbs in (39) and the corresponding converb construction in (40) are functional equivalents.

- (39) сид-ит молч-ит sit-PRES:3s keep.silent-PRES:3s 'sits and keeps silent'
- (40) сид-ит молч-а sit-PRES:3s keep silent-CONV 'sits keeping silent'

Turkic languages predominantly employ postverbs. The preverb construction (10) is iconic in the sense that 'take' is used to designate ingressivity, 'set about to', 'take the initiative to do', 'begin doing'. It has a vast areal distribution, being used in Scandinavian, Iranian, Turkic, Russian and Finno-Ugric languages, Baltic languages; see Larsson (1992). It is even found in languages such as Persian, which does not employ any other double verbs.

(41) SWEDISH

Ta och fundera på det här! take:IMPER and think:IMPER on this '(Begin to) think about this!' (Larsson 1992:90)

(42) FINNISH

Meidän kissa otti ja kuoli. our cat take:PT and die:PT 'Our cat died unexpectedly.' (Larsson 1992:90)

(43) Russian

Oн взял и пошел. he take:PT and leave:PT 'He left (with a sudden decision).'

(44) PERSIAN

begir bešin (< benešin)
IMPER:take:PRES IMPER:sit:PRES
'Sit down!'

Hungarian and Swedish only employ preverb constructions, whereas the order of the two verbs in Russian seems to be freer: The two verbs may be scrambled.

5 Crosslinguistic features of double-verb constructions: the notions grammaticalized

The semantic notions grammaticalized in double-verb constructions are rather similar in many languages of the Eurasian linguistic area; see also Masica (1971). The most frequent notions grammaticalized in Turkic, Slavic (Russian and Bulgarian), Hungarian, and also Japanese (cf. Alpatov, unpublished paper) are given in (45):

(45) Notions grammaticalized by double verb constructions:

a. ACTIONAL PROPERTIES

•	ACTIONAL PROPERTIES	
	1) Dynamicity	non-dynamic 'inessive' sense, dynamic 'illative' sense
	2) Phase structure	transformativity vs. non-transformativity, ingressive, final, in-progress, performed from beginning to end
	3) Temporal properties	durative, instantaneous, sudden, uninterrupted, performed until this or another point in time, coincidental
	4) Agentiveness	uncontrolled, performed with uncertainty, performed consciously
	5) Affectedness	first-actant oriented, oriented towards others, reflexive, (causative)
	6) Effect	change of state, irrevocable / irreversible, performed in advance or in preparation, the doer anticipating the future necessity (as precondition for another event)
	7) Manner	intensive, unforeseen or accidental occurrence, regularly occurring, singular occurrence,

regularly occurring, singular occurrence, repetitive, propinquitive meaning ('almost'),

gradually developing

8) Motion away from something, towards something

9) Emotional connotation negative connotation (irritating), positive

connotation (desiderative)

b. MODAL NOTIONS possibility, ability, conative (try to do)

c. VIEWPOINT NOTIONS intraterminality, postterminality, terminality

The verbs serving as the basis for the grammaticalization belong typically to certain semantic classes.

(46) Semantic classes of the lexical verbs grammaticalized as postverbs

- a. Postural verbs 'sit', 'stand', 'become' / 'be'
- b. Motion verbs 'go', 'run', 'move', 'come'
- c. Gestural verbs 'take', 'cast', 'give', 'send'
- d. Phasal verbs 'begin', 'finish'
- e. Perceptional verbs 'look', 'listen'
- f. Ability verbs 'know'

The set of auxiliary verbs and the set of the notions grammaticalized by them show great crosslinguistic similarities; see Ebert (2000). However, as pointed out by Johanson (2000), the same auxiliary can be used to convene different notions in different languages. One can, however, observe some tendencies.

Postural verbs, i.e. body position metaphors ('stand', 'sit', 'lie', etc.) are utilized in many languages to express grammaticalized actional modifications, such as durativity, e.g. Italian periphrases with *stare* 'be (situated)', Swedish *sitta* (och) 'sit (and)', Tatar *tor-* 'stand', *utïr-* 'sit', *yat-* 'lie', Kalmyk *kevt-*'lie'. The auxiliaries either preserve some of their lexical meanings, delimiting the action to certain body positions, or they are desemanticized and thus interchangeable.

6 Summary

Turkic double verb constructions observe typological properties shared by corresponding constructions in many Eurasian languages. An important parameter of a typological comparison is the order of semantic modification. In Turkic, semantic modification is a property independent of the syntactic hierarchy (hypotactic versus paratactic) of the two segments. Typologically dominant in Turkic is the postverb construction, which may be both hypotactic and paratactic. The grammaticalization of the postverbs have resulted in actionality and viewpoint markers, which are morphological modifiers of the lexical segment. The development of a preverbal construction is iconically motivated and may also be regarded to be contact-induced. Turkic languages have most probably influenced the development of double verb constructions in contact languages, such as Russian and Bulgarian.

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Tense-aspect markers as viewpoint operators in Swahili discourse¹

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1 Introduction

The purpose of this paper is to explore how the viewpoint category is grammaticalized in Swahili, and how it interacts with the tense-aspect (TA) system.² After introducing the concept of viewpoint (Vp) and presenting initial

Negation is carried by the pre-initial marker h(a)- which combines with a reduced set of morphological distinctions: h-a-som-i 's/he is not reading/does not read' (no boundary being necessarily implied: the subject may have read in the past or may read in the future, or s/he may not read at all); h-a-ku-soma 's/he did not / has not read'; h-a-ja-soma 's/he had not (yet) read'; h-a-ta-soma 's/he will not read'.

The dependent TA paradigm, which characterizes states-of-affairs as extensions of an already established situation, replaces the TA marker of the main paradigm by the markers -ki- and -ka-: a-ki-soma (SIM), a-ka-soma (SEQ). These will be discussed in section 3 below. They have no negative counterparts. The dependent TA marker -ki- is also used in pre-modifying clauses in order to express a condition.

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² The basic affirmative Swahili TA paradigm, which occurs in the main verbal predicate of the independent sentence, exhibits the following morphologically distinct categories: *a-na-soma* 's/he is reading' (PROG); *a-li-soma* 's/he read' (PT); *a-me-soma* 's/he has read' (PF); *a-mesha-soma* 's/he had read' (ANT); *a-ta-soma* 's/he will read' (FUT). Unbounded situations are represented by two distinct forms. The so-called *a-*tense implies iterative or intermittent action: (*a-a-sema ->*) *a-sema Kiswahili* 's/he speaks (Swahili) (occasionally)'. The so-called *hu-*tense, which leaves the category of person unspecified, is used for describing an entity by its characteristic behaviour: *hu-sema Kiswahili* 'he/she/I/you/we etc. speak(s) Swahili / are speakers of Swahili'. However, the *a-*form is gradually becoming obsolete and is being replaced by the *na-*present. Even apart from this recent development, the latter form's conventional designation as "progressive" - which will be used in this paper for lack of a fully acceptable alternative - appears to be a misnomer in the light of evidence from text-grammatical studies (Contini-Morava 1989, Wald 1997).

evidence for its encoding through the Auxiliary (AUX) of the so-called Complex Verb Construction (CVC; cf. Schadeberg 1992:33ff.), I shall demonstrate the superiority of Vp as a descriptive category for predicting and explaining the regularities of the most characteristic alternations between certain TA markers in Swahili discourse. I will show that explanations based on grounding variables or on feature theory fail to predict these regularities even in the case of narrative discourse where they were apparently most successfully applied. After briefly surveying further facets of the CVC-based viewpoint paradigm, drawing in part on additional evidence from conversational texts, I will conclude with some typological observations on viewpoint grammaticalization.

2 The -kuwa-auxiliary: temporal "shifter" or viewpoint operator?

2.1 We shall first look at a few passages (sample texts A-B, D below) from M.S. Abdulla's detective novel *Mzimu wa watu wa kale* (Abdulla 1982:1):

A. [The opening paragraph of the novel:]

- 1. Najum a-li-po-piga hodi nyumba-ni kwa Bwana Msa. Naium 3sS-PT-TEMP:REL-beat h. house-LOC Mister of Msa Kikwaju-ni karibu na Mnazi Mmoja Tamarind-LOC near with Coconut One
- 2. a-**li**-itik-i-w-a na mtoto mdogo³ 3sS-PT-answer-APPL-PASS-FV by child small
- 3. <u>a-li-ye-kuwa</u> a-ki-cheza mlango-ni. 3sS-PT-3s:REL-be 3sS-SIM-play door-LOC
- 4. Wakati ule

The final vowel -a, which generally characterizes verbs of Bantu origin, represents the modally unmarked case. It is replaced by -i in the unbounded negative, as shown above, and by -e in the optative: a-som-e 's/he should read'; a-ka-som-e '... so that s/he should read'. The negative counterpart of the optative is a-si-som-e 'he should not read/... so that he does not read'.

Dialectal variation in the Swahili TA system is quite considerable. See Wald (1981) and note 29 below.

³ Throughout this paper, as noun morphology is irrelevant to its main argument, nominal class prefixes will not be shown as such in the examples. For similar reasons of notational economy, I generally abstain from providing full detail of verbal post-stem morphology.

- 5. Bwana Msa a-li-kuwa msala-ni a-ki-oga, Mister Msa 3sS-PT-be wash.house-LOC 3sS-SIM-wash
- 6. na-ye <u>a-li-kuwa</u> a-**me-kwisha** ku-agiza kuwa and-3s 3sS-PT-be 3sS-PERF-finish INF-leave.instruction that
- 7. ye yote a-taka-ye-kuja any one 3sS-FUT-3s:REL-come
- 8. a-Ø-na ruhusa ya ku-ingia ndani a-m-ngoje-e.
 3sS-[be]-with permission of INF-enter interior 3sS-3sO-wait.for-OPT
 - '1. When Najum called "Hodi" [call to ask for permission to enter] at Mr. Msa's home, at "Little Tamarind" [compound] near "One Coconut Tree" [quarter], 2. he was answered by a small child 3. who was playing at the door. 4. At this time, 5. Mr. Msa was in the wash-house taking a shower 6. and had left the instruction that 7. whoever would come 8. should be allowed to enter inside [the compound] and should wait for him there.'

At first glance, the various TA markers in this passage seem to lend themselves to a straightforward description as a means of mapping a sequence of narrated events onto the temporal structure of the initial narrative situation, and of locating the various states-of-affairs relatively to each other on the time axis. Classic tense-logic à la Reichenbach (1966), distinguishing between simultaneity, anteriority and posteriority in conjunction with transposed vantage points defined ultimately by reference to speaker time, would seem to be able to take care of all apparent complexities.

However, a closer look at the data leads to a number of less trivial observations:

- 1. The narrative segment contains three occurrences of the stative predicate -kuwa 'be', respectively in (A3), (A5) and (A6). Of these, only (A5) is motivated by the need to express an independent stative predicate for the purpose of identifying a location. In the two other cases (A3; A6), the predicate -kuwa seems to be NOTIONALLY REDUNDANT. Its status in these two cases is that of an Auxiliary (AUX, underlined in the examples) in a Complex Verbal Construction (CVC).
- 2. In terms of their morphological range, both AUX and the main verb are amenable to further specification by the TA paradigm. The multiplication of the two marker sets less those combinations excluded by global constraints (see 2.3 and 8.3 below) constitutes an auxiliary TA paradigm whose versatility is obtained by associating the two independently varying TA sets with a single lexical predicate. One of the main functions of this twin TA paradigm is, as will be shown, to host the category of viewpoint and its refinements.

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3. In syntactic terms, the CVC is defined by the occurrence in immediate sequence⁴ of (i) the -kuwa auxiliary, which functions as Tense and viewpoint operator, and (ii) the main verb, which is solely responsible for the lexical content of the complex predicate.⁵ By virtue of this definition, (A5), which contains further lexical material intervening between -kuwa and the main verb, is excluded from the class of CVC. By contrast with (A3) and (A6), (A5) contains two separate lexical predicates whose combined TA configurations do not show, in spite of some overlap,⁶ the same variety as the twin TA paradigm of the CVC. On the other hand, the -kuwa predicate in (A5) shows similar viewpoint characteristics as the AUX of (A3) and (A6).

- 4. Within the primary time axis of the story, AUX establishes a point of temporal reference R_t, relatively to which an event expressed by the CVC main predicate is situated on a secondary time axis whose values are defined with reference to R_t. The event referred to by the lexical verb may thus be described, in purely temporal terms, as being anterior to R_t or as being simultaneous with R_t. Thus, the events reported in (A3) and (A5) the child playing at the door and Mr. Msa taking his shower are roughly simultaneous with the appearance of Najum on Msa's premises.
- 5. For all events reported in segment A, except for the reported speech in (A7-8), the time reference point R_t corresponds to the time frame initially set in (A1) and re-set by the deictically co-indexed adverbial phrase *wakati ule* ('at that moment') in (A4).
- 6. Action logic requires that the event described in (A6) the delivery of the instructions on the basis of which Najum will be admitted to the interior of the compound be terminated before his arrival, i.e. before the situation which defines the temporal reference point R_t arises. Post-terminality

Tu-nge-kuwa tu-nga-li tw-a-pig-ana kabila kwa kabila. 1p-COND-be 1p-PERS-be 1p-HAB-fight-each.other tribe against tribe '[If we had not been colonized,] we would still be fighting tribal wars against each other.'

The 1st degree persistive AUX, constructed with the root alternate *-li-* 'to be' (cf. Schadeberg 1992:31), implicates the cancellation of a pragmatically presupposed boundary (implying the cessation of tribal wars). In turn, the 2nd degree conditional AUX, marked as conditional, puts the 1st degree persistive CVC into counterfactual mood: tribal wars did in fact cease when the British took over.

⁴ This means that no lexical material may intervene between AUX and main verb. The apparent exception of the element *tayari* occurring in this position in (H2) and (H7) is explained by the reanalysis of this element as a TA-like operator. See note 36 below.

⁵ CVC auxiliation is recursive: a complex predicate may in turn integrate into a higher level CVC, as illustrated by the following example from the novel *Kikulacho ki nguoni mwako* by Peter Ngare (1975:27):

⁶ In both (A3) and (A5), the TA marker of the second verb is -ki- (cf. section 4).

defines a relation between two successive situations $s_i < s_j$ such that the realization of s_j is materially or cognitively contingent upon the prior termination of s_i . Post-terminality is expressed in Swahili by a periphrastic TA construction made up of the auxiliary predicate -kwisha - here a-mesha-kwisha 'he-had-finished' -, followed by an infinitival verb form - here ku-agiza 'leave instructions' - assigning its lexical meaning to the predicate. 8

7. There is no TA correlate of TERMINALITY. Terminality also implies closure of a situation within a given span of activity, but, in contrast to post-terminality, is indeterminate in regard to overlap vs. non-overlap of successive actions occurring within that span. The effect of terminality where it obtains appears to depend on the lexical semantics of the verb, as in the case of *-itika* 'respond to (a call)' in (A2), in contrast to, for instance, *- ongoza* 'lead' in (B2) below.

The Auxiliary is thus not adequately described as a temporal "shifter" whose "job" it would be to make out-of-phase statements or background information fit into the chronology of the main narrative. Its most characteristic effect is that it re-creates, within the global narrative sequence, a secondary narrative space capable of accommodating a variety of locally relevant temporal and logical relations. This description suggests that its main function is that of a VIEWPOINT OPERATOR.

2.2 What is viewpoint (Vp)? One of the most clearly noticeable effects of Vp is the selection of a specific phase of the action represented by the verb in its scope. A viewpoint is anchored in a situation and attributed to a "viewer". In narration, the "viewer" may be the narrator or a particular actor from whose viewpoint the story or part of the story is being told. This stipulation necessarily implies the selection of a specific phase of the action represented by the verb as being relevant to that specific situation, or as being cognitively salient for the attributee or subject of Vp.

For instance in (A3), the verb -cheza 'play' is doubtlessly to be classified as an activity (ACTI) verb, alongside with verbs such as 'work', which is used by Sasse (1991:37) to exemplify this category. The effect of AUX is to narrow down the segment of the event which is relevant to the story. It is irrelevant what the child did in the minutes before and after Najum's coming.

The case of the verb -oga 'take a bath or shower, wash one's body' in (A5) is different in that it implies a situation both protracted in time and oriented towards a change of state affecting the agent. Compared to -cheza, it carries an

⁷ By cognitive contingency I mean that the perception or the ratification of the termination of the preceding action by the agent of the subsequent action is considered to be the prerequisite to the latter's realization.

⁸ In its fully grammaticalized form, the perfect auxiliary verb construction *me-kwisha ku-VR* reduces to the pluperfect *-mesha-VR*, where *mesha-* functions exactly like any other TA prefix. See note 2 above.

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indisputable reference to its terminality. Native scholarly opinion and informant tests concur in insisting on the undetachability of the telic implicature from the meaning of the verb and oblige us, on the strength of Sasse's criteria (1991:35f.), to classify it as an unambiguous case of a GTER (gradually terminative) verb, rather than as an activity verb carrying potential boundaries.⁹

Obviously, however, the outcome of the action is of no relevance whatsoever to the development of the plot. The stative predicate, by coindexing the current state of the main predicate action with a locus (R_t) on the matrix narrative sequence, focuses on the central part of the main action while defocusing its terminality. The characteristic effect of the Vp, as illustrated by this example, is not one of changing the inherent semantics of the verb, by selecting one of its components and invalidating the others, but of re-arranging its component parts along a scale of current relevance in accordance with the teleology of the ongoing discourse.¹⁰

2.3 Inverting the perspective, we may ask: If the selection of a phase presupposes a viewpoint operation, does the adoption of a specific viewpoint also presuppose the segmentation of the event into phases? The answer is yes.

Application of the interruption test further corroborates this conclusion. The process denoted by -oga, if interrupted, cannot be referred to by a TA form implying global reference: Juzi, ni-li-kuwa ni-ki-oga a-ka-tokea kiboko ni-ka-kimbia 'the_other_day, I was taking_a_bath it-then-came a_hippopotamus I-then-run_away'. Replacing the viewpoint construction ni-li-kuwa ni-ki-oga by the simple past is possible, but would necessarily imply that the hippopotamus appeared on the scene after the washing was brought to completion: Juzi, ni-li-(po-)oga a-ka-tokea ...'the_other_day, (when) I-had-taken_my_bath ...' Thus, apprehension of the process at a pre-terminal stage necessarily imposes the recourse to the viewpoint strategy with its potential for defocusing the terminality component.

¹⁰ For the primacy of the interaction with terminality in describing the viewpoint category and its significance for discourse meaning, see Johanson (2000:31): "Viewpoint operators offer different choices for envisaging and presenting events as such, for opening Perspectives ON THEM AND THEIR INTERNAL PHASE STRUCTURE, FOR VIEWING THEM IN RELATION TO THEIR LIMITS. What is conceived of as one and the same event is PRESENTED IN DIFFERENT DIMENSIONS OF TERMINALITY" [emphasis TB].

⁹ It is precisely by its inherent telic component that the simplex *-oga* 'take a bath' differs systematically from the applicative *-ogelea* 'bathe (in), swim'. Both the definitions and the examples given in Bakhressa (1992:296) are clearly telic in the case of *-oga*, and explicitly locational and non-telic in the case of *-ogelea*. I am indebted to Mr. Omari Mwarape, a Swahili native speaker from coastal Tanzania, for his help in carrying out an acceptability test; it shows that even if *-oga* is used with a locational complement, it still imposes a functional interpretation, while in the absence of the functional component, only *-ogelea* is acceptable. Thus, *ku-oga mtoni* can only mean 'wash one's body in the river', whereas in order to express the idea of taking a swim in the river *ku-ogelea mtoni* must be used. This evidence suggests that the telic component is inherent in the lexical semantics of the lexeme *-oga*, rather than being inferred from the particular narrative situation in which it happens to be inserted in (A5).

We observe that, in Swahili, inherently global representations of states-of-affairs cannot be in the scope of a viewpoint operator. This is demonstrated most clearly by the ungrammaticality of the Past marker -li- and the Consecutive marker -ka- in the main verb of a CVC. Both markers conventionally implicate global reference to the designated event or action. Their exclusion from the CVC paradigm finds a plausible explanation in the conceptual incompatibility of global reference with the segmentation of the event into phases. ¹²

The fact that the Auxiliary cannot be construed with predicates carrying global reference is a strong indication that the selectional effect which posits a boundary internal to the event is indeed an essential component of the viewpoint operation associated with AUX.¹³

3 The -ka-/-ki- alternation: Sequentiality and viewpoint

Let us now look at another episode gleaned from the same detective novel (Abdulla 1982:44):

- B. [Mr. Msa, the Zanzibarian Sherlock Holmes, having discovered for himself the identity of the murderer, manages, while on his way to report his findings to the police, to keep his entourage mystified.]
- 1. Bwana Msa h-a-**ku**-m-jibu neno Mister Msa NEG-3sS-NEG:PT-3sO-reply word
- 2. ila a-li-ongoza njia, instead 3sS-PT-lead path
- 3. a-**ki**-mw-ambia Najum, 3sS-SIM-3sO-tell Najum

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¹¹ This should not be interpreted to mean that global reference is indifferent to the viewpoint paradigm. To the contrary, it could be argued that global reference is the default option of the viewpoint category. What I am dealing with here are constraints affecting the grammatical operations associated with the viewpoint paradigm.

Of course, this must not be interpreted to mean that global markers cannot be used to express PHASES OF EVENTS. But then, this is done by means of lexical verbs referring to actional phase categories, such as 'begin', 'continue', 'finish', etc., and by using periphrasis for constructing the phase as a predicate. An example is found in (H2) below: ... *u-mesha-anza ku-ji-jua* ... '... you have already BEGUN to realize ...'.

¹³ The ban on *-li-* and *-ka-* main verbs seems to be the only well established grammatical constraint restricting the co-occurrence of tense-aspect markers in CVC sequences, apart from the "modality clash" described in Section 8 below which seems to restrict the occurrence of the future marker *-ta-* in the main verb.

- 4. "U-**na**-jua we, 2s-PROG-know you
- 5. sasa tw-end-e Polisi now 1p-go-OPT police
- 6. tu-**ka**-pig-e ripoti." 1p-SEQ-beat-OPT report
- 7. Wa-**li**-kwenda kimya kimya 3p-PT-go quietly quietly
- 8. mpaka wa-**ka**-fika stesheni. until 3p-SEQ-arrive.at (police.)station
- 9. Njia nzima Bwana Msa <u>a-li-kuwa</u> a-ki-enda path whole Mister Msa 3sS-PT-be 3sS-SIM-go
- 10. hali uso wake u-na-tazama chini, while face his c11-PROG-look down
- 11. a-**na**-pita 3sS-PROG-pass
- 12. a-**ki**-vuta kiko chake tu. 3sS-SIM-draw pipe his only
 - '1. Mr. Msa did not answer, 2. but [simply] went ahead, 3. while he said: "4. You know, 5. now we have got to go to the police 6. and make a report." 7. They walked in silence 8. until they arrived at the police station. 9. All along the way, 10. he kept his eyes fixed on the ground. 11. While he was proceeding, 12. he was constantly puffing at his pipe.'

Conventional tense logic accounts only partially for the distribution of TA markers and their effects on discourse meaning in this passage:

1. The markers -ka- and -ki- both take their temporal reference from the preceding predicate. An event E_j connected by -ka- is always sequential (at least in narrative sequences)¹⁴ and is temporally post-indexed in regard to its

¹⁴ For Drolc (ms., p. 3f.), following Contini-Morava (1989), the common semantic denominator of all uses of -ka-, including those occurrences - in non-narrative context - where the event to which the -ka-predicate refers does not stand in a relation of temporal consecution to the preceding predicate, is CONTINGENCY: "... dass ka eine Handlung markiert, die abhängig von einer vohergehenden Handlung ist" (quoted and translated from Leonard 1980:217). For a non-narrative context which illustrates this point quite well, see (K3) below,

- verbal antecedent: $t_j > t_i$. The segment (B5-8) illustrates the use of -ka- and at the same time shows that it is not limited to narratives nor to past events: (B5-6) illustrates its use in a projected sequential action: ... tw-end-e Polisi tu-ka-pig-e ripoti 'let's go and make a report' (B7-8), on the other hand, illustrates its predominant narrative use: Wa-li-kwenda mpaka wa-ka-fika stesheni 'they went and (then) arrived at the (police) station'.
- 2. The marker -ki- is temporally co-indexed with its verbal antecedent E_i , so that $t_j = t_i$, as illustrated in (B2-3). The -ki-marked expression (B3) illustrates the embedding of a secondary, i.e. non-consecutive predicate into a narrative sequence by association with a primary narrative predicate (B2), which is itself part of the string of consecutive events. As implied by the temporal co-indexation, the primary narrative predicate provides the point of reference for the temporal insertion of the secondary predicate, in exactly the same way as for the AUX-mediated sequences in (A3) and (A6) above. The difference is simply that, in (B2-3), no auxiliary construction intervenes.
- 3. As a corollary of the absence of AUX, there are severe restrictions on the selection of the phase of the action referred to by the secondary predicate. At least in literary Swahili, only the TA marker -ki- may occur in the unauxiliated position of the temporally co-indexed second predicate, no TA markers carrying an inherent time-reference are admitted. In contrast to the CVC as for instance in (A6) above -, direct embedding does not include options involving temporal shift.¹⁵
- 4. It is not sufficient to define -ki- as a marker of simultaneity or of backgrounding, without also specifying its viewpoint characteristics, namely the selectional effects it has on the predicate it marks. These effects covary with the inherent actional properties of the -ki-marked predicate (and possibly depend on the interplay with those of the dominant predicate). What seems to be the case is that with gradually terminative (GTER) and activity (ACTI) verbs, the terminal point is excluded from the scope of the -ki-marked predicate, as illustrated respectively in (A3) and (A5) above. With totally terminative verbs (TTER), on the other hand, the actional property overrides the viewpoint-induced focus on the intraterminal phase:

where the viewpoint operator *a-ka-wa* is "prefixed" to a description of irregular school attendance, thereby underlining the contingency of this kind of behaviour.

¹⁵ Colloquial forms of Swahili seem to admit at least some of these options, implicating the viewpoint operator in cases where is usually present in standard forms.

¹⁷ Schadeberg's description of -ki- as "continuative" would seem to support this analysis (Schadeberg 1992:34).

¹⁶ Hopper (1979:214), on the basis of evidence from an a-terminative situation encoded by the verb *ku-pitia* 'pass through', discounts the "aspectual" characteristics of -*ki*- in favor of its discourse function as a backgrounding marker. However, the intraterminal aspectual characteristics conventionally associated with -*ki*- appear most clearly in combination with verbs whose actional scope normally includes terminality.

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this accounts for the global rather than intraterminal interpretation of the act of saying in (B3-6).¹⁸

The -ka-/-ki- alternation in Swahili narratives has served as a prototypical example of the grammaticalization of the putatively universal Foregrounding / Backgrounding opposition in the languages of the world (Hopper 1979:213f.). Surveying the -ki-markers in fragment B, one is at first inclined to see in their distribution a perfect illustration of the backgrounding function consistently claimed for -ki-. 19 Indeed, none of the -ki-marked sub-sequences appears to be indispensable in order to maintain the cohesion of the event sequence provided that the purpose of the latter is taken to be to describe the action of the detective following his discovery of the key evidence for solving his case. Both the comment made to his companion (B3-6) and his puffing the pipe (B12) would seem, from this perspective, to be merely incidental to the main narrated element that moves forward the story - Mr. Msa's physical move in direction of the place where these findings must be reported. And (B3-6) in a very literal sense qualifies as a comment on what is happening, which, as far as narrative discourse goes, counts as a major distinctive of backgrounding (Hopper 1979:215).

The problem with this interpretation is that it is in blatant contradiction to the immediate context of the story: the sequence B is a directly consecutive not to the discovery of new evidence but to the insistent inquiries of Mr. Msa's companion as to the identity of the murderer; these make up the whole preceding paragraph of the story. From the perspective of the local narrative context, then, fragment B reports Mr. Msa's reaction to Najum's impatient conjectures. From this perspective, (B3-6), in conjunction with (B1), is the prominent element of the story-line, and (B2) its background, rather than vice versa.²⁰

The two perspectives can be reconciled by considering that what -ki- does in (B3), is not to indicate the backgrounded status of Msa's remark, but to synchronize two intervowen parallel strands of narrated action. In other words,

¹⁸ The question as to whether *-ambia* 'tell somebody' is to be classified as TTER or GTER needs further exploration. My inclination towards the former categorization rests on the following two observations: (i) to assert the act of saying implies necessarily, in the case of *-ambia*, the complete enunciation of what is being said; (ii) the obligatory coding of the addressee amounts to an obligatory reference to the perlocutive stage of the speech act.

¹⁹ See Drolc (ms., p. 8-10) for further references.

Assigning grounding characteristics on the basis of independent criteria rather than on the basis of the distribution of the markers whose discourse-function one intends to define, is methodologically necessary to avoid the pitfall of circular reasoning. If the mere fact of the insertion of an event in the temporal sequence and its being marked by -ka- is taken to be sufficient evidence for its foregrounded status then the latter reduces to a mere tautology.

-ki- functions, at least in this case, in a similar way as stated above for AUX: as a viewpoint operator.²¹

4 The -ki-/-na alternation: Viewpoint and cognitive structure

The segment (B9-12), which remains to be examined, is introduced by an Auxiliary whose scope, as evidenced by the time shift of all four main predicates, extends over the whole sequence.

Whereas the past tense marker of AUX in (B9) *a-li-kuwa* situates the whole sequence on the story-line, the sequence itself is characterized by alternation between the non-past TA prefixes *-ki-* and *-na-*: *a-ki-enda* 'was going' (B9) ... *u-na-tazama chini* 'kept looking down' (B10) ... *a-na-pita* 'was proceeding' (B11) ... *a-ki-vuta kiko* 'was puffing his pipe' (B12).

As to -na-, Contini-Morava (1989:68) defines it (i) by its tendency to include the point of reference in the predicated event, and (ii) by its preferential use (as against other so-called present tense markers) with verbs of activity. Without pursuing further the disputed issue of the semantic value and pragmatic use of -na-, what needs to be stressed is that the criteria proposed for -na- can equally well be applied to -ki-. Conventional tense-logic does not provide a reasonable motive for the alternation:

- All four dependent predicates denote inherently non-bounded, non-terminative actions.
- The temporal relation between the events denoted by the predicates and the matrix situation is one of intra-terminality (Johanson 2000:32): the temporal reference point represented by the Auxiliary is included in the process of realization represented by the main verb.

Still the two markers -ki- and -na- in non-initial predicates are not interchangeable at random - notwithstanding the existence of overlap in certain cases, where both may indeed be used. Among the hypotheses that have been

²¹ This would still leave open the question of a hierarchization of the parallel strands in terms of the Foregrounding/Backgrounding hierarchy as proposed by Hopper (1979) and others. Adopting such a hypothesis, however, would inevitably lead to redefining the terms of the grounding dichotomy. Arguing from the present example, the assignment of background status to (B3) can only be maintained on the basis of a dichotomy, operating at a very high level of the global organization of the narrative material, between elements directly feeding into the plot, and those parts of the story which, while no less essential to its cohesion, consist of reported conversation as in (B3-6), or constitute a parallel string of happenings, including for instance elements contributing to the progressive unveiling of the mystery or, to the contrary, to the detective's reluctance to disclose his insights. Apart from heuristic problems involved in determining what is to be regarded as foregrounded, respectively as backgrounded, the possibility of local ambiguity of foregrounded vs. backgrounded status, evident in the case of (B3), would make it impracticable to correlate the distinction with the informational status of individual predicates in their local context.

²² See Wald (1997:60ff.) for a fuller discussion.

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advanced for explaining the difference of usage between the two markers, the one ascribing a backgrounding effect to -*ki*- has met broad approval (see Drolc (ms., p. 8-10) for a review of the literature). Bickel (1992:37) contrasts the two markers in an otherwise identical CVC construction:

(1) <u>Ni-li-kuwa</u> ni-**ki**-soma 'I was reading (when) ...' 1s-PT-be 1s-SIM-read

(2) <u>Ni-li-kuwa</u> ni-**na**-soma 'I was reading.'

Basing his analysis on elicited speaker reaction, Bickel opposes the closure of (2) (the point that the speaker wants to make is that he was reading) to the incompleteness of (1) (the speaker intends to speak of something else he was doing²³ while he happened to be reading).

While most discourse- or corpus-based work focuses on the function of -kiin comparison with -ka- (see section 3), Wald (1997) concentrates on -na-,
contrasting its condition of use with that of other "present tense" markers. A
computation of evidence from synchronic and historical sources leads him to
conclude that -na- has much more to do with the informational status of the
clause in which it occurs than with fundamental aspectual characteristics such
as progressive which have been traditionally associated with it. Wald's
observations on the semantic property which according to him guides the
various uses of Swahili -na- is in line with the phenomenon, widely noted in
Bantu languages, of focus categories being expressed in the TA paradigms. To
the extent that evidence adduced by Wald in favor of what he terms the
"pragmatic aspectual focus effect" (Wald 1997:59) of -na- in present-day
Swahili should be confirmed, this would add strength to the claim associating na- with foregrounding and contrasting it with the generally assumed
backgrounding function of -ki-.

Yet on the other hand, the distribution of the markers -ki- and -na-, as observed in the segment (B9-12), does not support the backgrounding / foregrounding hypothesis, at least not as applying to the informational status of the individual events expressed by the predicates in which the markers appear.²⁴ In terms of their informational weight, the predicates referring to Mr. Msa's moving ahead (B9, B11) rank lowest. They do nothing more than take up the fact already stated earlier in the sequence (B2) that Msa walks to the police station. Repeated reference to a well-known and well-introduced state-of-affairs as in (B9) and (B11) is only plausible as background information

²³ There is, incidentally, identity of subject between AUX and its associated main verb.

²⁴ Hopper's (1979:213-216) use of these terms is somewhat different. In narrative discourse, foregrounding is limited to "main line" events (p. 214) - non-sequential events are by definition backgrounded. The difference between -na- and -ki- would therefore be a further distinction within backgrounding material.

serving to situate that information which, in narrative terms, propulses the action, or else characterizes it in a way relevant to the action: The latter is true of the equally well-known but not locally predictable behavioral stereotypes betraying the master detective's intense rumination of his case: his gaze fixed on the soil (B10), and the manipulation of his pipe (B11).

Given the informational profile of the sequence, which assigns low communicative degree to (B9) and (B11), and high degree to (B10) and (B12), one would have predicted on the basis of the backgrounding/foregrounding hypothesis that the predicates of (B9) and (B11) would take the marker -ki-, whereas the communicatively prominent predicates of (B10) and (B12) would take the marker -na-. Clearly, this is not the case: -ki- appears with the low-degree predicate (B9) and the high-degree predicate (B12), whereas -na- marks the high-degree predicate (B10) and the low-degree predicate (B11).

BACKGROUND

FOREGROUND

a-li-kuwa ...

B9: ... a-ki-enda

B10: ... u-na-tazama

B11: ... a-na-pita

B12: ... a-ki-vuta kiko chake tu

Given further the widespread consensus regarding the backgrounding effect of -ki, its use in (B12) is particularly puzzling. I shall return to this question in a moment. Let us first examine the equally problematic *prima facie* low-status predicates referring to Mr. Msa's movement. While the difference in TA-marking of (B9) and (B11) cannot be explained on the basis of the informational status of the predicates, the difference becomes natural if one takes into account the categorization of events in terms of viewpoint:

1. *a-ki-enda* 'he was going' is not part of the cognitive domain constituted by the viewpoint operator, but its function is to co-determine the viewpoint itself. A necessary part of the definition of viewpoint as a discourse-pragmatically relevant category is its anchoring in the matrix discourse. In the default case, the domain of reference of viewpoint is specified by the antecedent predicate as is the case in (A3) and (A6), but in many cases viewpoint is insufficiently specified by the natural antecedent, and additional determination is required. Metaphorically speaking, not only the entity to which the viewpoint is attributed may shift (e.g. between narrator and actor), but the size of the window from which the view is being taken

²⁵ E.g. Drolc (ms, 10) concludes on the basis of a complete inventory of the occurrences of -ki- in Kezilahabi's novel Rosa Mistika: "Das mit ki markierte Verb beschreibt den Handlungshintergrund, der in der Übersetzung entweder einem konditionalen Bedingungssatz [...] entspricht oder die Art und Weise einer Handlung ausdrückt."

²⁶ At the limit, it could be argued that tu 'only' corresponds to what Bickel calls

At the limit, it could be argued that tu 'only' corresponds to what Bickel calls "downplaying" But the narrative context provides no justification for this interpretation of tu, which, also, is not conventionally implied. Still, one would then ask why the same criterion does not apply to (B10).

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may also change, and correspondingly, the field of perception. In (B9), the frame element njia nzima 'on the whole way' and the -ki-predicate a-ki-enda 'while he was going' reinforce each other in extending the domain of reference for which the segment (B10-12), being in the scope of the viewpoint defined by (B9), is validated. The effect of the -ki-marked predicate in (B9) is that it defines the temporal extension of R_t as coterminous with the duration of the action described by the verb. Thus, while (B9) fulfils an ancillary function assigned to viewpoint, the sequence (B10-12) constitutes its operational domain.²⁷

- 2. The operational domain assigned to a given viewpoint operator is not restricted to a single event, but may subsume a class of related but clearly distinguishable activities. In the present case, we are dealing with a couple of activities united by the common property of being the activities of Mr. Msa on his way to the police station. (B11) *a-na-pita* 'he is proceeding' predicates a state-of-affairs which is structurally parallel to (B10) *u-na-tazama* 'it (Mr. Msa's face) is looking'. In both cases, initial *-na-* marks the entry point to a cognitive space licensed by the viewpoint operator. Both activities are temporally co-terminous with each other as well as with the domain of reference established by the viewpoint operator, both therefore take *-na-* as initial TA-marker.
- 3. By stipulating that -na- marks the opening of a new cognitive space under a given viewpoint, we assign the TA-marker its function as an operator of the sub-sequence filling that space, rather than as an operator of the individual predication in which it happens to surface. This makes it understandable that the distribution of the markers, in cases of a certain degree of complexity, no longer reflects the informational status of the individual predicates, and may even, as illustrated by the failure of the foregrounding / backgrounding hypothesis in the case of the subsequence (B11-12), directly contradict hypotheses and assumptions based on less complex cases.

Returning now to the problem of the seemingly counter-intuitive occurrence of -ki- in (B12), it will be recalled that TA markers carrying an inherent time reference are only allowed to appear if licensed by an Auxiliary (cf. section 3, point 3). Whereas the subsequence (B11-12) as a whole satisfies this criterion in the same way as (B10) to which it is a sister, (B12) is, syntactically speaking, a daughter of the node constituting the sub-sequence, and hence a sister to (B11). Therefore the sequential constraint banning the informationally stronger -na- from non-auxiliated predicates enforces the use of -ki- as the

²⁷ Narrative discourse theory might consider this as an instance of setting. But one would also have to note that the actions described in (B9-12) are not part of the "backbone" of the narrative. The notion of a secondary line of action is neatly captured in terms of the additional cognitive space created by viewpoint.

While my argument so far was based on a detailed analysis of the viewpoint category and its categorial ramifications, it should have become clear that syntactic considerations also play a role in defining or delimiting the referential objects which lie in its scope. A syntax-based confirmation of the analysis of (B9-12) proposed on the grounds of its viewpoint characteristics comes from the insertion of the conjunction *hali* 'while' at the point of transition between (B9) and (B10-12). This transition point, according to the above analysis, sets apart the segment expressing the anchoring of viewpoint itself, from the material expressing the content which lies in its scope.

The result of the proposed analysis shows that the two elements marked by -na- are structurally aligned:

Alikuwa akienda

hali ... u-na-tazama a-na-pita

a-ki-vuta kiko chake tu

The following passage extracted from a different source (Suleiman 1969:400) further confirms that the interaction between viewpoint and structural criteria has a determining influence on the distribution of TA-markers in the extended discourse sequence:

- <u>C.</u> [The scene is part of the description of the hero's tantalizingly long day full of ordinary things while he can hardly wait for the rendezvous with a mysterious lady who had asked him, Sadiki, to meet with her by the seaside at nightfall.]
- 1. <u>U-li-kuwa</u> ni mchana wa saa nane, c3-PT-be COP daytime GEN hour eight
- 2. Bahati mke-we Sadiki <u>a-li-kuwa</u> ka-shughulika Bahati wife-his Sadiki <u>3sS-PT-be</u> (3sS)PERF-occupy
- 3. a-**ki**-ingia jiko-ni na ku-toka 3sS-SIM-enter kitchen-LOC and INF-go.out
- 4. huku a-**na**-i-tandika meza ya ku-l-i-a ... while 3sS-PROG-c9-set table GEN INF-eat-APPL-FV
 - '1. It was 2 o'clock p.m. 2. Bahati, Sadiki's wife was busy 3. entering the kitchen and coming out again, 4. as she was setting the table ...'

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The 3s perfect form $-ka^{-28}$ is the operator positing the sub-sequence (C2b-3) in the scope of the viewpoint operator alikuwa (C2a), whereas -na- in (C4) posits the setting of the table as a separate object of cognition. As pointed out in Drolc (ms., p. 10), -ki-predicates often express the manner in which the matrix action is performed. Thus, (C3) specifies the generic state-of-affairs contained in the predicate 'to be occupied at ...' in (C2b). As in (B10-12), the alternation between the markers -ki- and -na- is well motivated in terms of their respective roles in the overall structure: -ki- relates an embedded predicate to its matrix predicate; the effect of -na- is that it constitutes the subsequence comprising both predicates as an operational domain of viewpoint. Cases like these, while offering some intuitive justification to the treatment of -na- as foregrounding and of -ki- as backgrounding, also show the need for an operational definition of grounding categories relating them explicitly to the hierarchical structure of the discourse.

5 Viewpoint and empathy

I hope to have shown in the preceding section that structural factors pertaining to the organization of larger discourse units tend to override considerations of informational prominence in the assignment of TA-markers to individual predicates. But there are other cases of alternation whose apparent arbitrariness cannot be resolved by invoking syntactic or structural criteria. A third excerpt from the detective novel will serve to illustrate this, using again the -ki-/-na-alternation as an example, and demonstrating that the viewpoint paradigm offers a plausible explanation for apparently paradoxical patterns of distribution (Abdulla 1982:46):

- <u>D.</u> [At the police station, after having received Mr. Msa's deposition, the inspector calls one of his men, ordering him to accompany him for verifying the facts on the scene.]
- 1. A-li-mw-ita mmoja katika wale askari 3sS-PT-3sO-call one among those (police-)officers

²⁸ In the *Kiunguja* dialect, a standard spoken predominantly in Zanzibar Town, *ka*- is used or may be used in place of the 3s Perfect form *a-me* '3sS-PF' of Continental Standard Swahili.

This analysis is also well motivated by the immediate context of the story: Sadiki occupies the position of the observer following every gesture of his wife. On the other hand, it appears very likely that the alternation of the markers is forced by a structural constraint which either prohibits or disprefers serialization of -ki- constructions. Finally the proposed segmentation is underscored by the connector huku in (C4); its role as a structural discourse marker is comparable to that of hali in (B10).

- 2. wa-**li-**o-kaa nje roshani-ni 3p-PT-3p:REL-sit outside veranda-LOC
- 3. na kumbe a-li-tokea and lo! 3sS-PT-turn.out
- 4. kuwa ni yule <u>a-li-ye-kuwa</u> a-ki-sinzia that be:COP that.one 3sS-PT-3s:REL-be 3sS-SIM-doze
- 5. wakati <u>wa-li-po-kuwa</u> akina Bwana Msa time 3p-PT-TEMP:REL-be folks.of Mister Msa wa-**na**-ingia ndani, stesheni.
 3p-PROG-enter inside (police.)station
 - '1. He (the inspector) called one among the policemen 2. who were sitting outside (the police station) on the veranda, 3. and lo and behold, it turned out 4. to be the one who had been dozing 5. at the moment when Mr. Msa's group had entered the building.'

The obvious question to address concerns the criterion that conditions the recourse to -ki- in (D4) and to -na- in (D5). Both segments are in CVC's and are unquestionably backgrounded. Encoded as relative clauses, both refer to details which had been narrated shortly before and which are now rehearsed for no other obvious purpose than for unambiguously identifying the policeman in question. True, the highly marked verbal periphrasis with the surprise marker kumbe in (D3) suggests that some salient attribute of the personage - most likely his doziness - receives narrative prominence for some specific literary purpose. But even in this case, the foregrounding / backgrounding hypothesis would have predicted -na- in the predicate (D4) which expresses this salient property, and -ki- in (D5), since (D5) refers back to an already established state-of-affairs (cf. D8) which is being evoked here for the sole reason of connecting the salient fact with the sequence of events. The suggested distribution of the TA markers would have been expected all the more as, in terms of differences of degree of backgroundedness, the deeper embedded relative clause (D5) provides the background to the state-of-affairs described in the matrix relative clause (D4), which itself is part of the background to the ongoing story. In other words, even a relative view of foregroundedness within a backgrounded sequence would have assigned informationally high status to (D4) and informationally low status to (D5). The actual distribution of the two application of again the inverse from what the foregrounding/backgrounding parameter according to usually recognized criteria would let us expect.

As a means of escaping from this dilemma, one could be tempted to follow Schadeberg's suggestion (1992:35) to characterize the difference as one

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between "process in action" (-na-) and "situation" (-ki-). Applied to (D4-5), these features would not only fit the description, but would provide a beautiful grammatical counterpart to the possibly intended literary effect opposing the irruption on the scene of the purpose-driven private detective, an event naturally marked with -na-, to the pathetic inertia of the public service agents which would naturally have elicited -ki-marking if Schadeberg's interpretation of the difference was adopted. His proposal would analyze the difference between the markers in terms of inherent semantic features associated with the predicates they represent - a view which to me seems difficult to maintain on both theoretical and empirical grounds³⁰.

It appears to be falsified on empirical grounds (i) by the numerous occurrences of -ki- with dynamic predicates, as for instance in (C3) above, where the description of Bahati's energetic moves in going to and fro should, according to theory, have elicited -na- rather than -ki-, and (ii) by the fact that the assignment of -ki- and -na-, while not arbitrary, appears to be independent of lexical semantics in general, and of the state / activity dichotomy in particular.

We are still left with the unresolved problem of the apparently counter-intuitive distribution of the two markers in (D4) and (D5). The solution of the puzzle requires that the variables associated with viewpoint be taken into consideration. Apart from its varying extension in time and space (cf. section 4 above), viewpoint may also vary as to its attribution to different discourse instances (e.g. narrator, various actors of the story, etc.). For the episode under review, there can be no doubt that it is being told from the viewpoint of the detective and his companions, not from the viewpoint of the police officers. In terms of overall empathy, the actor of (D5) clearly outranks the actor of (D4). It is the empathy relation - or attribution of viewpoint - which is reflected in the choice of the markers: the higher-ranking -na- for the predicate whose thematic argument is the focus of empathy, and the lower-ranking -ki- for the predicate associated with the argument disfavored in terms of empathy.

Returning to the beginning, we notice that (A3) shows a -ki-marked main predicate under the scope of AUX in a position which, measured by standards of grammatical correctness, would also have permitted the marker -na-. The choice of -ki- becomes clear in the light of the preceding hypothesis. The initial scene - as confirmed by the subsequent paragraphs - is wholly presented from the perspective of Najum (a relative of the victim who in the course of the novel, will become Mr. Msa's amanuensis). This imposes the choice of -ki-rather than -na- in those predicates which describe actions controlled by actors who are out-of-focus in the current episode (the child, Mr. Msa).³¹

³⁰ Cf. Bickel's demonstration of the failure of a feature-based approach to the Swahili TA system in general (Bickel 1992).

³¹ Similar reasoning could be applied to (A5). However, since (A5) is not a CVC, the *-ki-/-na*-alternation, according to our tentative hypothesis, is ruled out in this case on structural grounds.

Throughout sections 3-5, it has been shown that -ki- is not simply a formal correlate of backgrounded material as has been claimed, and that the foregrounding / backgrounding dichotomy is unable to account in a straightforward and coherent way for the very characteristic predicate marker alternations involving -ki- in Swahili narrative discourse. For one thing, the occurrence of -ki- is subordinated to viewpoint, and its more specific values are defined in connection with Vp operations. Being associated with Vp, -ki- itself becomes part of the discourse manifestation of Vp. On the other hand, the alternations, highly characteristic of Swahili narrative discourse, in which -ki-represents the lower or unmarked value, have been shown to operate on quite heterogeneous domains, such as the discourse organization of cognitive space and such as empathy - and others perhaps -, whose common defining property is their dependency on viewpoint.

Foregrounding and Backgrounding are not, after all, genuine operational parameters, but intuitively appealing visual space metaphors in need of interpretation. If the metaphor is to be retained, the set of parameters with which it has been habitually associated, notably by Hopper, is certainly in need of revision. One important criterion which needs to be taken into account, highlighted in connection with the -ki-/-ka-alternation (cf. section 3 above), is the tension or possible contradiction between globally and locally determined foregrounding effects.

6 Sequentiality, anteriority and viewpoint

We have started from the assumption that the kuwa-auxiliary verbal construction (CVC) serves primarily as a mechanism for representing temporal reference point shifts of the kind prototypically expressed by pluperfect. Following our exploration of a small sample of data, all taken from literary narratives, our preliminary conclusion is that management of shifting temporal reference points is indeed an important function of CVC's, which crucially contributes to ensure the temporal cohesion of the narration. At the same time, we have come to the conclusion that the role of CVC's in narrative texts cannot be reduced to that of a device for accommodating deviations from the preferential linear time sequence of the narrative, but that one of its main functions, quite independently of time shift, is the representation of viewpoint. The postulate of a distinct viewpoint category for explaining the form and use of CVC has in turn been conceptually justified via its licensing properties, mainly the fact that it allows cognitive space for independent developments to be embedded into the matrix discourse without being subject to the latter's sequentiality constraints.

Time and space limitations do not allow me to fully exploit available data in order to try to answer questions triggered by these few observations made on a limited sample, which stand in fact for a much richer paradigm linked up with viewpoint operations and its particular grammaticalizations in colloquial varieties of Swahili. I will limit myself to listing a few cases illustrating the versatility of the paradigm, mostly as an incentive for further research, before concluding on a note broadening the typological perspective on viewpoint.

6.1 First, we need to come back to the interaction between viewpoint and temporal shift in the CVC paradigm as a conditioning factor for its use in narrative discourse:

Combinations of tenses are constrained by the principle of iconic correspondence between time of narration and narrated time: the order of telling and the order of events must coincide, or - in weaker formulation - must not contradict each other. The insertion into the matrix event-line of a concomitant event such as the inspector's ominous comment to his amanuensis on the way to the police station (B3-6), while momentaneously suspending the linear sequence of narration, does not disrupt it. These are exactly the conditions under which the unauxiliated -ki-construction (B2-3) can be used. By contrast, reference to an anterior event, for instance, means that the canonical order of narration would be disrupted and therefore obligatorily requires the Auxiliary construction.

Thus, when at the end of Suleiman's story *Siku ya arobaini* the writer looks back to its beginning, the CVC's are consistently being used to evoke and explain those events of the opening paragraph which had remained enigmatic (Suleiman 1969:403):

F.

- Sadiki a-li-nas-w-a mtego-ni,
 Sadiki 3sS-PT-catch-PASS-FV trap-LOC
- 2. kwani ile barua <u>a-li-yo-kuwa</u> **a-me-let-e-w-a**because that letter 3sS-PT-c9:REL-be 3sS-PERF-bring-APPL-PASS-FV
- 3. <u>i-li-kuwa</u> i-me-toka kwa mke-we mwenyewe, Bahati. c9-PT-be c9-PERF-come.from from wife-his herself Bahati.

'Sadiki was caught in the trap set for him, for that letter which had been handed to him [inviting him to a rendezvous with a mysterious female] had come from his own wife, Bahati.'

(F2-3) refers back to the moment at the very beginning of the story when the mysterious letter had been handed to Sadiki. Moving backwards on the time-line is a highly marked option in narrative mode, which makes recourse to a CVC verb form mandatory. To conclude, however, from its obligatory use as a mechanism of compensation for the disruption of narrative canonical order, that the CVC should be seen as a sort of repair mechanism for mending violations of sequentiality constraints would be radically contrary to the facts of Swahili grammar and usage. The crucial observation here is that the CVC is used quite independently of the disruption of temporal cohesion, and is used even in many cases when no temporal shift at all occurs. This temporally redundant use of AUX is consistent with its proposed interpretation as being primarily a viewpoint operator.

6.2 What then conditions the recourse to viewpoint as a grammatical category in those cases where it is not made obligatory by temporal backshifting? Why is it for instance that the synchronous spin-off in segment C triggers viewpoint periphrasis (C2), while the shorter, but tense-logically analogous development in (D2) does not? The reason for the difference does not seem to have to be sought in inherent properties of the actions and their verbal representations: -kaa 'sit' is primarily an ISTA verb, but may be reduced to the global expression of a state, while -shugulika 'be occupied' oscillates between an ISTA-type and an ACTI-type use, both uses being attested.³² On the other hand, the protagonists involved are not carriers of empathy in their respective local contexts. The likely reason for choosing viewpoint grammar in the first case, but not in the second, is a difference in narrative function: Bahati's activities are part of the plot, the policemen's sitting on the verandah is not - it is mentioned for the sole purpose of identifying a personage by its habitual location.

7 Posteriority of viewpoint vs. posteriority of action

Posteriority on the event line is the default case of narrative sequence. As seen in section 3, it is normally expressed by the Consecutivity marker -ka-. Again, a strong argument for the distinctness of the viewpoint function of AUX can be based on the fact that AUX itself can "move forward" on the time line. In the following extract, a-ka-wa 'and she was [...]' displaces the relevant R_t one step beyond its referentially situated temporal anchor (i.e. the reported speech element in (G1)):

³² In (C2), this verb is construed according to the ISTA pattern. Its treatment as being of the ACTI type in (K1) may be conditioned by the multi-occurrence type of occurrence in the latter context (cf. section 9).

<u>G.</u>

- 1. "Kila mtu a-mw-on-e", each person 3sS-3sO-see-OPT
- 2. <u>a-ka-wa</u> a-na-m-pitisha Maimuna kwa wale 3sS-SEQ-be 3sS-PR-3sO-cause.pass M. to those <u>wa-li-o-kuwa</u> wa-ki-nywa 3p-PT-REL-be 3p-SIM-drink
- 3. [...] Tena a**-ka**-wa a-na-pita 3sS-SEQ-be once.more 3sS-PR-pass na ku-m-wek-e-a kila mtu kopo moja. with INF-3sO-put-APP-FV each bowl one person
 - '1. "Everyone should see her", [said the brothel mother], 2. and she had Maimuna move around to those who were drinking. ... 3. Again, she was passing around, putting one bowl in front of everybody.'

In terms of sequentiality, the Auxiliary is perfectly redundant in both (G2) and (G3). No information would have been lost, nor would the sequence of events have been modified, if the scene of the brothel mother passing around to her guests first the new human "acquisition", then the drink for cheering it, had been told using the unauxiliated main verb forms *a-ka-m-pitisha* ... *a-ka-pita*. G2) and (G3) thus provide an excellent example of the constitution of viewpoint as a quasi-independent source of temporal deixis: while the preceding event serves as its anchor (the reported speech (G1) for (G2), and (G2) for (G3)), the deictic center itself, from which the events depending on it take their temporal values, is defined as posterior and therefore as distinct from the time of the anchoring event.

8 Double aspectual determination of single predicates and "empty" viewpoints

8.1 Outside the sequentiality constraints of narrative discourse, the "future" marker *-ta-* is used with the *-kuwa*-operator for establishing a posterior or fictitious viewpoint. "Pre-initiality" may serve as a convenient label for

The necessity for distinguishing between anchor and deictic center has been established by

recent research on deixis in general (cf. Bearth 1996, Bickel 1994).

³³ The iterativity inherent in the action of passing the trophy from one person to the next may favor a CVC representation since the choice of CVC allows for the special phase-related focusing effect associated with -na- to be coded separately. However, it is quite normal for iterative action to be coded globally, using simply -ka-.

capturing the common denominator for temporal and modal uses of -ta-. The following example is taken from an interview on marriage customs (Swahili Archives, Ndoa na talaka [Marriage and divorce], Z 98-3-3).

- <u>H.</u> [The passage is part of general advice on how to proceed in seeking to marry a girl. Specifically it highlights the wisdom of being prepared in advance for being confronted with the request of an excessively high brideprice.]
- 1. Kwa hivyo na wewe mwenyewe toka mwanzo for this and you self from beginning kabla ya kw-enda before GEN INF-go
- 2. <u>u-ta-kuwa</u> tayari³⁵ u-**mesha**-anza ku-ji-jua kwamba 2s-FUT-be already 2s-ANT-begin INF-REFL-know that
- 3. ni-ki-enda kule mahari ya-ta-kuwa ma-kubwa 1s-COND-go there bride.price c6-FUT-be c6-big
- 4. kwa hivyo kabla si-ja-enda ni-anz-e for this before 1s:NEG-ANT:NEG-go 1s-begin-OPT ku-ji-andaa kabisa INF-REFL-prepare fully
- 5. kwa hivyo a**-ki-**fika **tu** a**-ki-**sema for this 3sS-SIM-arrive only 3sS-SIM-say
- 6. <u>i-ta-kuwa</u> h-u-na matatizo makubwa sana it-FUT-be NEG-2s-with problems big very
- 7. kwa sababu tayari <u>u-ta-kuwa</u> u-mesha-ji-andaa toka mwanzo for reason (al)ready 2s-FUT-be 2s-ANT-REFL-prepare from beginning
 - '1. Therefore, you yourself from the beginning before going there (to propose), 2. you will already have begun to tell yourself: 3. 'If I am to go there, the bride-price will be high, 4. therefore, before I go, I must begin getting prepared as much as possible.' 5. Therefore if he arrives there and starts speaking, right from the beginning, 6. there will not be much of a

³⁵ *Tayari*, an adverb of manner translated as '(be) ready' has, in at least some varieties of Colloquial Swahili, come to be used as an approximate equivalent of 'already'. In co-occurrence with *-mesha-*, it seems to strengthen the latter's effect of post-terminality. Its "sandwich" position between AUX and Main verb is a strong indication of its desemanticization.

problem, 7. because already you will have prepared yourself from the beginning [...].'

As can be seen from this passage, the extremes of the two scales, in this case pre-initiality of viewpoint and post-terminality of Event, may be combined and in fact be jointly assigned to a single predicate. And, as could easily be documented, any values in between may be freely selected and combined.

8.2 Even more strikingly, post-terminality of Event may be embedded in post-terminality of viewpoint. Evidence for this comes from the turn which, within the same conversation on matrimonial matters, follows immediately the preceding extract H, and which serves to illustrate the recommended circumspection in such matters from the perspective of the bride's family. The current speaker introduces his turn with an explicit back-reference (I1) to the situation described by the previous speaker, Mw. Daudi, where the well prepared suitor arrives on the scene of the negotiation (H5-7):

<u>I.</u>

- 1. Mwalimu Daudi a-li-po-fika teacher D. 3sS-PT-place:REL-arrive
- 2. kwamba tayari wale wazee kike wa that (al)ready those old.ones GEN female na wazee wa kiume wa-**mesha**-kuwa wa-**mesha**-ju-ana and old.ones GEN male 3p-ANT-be 3p-ANT-know-REC
- 3. kwamba mwan-etu a-**ta-**olewa na fulani. that child-our 3sS-FUT-get.married with somebody.
 - '1. The point at which Mw. Daudi has arrived [in his account of the suitor's preparation], 2. already [at some indefinite point before] the old women and old men had had reached the point where they had been mutually informed 3. that one of their daughters will get married.'

The temporal matrix of segment I may be represented like this:

$$R_t > [Vp > [Event]]$$

The anterior AUX *-mesha-kuwa* locates the viewpoint from which the advanced state of the preparations of the bride's family is presented at some indefinite point in time prior to R_t , i.e. prior to the suitor's arrival first evoked by Mw. Daudi in (H5-7) and anaphorically resumed in (I1) by the current speaker. The construction of a referentially empty Vp prior to R_t , which in turn

has in its scope an event classified as anterior in respect to Vp, may seem extravagant. It is, however, justifiable on the grounds that Vp is clearly not attributed to the suitor whose activity constitutes R_t. Knowledge about the preparedness of the bride's family is not presented as part of the suitor's preparedness in this context, but is presented as additional information to the theme of preparedness in matrimonial procedure from an undeterminate viewpoint whose locus is defined as being prior to the suitor's appearance on the scene. In any case, the combination of post-terminality of viewpoint and post-terminality of event in a single predicate can hardly be interpreted otherwise than in terms of a heightened overall effect of post-terminality on the main predication referring to the concertation of the old men and women.

8.3 According to Schadeberg (1992:33f.), the Future marker *-ta-* is excluded from the main verb of the CVC. Data accessible to me seem to confirm this to the extent that pre-initiality of a Vp-embedded event never seems to co-occur with terminality (whether global or segmented) of the viewpoint host: a perusal of close to a dozen sizeable conversations and monologues from *Swahili Archives* and from *Swahili Corpus* did not produce a single CVC combining an auxiliary Perfect (PERF), Anterior (ANT), Past (PT) or Sequential (SEQ) with a *-ta-*marked main verb. The likely reason for this apparently systematic co-occurrence restriction is what might be called a "modality clash": the modal property of uncertainty which attaches to the future event (its being intended, desired or expected) enters in conflict with the presumption of certainty that accompanies Vp-neutral events whose assertion looks back on their termination. Markers inherently carrying mutually exclusive modal values cannot be integrated into a single predicate, as would be the case if *-ta-* occurred in the main verb slot of the CVC.

But it is of course quite normal and frequent to have this type of modal alternation mediated by a verb of cognition or of speaking, as is the case in (H3) above: they had INFORMED each other that X will get married.

On the other hand, as shown in (H2) and (H7), the co-occurrence restriction does not apply to the inverse combination of pre-initial *-ta*-marked AUX with a terminal and post-terminal main verb. This apparent asymmetry is easily explained: AUX functions as the locus of predicate OPERATORS, including those related to modality, whereas the main verb functions as its operational domain.

Also, the ban on main verb -ta- does not apply to events depending on a viewpoint not anchored in any kind of particular event or situation, as in the following purely fictive description of the unhappy fate of a person supposedly lacking motivation for travelling (Swahili Archives, Z 998-3):

<u>J.</u>

Sasa mtu kama yule <u>a-na-kuwa</u> <u>a-ta-kaa</u> pale pale.

now person like that.one 3sS-PROG-be 3sS-FUT-sit there there

'Now a person like this [he is-being] he will stay always at the same place (instead of getting instructed through travelling).'

9 From complexity to simplicity: the emergence of a new aspect

The habitual nuance of the -na-marked Auxiliary in segment J is not accidental. The fully redundant double -na-marking of CVC's is extremely frequent in colloquial Kiunguja (the main dialect spoken in Zanzibar town) and is clearly an emergent new verb form standardly expressing habitual states-of-affairs. The following example stems from a discussion of hindrances to efficient schooling of young children:

<u>K.</u>

- 1. Watoto wengi wa-na-kuwa wa-**na-**shughulika na uvuvi children many 3p-PROG-be 3p-PROG-be.occupied with fishing zaidi kuliko kusoma more than learning
- 2. Halafu vilevile wazee pia saa nyingine wa-na-kuwa then also parents too hours others 3p-PROG-be wa-na-changiwa.

 3p-PROG-involved
- 3. Kwa hiyo mtoto siku a-na-weza a-**ka**-wa moja for that child 3sS-PROG-can 3sS-SEQ-be day one h-a-ja-enda a-si-amb-iw-e kitu. NEG-3sS-ANT-go 3sS-NEG-tell-PASS-OPT thing
- 4. Y-a pili h-a-ja-enda. c9-GEN second NEG-3sS-ANT-go
- 5. Mwisho mtoto <u>a-na-kuwa</u> h-a-end-i tena skuli in.the.end child 3sS-PROG-be NEG-3sS-go-NEG again school
 - '1. Many children are (pre)occupied with fishing more than with going to school. 2. Then also the parents are involved. 3. Therefore a child cannot go to school one day without being told anything. 4. The next day (s)he (again) would not go. 5. Finally, (s)he does not go to school anymore.'

The double -na-construction in (K1-2) refers to general attitudes of children and parents (note the plural forms!). We can draw on previous observations in contrasting it with a specific fictive situation singled out in (K3) which is introduced by the sequential viewpoint marker a-ka-wa, exemplifying en passant again the non-narrative use of -ka-. This must suffice as a preliminary argument in favor of the hypothesis that principles of viewpoint assignment are essentially identical in narrative and non-narrative texts.

The redundancy of the time-reference in the double -na-marked predicate in (K1-2) may have favored, at least in Zanzibari Colloquial Swahili, its mutation to a regular Habitual.³⁶ Another factor favoring this process is the gradual obsolescence of the old -a-present form which tended to be associated with Continuity and Habituality. The double -na-form, then, illustrates the potential of the CVC as a resource innovation potentially reshaping the primary tense-aspect paradigm via a process of re-grammaticalization of specific marker sequences generated by the twin paradigm.

10 Concluding remarks

The CVC with its characteristic twin TA paradigm conjunction appears to be a quite recent innovation in Swahili (for further reference to its history, see Drolc 2000:98). Wald (1981, quoted in Drolc 2000) considers it to be a borrowing from English auxiliary verb constructions. The latter hypothesis would seem to be inadequate for accounting for the use made of the CVC in Swahili discourse which, as far as its core function as the centerpiece of a full-fledged viewpoint grammar is concerned, has no obvious parallel in English verb morphology and its use in connected discourse. Moreover, the Swahili CVC differs from auxiliary predication in Germanic and many other languages by its formal characteristics, notably the conjunction of two finite predications, both deploying their full TA potential while representing a single notional predicate, but without anything remotely reminiscent of the reduction to participial status of the lexical verb.

I have no knowledge of anything comparable to the Swahili CVC and its extensive assignment to the discourse function of viewpoint in other Bantu languages. This may however be due, if not to sheer ignorance of relevant work, to the latter's absence in less well known Bantu languages. However, at least in the wider Niger-Congo family, Swahili does not stand alone with its elaborate strategy of viewpoint construction through TA duplication. A similar, and no less elaborate system of viewpoint operators based on TA-conjunction

³⁶ It also explains its compatibility with the main verb *-ta*-marker in J above, since Habitual by definition implies pre-initiality in the sense that no specific act or action is being asserted, only its potentiality.

has been described in detail for Toura narratives in Bearth (1986, ch. 4; 1997).³⁷

The integration of a grammatically distinct viewpoint category in the verbal systems of such languages as Swahili and Toura does not in itself constitute a claim to originality. The degree of grammatical differentiation and elaboration of this category may turn out to be much less unique than it seems, once what has been described for a few languages will have become part of a general heuristics in linguistic research. What seems to be a typological particularity, however, in both Toura and Swahili, but even more strikingly in the latter case, is its constitution as a full-fledged, morpho-syntactically autonomous auxiliary paradigm, drawing on the main TA paradigm as a resource, yet exploiting it, at least partially, on its own independent terms. The decompositional representation of primary TA operations and specific viewpoint operations accounts for a transparency of the categories and subcategories involved which seems to predestine Swahili as a field for further exploration of this still little known aspect of aspectuality.

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³⁷ The major difference compared to Swahili CVC's is that, in Toura, the TA-marker functioning as viewpoint operator is hosted in tail-head linkage clauses rather than in an auxiliary predicate.

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ASAS 13: Karen H. EBERT, 1994. The structure of Kiranti languages. Comparative grammar and texts.

The book gives an overview of the basic grammatical structures of six Kiranti languages: Athpare, Bantawa, Camling, Khaling, Limbu and Thulung. The Athpare and Camling data are from the author's fieldwork in Nepal and presented here for the first time. Data on Bantawa and Khaling are mainly derived from unpublished texts. Special emphasis is given to some typologically interesting features: complex agreement patterns, inverse marking (in 2 langs.), grammaticalization of the vertical dimension (e.g. in locative case suffixes), degrees of finiteness in subordination and complex predicate formation. Due to the limited material there is little information on phonology and clausal syntax. The appendix contains 130 pages of texts with morphemic glosses.

ASAS 14: Lukas NEUKOM, 1995. Description grammaticale du nateni (Bénin). Système verbale, classification nominale, phrases complexes.

Cette thèse porte sur le naténi, langue Gur parlée au Bénin. Elle suit le modèle théorique de Bonvini (1988) "Prédication et énonciation en kasim" et est composée de quatre chapitres: "La prédication" sert à introduire les unités fondamentales sur lesquelles est basée l'analyse. "Le verbal" constitue la partie principale du travail, à savoir la description du système verbal. "Le nominal" traite du comportement du verbal au contact du nominal et "L'énoncé et ses variations" est consacré à l'intégration du verbal à un niveau supérieur, à savoir dans le discours.

ASAS 15: Balthasar BICKEL, 1996. *Aspect, mood, and time in Belhare.* Studies in the semantics-pragmatics interface of a Himalayan language.

In this in-depth analysis of the modal and aspectual system of Belhare (Tibeto-Burman, Nepal) close attention is paid to factoring out semantic entailments from generalised conversational implicatures, which allows a morphological analysis without zero morphemes. The aspectual system is described whithin a theory of aspect which attempts at typological adequacy and which allows a detailed assessment of the interaction of aspect marking with lexical Aktionsart (time schemata). The theory elaborates on earlier work by Breu and Sasse, and is compatible with the format of semantic representation proposed by Jackendoff as well with the representational format used in Role and Reference Grammar.

ASAS 16: Karen H. EBERT & Fernando ZÚÑIGA [eds.], 2001. Aktionsart and aspectotemporality in non-European languages. Proceedings from a workshop held at the University of Zurich, June 23-25, 2000.

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