TOWARDS A COGNITIVE ANALYSIS OF THE TURKISH ASPECTUAL SYSTEM

Vit Bubenik Memorial University of Newfoundland

1. PRELIMINARIES

A fitting introduction to the present inquiry might be a quote from Menges' 1968 classic *The Turkic Languages and Peoples* (p.125):

'The Altajic verb is of nominal nature, so that even when it is found in the function of the predicate there is no real equivalent to the Indo-European or Semitic finite verb'.

According to Menges (p.127) the Turkic *nomen verbale* is equal to the verbal substantive of IE in independent position, in adnominal position to the IE participle, and at the end of a clause it may function as the finite predicate (if in the 3rd person). To exemplify the latter two options from Turkish (Osmanli), we may contrast the Retrospective (perfect) participle in its prenominal position (l) and the same form in the clause-final position, where it possesses the meaning of the Inferential mode (2):

 gel-miş arkadaş come+RETRO friend 'a/the friend who has come'
arkadaş gel-miş

arkadaş gel-miş friend come+INF '(I gather that) the friend has come'

(Lewis 1967 calls (1) the *mis*-past and (2) inferential; Aksu-Koç (1988: 22-3) calls (1) Resultative perfect and (2) quotative). Thus the nature of finiteness in Altajic (common spelling) languages differs considerebly 'in its rudimentary structure' from that in IE 'representing ... a truly prehistorical form, while it is essentially and basically different from that of Semitic or Caucasian'. To stay with the Retrospective participle, its IE counterpart involves the addition of the characteristic suffix **wot* to the verbal root which is ablauted and reduplicated; the finite forms of the retrospective aspect, however, do not contain that particular suffix **wot* as a stem building element. Instead, a special set of finitizing suffixes (originally -*He*, -*tHe*, -*e* in the singular) is attached directly to the root. This is shown in (3) using the PIE root **leikw* 'abandon':

LINGUISTICA atlantica 18 / 19 (1996 / 1997) 43-52

(3)	PIE retrospective participle	Retrospective aspect (2ND sg)
	*le-loikw-wót- 'having abandoned'	'lé-loik ^w -tHe 'you have abandoned'
	(AGr le-loip-ṓs)	(AGr lé-loip-a-s)

Altaic languages preserved a much more 'rudimentary structure' in forming the finite forms of the Inferential mode by cliticizing the copula to the *nomen verbale* (participle). Thus to form other persons of the Inferential mode in (2) one simply adds clitic forms of the copula (*-im, -sin,* etc.) to the Retrospective participle *gel-mis* 'having come':

(4)	Finite forms of the Inferentia	l mode (Turkish)
	gel-miș-im lit. I am having come '(people say that) I have come'	gel-miș-sin lit. you are having come '(I gather that) you have come'

2. TURKISH PARTICIPLES

Given the nominal nature of Altaic finite forms, it is unfortunate that so much tense-oriented terminology is found in various grammars of Turkic languages. In view of the fact that in Turkic languages the participles are chronogenetically prior (in the sense of Hewson & Bubenik 1997: 5) to the formation of finite modal and non-modal forms, I propose to take a new fresh look at the verb system of Turkish in the following order: participles, modal forms (second chronogenetic stage) and non-modal finite forms (third chronogenetic stage).

The six productive Turkish participles are enumerated and exemplified in (5). Indoeuropeanizing and morphology-based terminology, familiar from Lewis (1967, 1975), will be replaced in the rest of this article by aspectbased terminology which is appropriate for the first chronogenetic level.

(5)	Turkish	Turkish participles				
	gel-en gel-ir gel-miş gel-dik gel-ecek	'coming' 'who (habitually) comes' 'who has come' 'who came' 'who will come' 'one ought to come'	Lewis (1967) present aorist <i>mis</i> -past <i>di</i> -past future necessitative	Imperfective Habitual Retrospective Perfective Prospective Necesssitative		

The nominal nature of Turkish participles is patent in their usage as nouns; e.g. *gel-ecek* 'who/which will come' \rightarrow 'future'; *yaz-ar* 'who (habitually) writes' \rightarrow 'writer'; *gel-ir* 'what comes' \rightarrow 'revenue'; etc.

It should be emphasized that the Retrospective participle, *gel-mis* 'who has come', does not possess any inferential meaning which is found in the finite forms built on this participle (cf.4).

In contemporary Turkish the Perfective participle is limited to a few frozen forms such as *bil-dik* 'acquaintance' or *de-dik* 'said'. There are several reasons for calling the participle of the '*di*-past' Perfective. The way Lewis (1967: 163) put it points in this direction: 'the past participle in *-dik* really means not 'having done' but 'characterized by past doing'.' In my terminology, not Retrospective (perfect) but Perfective (or Completive). Its Perfective (or Completive) aspectual meaning is especially clear from its gerundial (adverbial) usage as shown in (6):

yaz-dık-tan sonra write-perf-ABL after 'after writing' ~ 'having written' (Ancient Greek would use the participle of the aorist here: gráp-sa:s 'having written').

The necessitative participle is used impersonally: *gel-meli* 'one ought to come' (cf. Latin gerundive *veni-endum est* 'one has to come'). Its suffix consists of the verbal noun suffix *-me* (*gel-me* 'coming') and the possessive suffix *-li* (as in *seker*'sugar' \rightarrow *seker-li* 'sweet').

Assuming that aspectual distinctions reflect different representations of the position of of the subject of the event (cf. Hewson & Bubenik 1997: 12), we may place the six participles of Turkish in five positions on the line with vertical strokes representing the initial and final limits of an event:

(7)

(6)

A B -----D E Prospective Imperfective Retrospective Necessitative Perfective

(The Habitual category may be considered as a subcategory of the Imperfective). The Prospective and Retrospective participles are often used together with the present participle of *ol-* 'be' or *bulun-* 'be found' (or rather middle voice as in German *sich befinden*). This fact enhances their values as exponents of 'transcendental' aspect (positions A and E are outside the event time):

(8)	gel-ecek haber	or	gel-ecek ol-an haber
	come-prosp news		come-prosp be-part news
	'the news which is a	bout to cor	ne'

Compared with Ancient IE languages, the first chronogenetic stage in Turkish does not show any gaps; Latin has no perfective participle (corresponding to the Greek aorist), and the gerundive (necessitative participle) in Ancient Greek (grap-téon 'to be written', Latin scrib-endum) stands outside the productive participial system:

(9)	Latin participles	scrīptus —	scrībēns	scrībendus scrīptūrus
	Greek participles	grápsās gegraphốs	gráphōn	 grápsōn
	Turkish participles	yazdık	yazar yazan	yazmalı
		yazmış		yazacak

3. MODAL CATEGORIES

Modal categories—subjunctives and optatives—allow for a binary contrast Imperfective vs. Perfective, and a further modal distinction of Inferential. Their morphology (in 3RD SG) is surveyed in (10):

(10)		Subjunctives	Optatives
	Imperfective	gele	gel-se
	Perfective	gele-idi	gel-se-idi
	Inferential	gele-imiş	gel-se-imiş

The Perfective and Inferential categories are formed by attaching the past and inferential forms of the copula to the stem of the subjunctive (*gele-*) and the optative (*gel-se-*). The 'optative' is called *dilek-sart kipi*, the 'wish-condition verb form' by Turkish grammarians (Lewis 1967: 130 calls it 'conditional').

As in IE languages, the subjunctive is not restricted to expressing wishes in the main clauses. The Imperfective subjunctive is used in subordinate clauses of purpose introduced by subjunctions (*ta*) *ki*:

(11) otur-du-m ki bir dakika dinlene-yim [Lewis 1967: 264] sit-PERFVE-ISG that one minute rest-SUBJ-ISG 'I sat down that I may rest a minute'

It will be observed that—unlike in IE languages—there is no sequence of tenses in that the past tense (Perfective aspect) is followed by the present (Imperfective) subjunctive. (French or Latin would use the imperfect subjunctive in these circumstances: '... ut quiescerem').

In colloquial Turkish the Imperfective subjunctive is used for future time references (*gele-yim* 'I'll come' instead of literary *gel-eceğ-im* (on the IE side one observes the usage of the Perfective (aorist) subjunctive for future time reference; e.g., in Classical Armenian the subjunctive of the aorist *ek-ic*^h'I'll come', cf. Schmitt 1981: 150).

In main clauses the Imperfective subjunctive conveys requests (*gele-sin* 'you should come') whereas its Perfective counterpart expresses unfulfillable wishes (*gele-idi-n* 'would that you had come'). The Inferential subjunctive is used to quote the Imperfective and Perfective subjunctive (*geleimiş* 'people are saying 'would that he might come!' '). The Inferential category is ambiguous between expressing either the request or the unfulfillable wish (i.e. one cannot combine the Perfective subjunctive with the Inferential form of the copula **gele-idi- imiş*).

The Perfective optative, *gel-se-idi* 'if (only) he had come', as an exponent of 'contrafactivity' (Lyons 1977: 816), must be carefully distinguished from the Perfective conditional, *gel-di-ise* 'if he came'. The latter form is used in the protasis of hypothetical judgements expressing an 'open' condition (Lewis 1967: 271) or rather 'remote' condition in the past (Lyons 1977: 816). These two forms differ in their sequencing of markers for aspect and mood:

(12)	Perfective optative (irrealis)	gel-se-idi M A	'if (only) he had come'
	Perfective conditional	gel-di-ise M A	'if he came'

The Perfective optative corresponds to the IE irrealis: (*keski/e*) gel-se-idi 'if (only) he had come' (with or without the particle) would be used to translate Latin *utinam vēnisset*. Its Imperfective counterpart, gel-se, expresses 'less remote' conditions, 'if he were to come', and wishes 'if only he would come'.

There is an interesting parallel to this sequencing of markers for aspect and mood in Sanskrit. Vedic Sanskrit distinguishes its optative of the aorist from the conditional by sequencing the markers M - A for the optative, but A - M for the conditional ($-y\bar{a} = optative, -s = aorist$):

(13)	optative of the aorist	bhū-yā-s-am 'if I had been'
	(so called 'precative')	M A
	conditional	a-bhav-iṣ-ya-m 'if I were/I would be'
		A M

4. FINITE FORMS

The participial stems presented in 2. may be finitized by attaching the suffixes of Type I. These suffixes are identical with the clitic forms of the copula (-*im*, -sin, -(*dir*), -*iz*, -siniz, -(*dir*)ler).

Two provisions à propos their formation have to be made.

(i) An input to the formation of the Progressive aspect is the stem in *-yor* (not the Imperfective participle in *-en*). This formative goes back to the Habitual form *yorI-r* of the ancient verb *yorI-mak* 'march, go'.

(ii) The Perfective aspect (Lewis' *di*-past) is formed by the suffixes of Type II. These suffixes are (or some were) identical with the possessive suffixes (cf. Bubenik 1993). Compare the following nominal and verbal forms:

(14)	possessive	e suffixes	suffixes o	f the Perfective aspect
	anne-m	'my mother'	gel-di-m	'I came'
	anne-n	'thy mother'	gel-di-n	'thou came'
	anne-miz	'our mother	(gel-di-k	'we came')
	anne-niz	'your mother'	gel-di-niz	'ye came'

(The suffix of the 1st plural Perfective used to be *-miz*; cf. Orkhon Turkic (8th c.) *qirqiz tapa sülä-di-miz* 'we started a campaign against the Kirgiz' in Tekin 1968: 189).

Their past tense counterparts are formed by attaching the reduced past tense forms of the copula to the participial stem (the full form of the copula, *i-di-*, is still recognizable in the vocalic stems of the Perfective and Necessitative). The whole system of finite forms may be presented as dichotomized into non-Past vs. Past forms:

(15)		non-Past	Past
	Progressive	gel-iyor-um	gel-iyor-du-m
	Habitual	gel-ir-im	gel-ir-di-m
	Retrospective	gel-miş-im	gel-miş-ti-m
	Perfective	gel-di-m	gel-di-idi-m
	Prospective	gel-eceğ-im	gel-ecek-ti-m
	Necessitative	gel-meliy-im	gel-meli-idi-m

The pair gel-di-m 'I came' vs. gel-di-idi-m 'I had come' corresponds to the non-Past vs. Past forms of the *l*-participle of prefixed verbs in Slavic languages (cf. OCS pri- \check{s}_bd -l \mathfrak{r} jesmb 'I came' vs. pri- \check{s}_bd -l \mathfrak{r} byl \mathfrak{r} jesmb 'I had come'). Diachronically, the di-form did not have the past counterpart; in Orkhon Turkic the pluperfect was formed in the Retrospective aspect (with inferential meaning), V-mišär-ti, not in the Perfective aspect (cf. Tekin 1968: 188,195); and the same is true about some contemporary Turkic languages (e.g., Uzbek, cf. Kononov 1960: 215-6, where the simple *yoz-dim* 'ja napisal' is described as the 'evidential categorical past' expressing 'semelfective or multiple actions', i.e., very much like the IE aorist). Osmanli Turkish appears to have reinterpreted the former Perfective aspect as the past tense (through the process of grammaticalization); notice, however, that its past counterpart (pluperfect) in -di-idi is much less common than the Inferential pluperfect in -miş-ti.

The Necessitative aspect (or rather mood) is used not only impersonally (cf.5) but it also shows a complete set of finite forms in both tenses: *gel-meliy-im* 'I ought to come' and *gel-meli-idim* 'I had to come/should have come'. It should be observed that the Necessitative of transitive verbs, al-maliy-im 'I ought to take', possesses active meaning (unlike the IE gerundive, e.g., Latin *laudandus sum* 'I ought to be praised', which is passive).

Within the space of this article we cannot enter into the discussion of whether Osmanli has a tripartite tense distinction; suffice it to mention that Turkish grammars are silent on the possibility of the formation of the progressive aspect in the future tense (of the type *gel-iyor* or *gel-mek-te ol-acağ-im* 'I will be coming'; but Aksu-Koç (1988: 22) mentions the existence of the Future Perfect (*gel-mis ol-acağ-im* 'I will have come').

5. INFERENTIAL MODE

Both modal categories (subjunctive and optative in 3) and the five aspectual categories (with the exception of the Perfective) may appear in the Inferential mode. The Inferential mode is formed by attaching the inferential forms of the copula (*imiş-im*, *-sin*, *-iz*, *-siniz*, *-ler*) to the modal and aspectal stems as shown in (16):

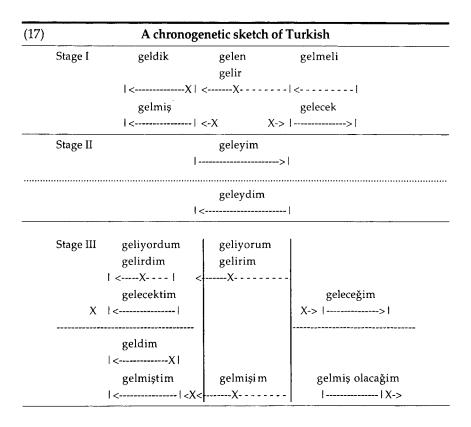
(16)			Inferential	
	Subjunctive Optative	gele-yim gel-se-m	gele-imiş-im gel-se-imiş-im	
	Progressive Habitual Retrospective Prospective Necessitative	gel-iyor-um gel-ir-im gel-miş-im gel-eceğ-im gel-meli-yim	gel-iyor-muş-um gel-ir-miş-im gel-miş imiş-im gel-ecek-miş-im gel-meli-imiş-im	

The basic Retrospective category, *gel-mis* 'I gather that he has come', has been inferential since the earliest Turkic documents (cf. Tekin 1968: 192, where it expresses past actions known from hearsay such as 'my

father marched ... killed ... subjugated'). Nevertheless, it forms the Inferential mode like any other aspectual category (with the exception of the Perfective) by cliticizing the inferential form of the copula to the Retrospective participle: gelmis imis > gelmismis 'he is said to have come'. (The inferential meaning comes here from the clitic element not from the Retrospective participial stem). If the basic (non-inferential) form of the copula, -dir 'is' (originally tur-ur 'he stands') is attached instead, the Retrospective meaning is restored: gel-mis-tir 'he has come'. The latter form is called a 'definite' past tense (cf. Lewis 1967: 122) and is used in writing (compare the French Passé composé); spoken language employs the 'evidential' Perfective category instead: gel-di 'he came' (compare the French Passé simple).

6. CONCLUSION

Our assumption that the Prospective (future) and the Future Perfect are aspectual categories (based on Ascending Time) coupled with the remaining aspectual categories which are morphologically dichotomizable into non-Past vs. Past (based on Descending Time) entails an introduction of three time zones (Past - Present - Future) for allocating events. It will be observed that the resulting (tentative) chronogenetic sketch of Turkish in (18) is strongly reminiscent of Latin and French. The Present 'watershed' between the Past and the Future time zones is created by the non-Past forms of the Progressive, Habitual and Retrospective aspects. In the absence of a three-way morphological contrast (such as Latin laudabam laudo - laudabo) the system is asymmetric in that the Future tense morphology is built on a different stem. One will also notice the skewed position of the Perfective vis-à-vis its Imperfective and Retrospective counterparts, and the existence of the Past Perfective category (gel-di-idim 'I had come') corresponding to the pluperfect of prefixed verbs in Slavic languages.



REFERENCES

- AKSU-KOÇ, AYHAN. 1988. The Acquisition of Aspect and Modality. The Case of Past Reference in Turkish. Cambridge: Cambridge University Press.
- BUBENIK, VIT. 1993. Inflectional morphologogy and clitics in Functional Grammar. *Diachronica* 10,2:165-90.
- HEWSON, JOHN & VIT BUBENIK. 1997. Tense and Aspect in Indo-European Languages: Theory, Typology, Diachrony. Amsterdam: Benjamins.
- KONONOV, A.N. 1960. Grammatika sovremennogo uzbekskogo literaturnogo jazyka. Moskva: Izdatel'stvo Akademii Nauk SSSR.

LEWIS, GEOFFREY L. 1967. Turkish Grammar. Oxford: Clarendon Press.

- LYONS, JOHN. 1977. Semantics. Vol.2. Cambridge: Cambridge University Press.
- MENGES, KARL H. 1968. The Turkic Languages and Peoples. An Introduction to Turkic Studies. Wiesbaden: Harrassowitz.
- SCHMITT, RUDIGER. 1981. Grammatik des Klassisch-Armenischen mit sprachvergleichenden Erläuterungen. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- TEKIN, TALAT. 1968. A Grammar of Orkhon Turkic. Bloomington: Indiana University.