

MULTIFUNCTIONALITY OF NON-FINITE VERB FORMS IN TURKIC LANGUAGES



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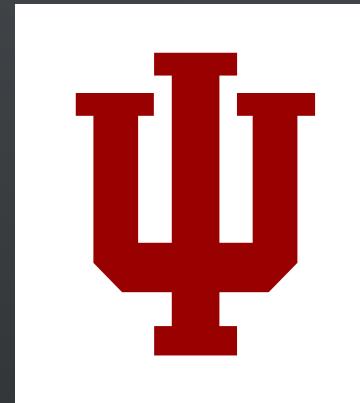
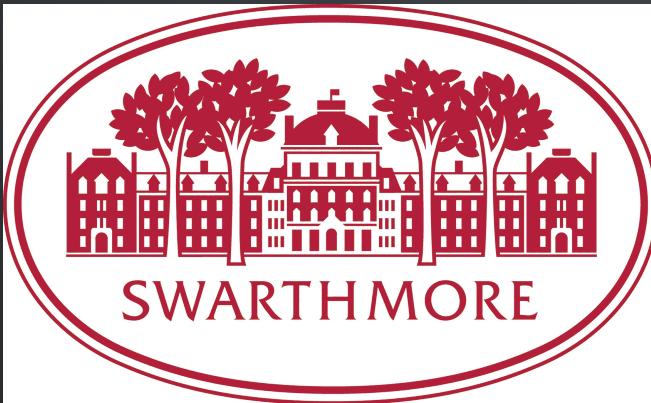


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OVERVIEW

Our talk in a nutshell

Turkic NFV forms are more multifunctional than normally assumed

The next ~18 minutes:

- Conventional delineation of Turkic NFV systems
 - "participles" / "причастия"
 - "converbs" / "деепричастия"
 - ("infinitives" / "инфинитивы")
- Some problems with it
- Proposed novel delineation
 - Overview and definitions:
VN/VAdj/VAdv/INF
 - Methodology
 - Results
- Outstanding issues
- Conclusions

CONVENTIONAL DELINEATION

- **Participles/причастия** - behave nominally and (especially) attributively

(1) *Мазан кітапханаға барған кісі үнайды.*^(kaz)

маван кәтәрханапақа ғағын кесе ү'наjdə
I.DAT library-DAT go-PTCP person be.liked-NPST-3

"I like the/a person who went to the library."

- **Converbs/деепричастия** - pattern together with other verbs, "subordinate" (other terms used: adverbial participle, gerund, ...)

(2) *Мен кітапханаға барып, селфи жасадым.*^(kaz)

miən kәtәрханапақа ғағыр 'sεlfjɪ ʒasadəm
I library-DAT go-CVB selfie make-PST.DEF-1SG

"I went to the library and took a selfie."

- Sometimes **infinitives** - behaves as a subject (sometimes object, etc.)

(3) *Содан кейін кітапханаға бару әдемке айналады.*^(kaz)

suðdan kiøjen kәtәрханапақа ғағow ædiøtkiø ajna'ładə
that-ABL after library-DAT go-INF habit-DAT turn into-NPST-3

"After that going to the library will turn into a habit."

CONVENTIONAL DELINEATION

- **Participles/причастия** - behave nominally and (especially) attributively
 - (1) *Мазан кітапханаға барған кісі үнайдұ* (kaz) **Some problems with this:**
маван кәтәрханасы өзіңде
I.DAT library-DAT be.liked-NPST-3
"I like the/a person who went to the library."
- **Converbs/деепричастия** - pattern together with other verbs, "subordinate" (other terms used: adverbial participle, gerund, ...)
 - (2) *Мен кітапханаға барып, селфи жасадым.* (kaz)
miən kәtәrханасы өзіңде
I library-DAT go-CVB selfie make-PST.DEF-1SG
"I went to the library and took a selfie."
- Sometimes **infinitives** - behaves as a subject (sometimes object, etc.)
 - (3) *Содан кейін кітапханаға бару әдемке айналып* (kaz) **Multifunctionality...**
suðdan kięjən kәtәrханасы өзіңде
that-ABL after library-DAT go-INF habit-DAT turn into-NPST-3
"After that going to the library will turn into a habit."

CONVENTIONAL DELINEATION: SPORADIC INTERNAL MULTIFUNCTIONALITY

- Multifunctionality of **converbs**

(4) *Аһаан барда.*^(sah—from Popova, 2018)

ahɑ:n barda

eat-cvb go-PST.3SG

"S/he ate and left."

"S/he started to eat."

- Also cf. Johanson (1995) "On Turkic converb clauses":

4 distinct "levels" of converb (syntactic functions)

- Multifunctionality of **participles**

(5) *Kümenkanada ииүтен жатканын бүгүн да көрдүм.*^(kir)

kitəpqañada

iʃtep

dʒatqanun

bүгүн

da

көрдүм.

library-LOC

work-cvb

PROG-PTCP-POSS.3-ACC

byɣyn

da

kørdym

"Today too I saw the one who's working at the library."

"Today too I saw him/her working at the library."

- We argue this is actually syncretism between distinct categories

NOVEL DELINEATION OF TURKIC NFV FORMS

conventional	novel
converb / деепричастие	infinitive
participle / причастие	verbal adverb
(infinitive / инфинитив)	verbal adjective (+substantivised)
	verbal noun

- Based on **morphological** and **syntactic** criteria
- Some assumptions:
 - **inflectional** categories (not derivational)
 - a given *form* may fall in multiple categories (**syncretism**)
 - **entire VP** (and often subject) together cast to **new syntactic function**

TURKIC VERBAL NOUNS

- VP functions as **nominal head**:
subject, complement, adjunct relation to another V
- Take **nominal morphology**: case, possession
 - Possession when agreeing in person/number with "extracted" subject (in genitive case)
 - Do not (appear to) occur with dependent adjectives or determiners
 - Restrictions regarding use of plural morphology
- Synchronic and diachronic **interaction** with other categories
 - Some overlap with verbal adjective forms
 - Adverbial with case morphology, so grammaticalisation into verbal adverb-forming affixes common
 - Forms that don't overlap with verbal adjectives often referred to as "infinitives"

TURKIC VERBAL ADJECTIVES

- VP functions **attributively**, modifies nominals
- One of the main strategies in Turkic for forming **relative clauses**
 - modified noun understood to be "extracted" (or similar) from VP
- Morphological behaviour
 - Through a null head can function nominally, take noun morphology
 - Sometimes have person/number agreement with subject
- Some differences from adjectives
 - (Often) may not be modified by adverbs
 - Do not receive comparative morphology
 - In some languages (incl. Turkish), agreement marking with subject

TURKIC VN & VADJ: EXAMPLES

- (6) *Маған кітапханаға барған үнайды.*^(kaz)
маған кітапханаға барған үнайды
I.DAT library-DAT go-VN be.liked-NPST-3

"I like **going** to the library."

- (7) *Маған кітапханаға барған кісі үнайды.*^(kaz)
маған кітапханаға барған кісі үнайды
I.DAT library-DAT go-VADJ person be.liked-NPST-3

"I like the/a person **who went** to the library."

NOMINALISATION OF VADJ VS. VN

- (8a) *Kumenkanada iisheten жатканын бүгүн да көрдүм.*^(kir)
kitepqañada ištep džatqanun byyyn da kordym
library-LOC work-INF PROG-VADJ.SUBST-POSS.3-ACC today also see-PST.DEF-1SG
"Today too I saw the one who's working at the library."
- (8b) *Kumenkanada iisheten жатканын бүгүн да көрдүм.*^(kir)
kitepqañada ištep džatqanun byyyn da kordym
library-LOC work-INF PROG-VN-POSS.3-ACC today also see-PST.DEF-1SG
"Today too I saw him/her working at the library."

VERBAL ADVERBS

- Head VPs **subordinate** to another V
- **Adverbial relation** to other V
- Semantically convey (usually) specific type of **temporal or causal relationship** between VPs
- Usually don't take additional morphology...
 - Conditional vADV agrees in person/number with subj. (most Turkic lgs)
- Can share a subject with matrix VP or have a different subject

INFINITIVES

- Collocate with auxiliaries, single VP projection?
- Auxiliaries small lexical class for many Turkic languages
- Only one external argument, unlike for VADV
- Combination of specific AUX and specific INF: conveys specific aspectual or modal information
- Auxiliary bears inflection for person/number, tense, etc.
- INF affixes almost always show syncretism with VADV

VERBAL ADVERBS VS. INFINITIVES

(9a) <i>Досум</i>	<i>китепти</i>	<i>китепканага</i>	<i>тапшырганы</i>	<i>турат.</i>	(kir)
dosum	kitepti	kitepqañawa	tapʃıqvañash	turat	
friend-.POSS.1SG	book-ACC	library-DAT	turn.in-INF	stand-NPST.3	

"My friend is getting ready to return the book to the library."

(9b) <i>Досум</i>	<i>китепти</i>	<i>китепканага</i>	<i>тапшырганы</i>	<i>кезекте</i>	<i>турат.</i>	(kir)
dosum	kitepti	kitepqañawa	tapʃıqvañash	kezekte	turat	
friend-.POSS.1SG	book-ACC	library-DAT	turn.in-VADV	line-LOC	stand-NPST-3	

"My friend is standing in line in order to return the book to the library."

POTENTIAL AMBIGUITY: IDENTICAL AUX AND LEXICAL VERB

(10a) *Aһаан барда.*^(sah)

ahɑ:n barda

eat-INF go-PST.3SG

"S/he started to eat."

(10b) *Aһаан барда.*^(sah)

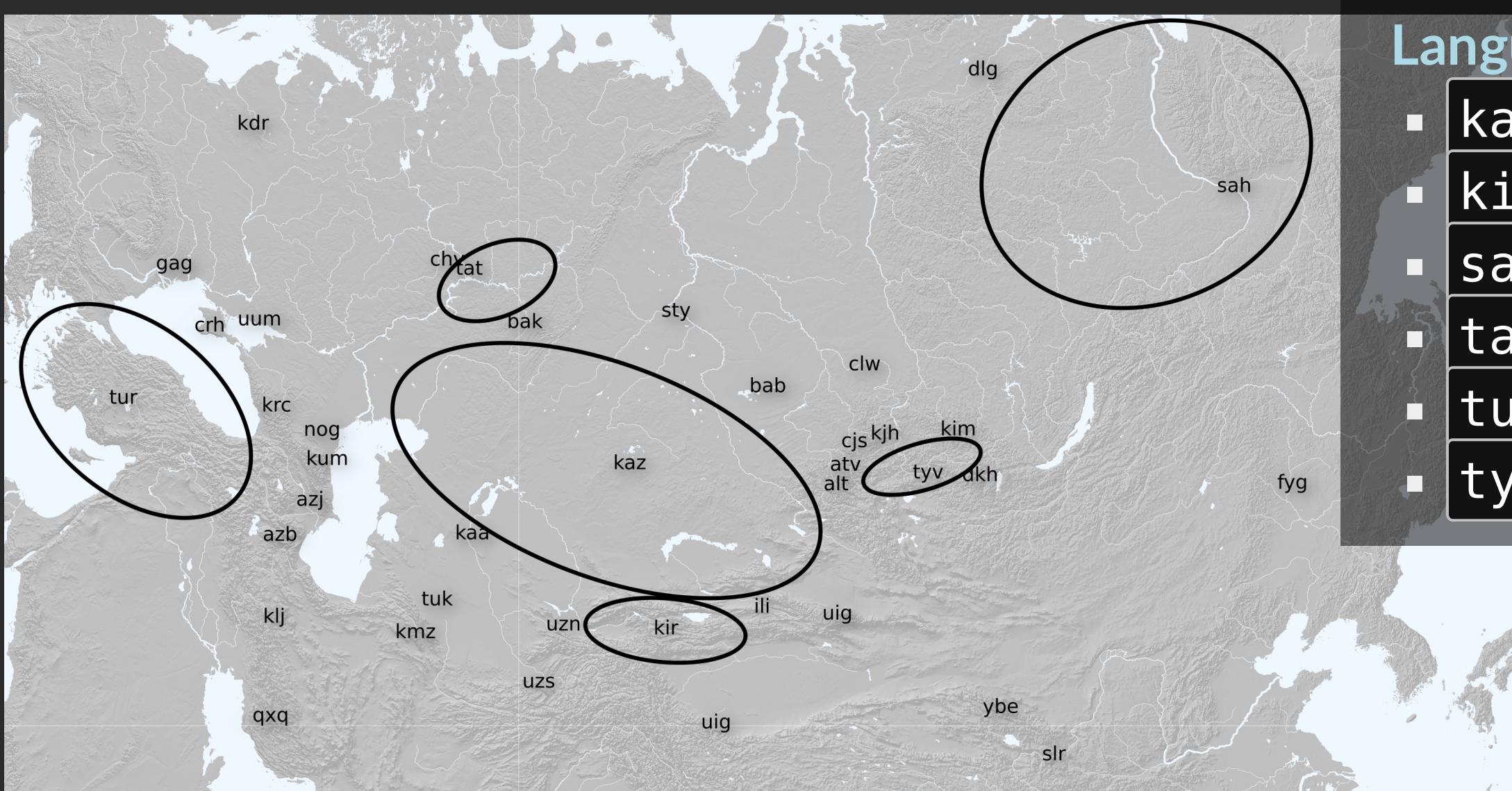
ahɑ:n barda

eat-VADV go-PST.3SG

"S/he ate and left."

METHODOLOGY

- Chose 6 geographically diverse Turkic languages



- Consultation with grammars, native speakers, corpora
- For each NFV-forming suffix identified
 - examined **morphological** and **syntactic** behaviour
 - **categorised** uses
- Output: **near-exhaustive typology** of NFV-forming suffixes

METHODOLOGY

- Morphological behaviour, example tests:
 - Take possession and/or case morphemes?
→ Verbal noun or verbal adjective reading (rely on semantics)
 - Take plural morpheme?
→ Probably verbal adjective
 - Some forms with limited morphology
- Syntactic behaviour (here with some "participle" forms):

	complement clause	adnominal modifier	clausal subject	nominal subject	nominal object
gördüğüm	✓	✓	✓	✓	—
gören	—	✓	—	—	—
gördüklerim	—	—	✓	✓	—
görenler	—	—	✓	✓	—
gittiğimi	✓	—	—	—	✓
gideni	—	—	—	—	✓

RESULTS KAZAKH

morpheme	example form	VN	VADJ	VADV	INF
-GAn	ішкен	✓	✓		
-EtIn	ішетін	✓	✓		
-(A)r	ішер	✓	✓		
-(I)w	ішу	✓			
-GIs	ішкіс		✓		
-(I)p	ішіп			✓	✓
-E	іше			✓	✓
-GAII	ішкелі			✓	✓
-GAnʃA	ішкенше			✓	
-sA	ішсе			✓	

RESULTS KYRGYZ

morpheme	example form	VN	VADJ	VADV	INF
-GAn	иҹен	✓	✓		
-(A)(:)r	иҹэр	✓	✓		
-E elek	иҹе элек	✓	✓		
-(U)U	иҹүү	✓			
-ӮU	иҹүү		✓		
-GIs	иҹис		✓		
-(I)p	ичиپ			✓	✓
-E	иҹе			✓	✓
-GAnl	иҹени			✓	✓
-GAnӮA	иҹенче			✓	
-sA	иҹсе			✓	

RESULTS SAKHA

morpheme	example form	VN	VADJ	VADV	INF
-Ar	Иһэр	✓	✓		
-Blt	ИСПИТ	✓	✓		
-lAx	Иһиэх	✓	✓		
-A ilik	Иһэ илик	✓	✓		
-lAn	Иһиэ	✓			
-DAx	ИСТЭХХЭ	✓			
-AAтүүл	Иһээччи	✓			
-(A)n	Иһэн			✓	✓
-A	Иһэ			✓	✓
-lmlnA	Иһиминэ			✓	
-BAkkA	ИСПЭККЭ			✓	
-AArl	Иһээри			✓	

RESULTS TATAR

morpheme	example form	VN	VADJ	VADV	INF
-GAn	ЭЧКӘН	✓	✓		
-(V)r	ЭЧӘР	✓	✓		
-AçAK	ЭЧӘЧӘК	✓	✓		
-(I)w	ЭЧҮ	✓			
-mAK	ЭЧМӘК	✓			
-E	ЭЧӘ				✓
-(I)p	ЭЧЕП			✓	✓
-GAnçl	ЭЧКӘНЧӘ			✓	
-GAç	ЭЧКӘЧ			✓	
-sA	ЭЧСӘ			✓	

RESULTS TURKISH

morpheme	example form	VN	VADJ	VADV	INF
-mlʃ	içmiş	✓	✓		
-dlk	içtik	✓	✓		
-(j)AcAk	içecek	✓	✓		
-(V)r	içer	✓	✓		
-mA	içme	✓			
-mAk	içmek	✓			
-(j)lʃ	içiş	✓			
-(j)An	içen		✓		
-(V)rken	içerken			✓	
-(j)ArAk	içerek			✓	
-(j)IndʒA	içince			✓	
-(j)lp	içip			✓	✓
-sA	içse			✓	

RESULTS TUVAN

morpheme	example form	VN	VADJ	VADV	INF
-GAn	ишкен	✓	✓		
-(V)r	ижер	✓	✓		
-GAIAK	ишкелек	✓	✓		
-Gl deγ	ишки дег		✓	✓	
-Glʒe	ишкиже	✓		✓	
-(l)p	ижип		✓	✓	
-E	иже		✓	✓	
-GAIA	ишкеле		✓		
-vIʃA:n	ишпишаан		✓		
-GAʃ	ишкеш		✓		
-zA	ишсе		✓		

GENERALISATIONS

- No Turkic language clusters NFV-forming suffixes into two groups
- (Some tendency in that direction)
- Tuvan is the only language where conventional patterning is broken (grammaticalisation)
- Forms often called infinitives are VN-only participles (but not always limited to certain nominal inflectional)

HISTORICAL PERSPECTIVE

- VN + case → VADV
 - Verbal nouns with cases are adverbial, same function
 - Can/do grammaticalise to verbal adverbs
 - when one of the components otherwise becomes less productive
 - when semantics of the combination are no longer compositional
 - Sometimes hard to tell when fully grammaticalised
 - -/GAntʃA/^(kir) ‘VADV’ ('until _-ing') as -/GAn-tʃA/ ‘VN-MANNER’
 - -/GAIAK/^(tuv) ‘VN, VADJ’, as VN only takes LOC, so -/GAIAKtA/ as VADV
- VN ↔ VADJ
 - Nouns and adjectives often used as overt heads of other's phrase in Turkic (via null head)
- VADV → INF?
 - Accompanied v → AUX?
- VN-NOM/ACC → INF
 - And sometimes hard to tell if VN is limited to NOM/ACC

OUTSTANDING ISSUES: TATAR INFINITIVE

- Appears to be used as all four categories?

(11a) *Миңа китапханәгә барырга кирәк иде.*^(tat)

mina kitapxanæyæ bərərgə kirkæk ide
I.DAT library-DAT go-vN necessary be-PST.3

"I needed to go to the library."

(11b) *Китапханәгә барырга қыюлығым житмәде.*^(tat)

kitapxanæyæ bərərgə qəjułəkəm zitmæðə
library-DAT go-vADJ nerve-POSS.1SG be.sufficient-NEG-PST.3

"I didn't have the nerve to go to the library."

(11c) *Китапханәгә барырга вакыт кирәк.*^(tat)

kitapxanæyæ bərərgə wəqət kiræk
library-DAT go-vADV time necessary

"Time is needed in order to go to the library."

(11d) *Мин китапханәгә барырга яратам.*^(tat)

min kitapxanæyæ bərərgə jøratam
I library-DAT go-INF(?) necessary

"I like going to the library."

OUTSTANDING ISSUES: VOLATIONALS

(12a) *Kypəsem* *килə.*^(tat)

kypəsem kilə

see-vN?-1SG come-NPST.3

"I want to see."

(12b) *Ko 'rgim* *bor.*^(uzb)

kørgim bør

see-vN?-1SG present-COP.NPST.3

"I want to see."

OUTSTANDING ISSUES: COMPOUND/SERIAL VERBS

- Not clear how compound verbs fit our typology

(13)	<i>Мен кітапты мектепке алып бардым.</i>	(kaz)
	miən kətaptə miəktiərkiə ałəp bardəm	
	book-ACC school-DAT take-VADV? go-PST-1SG	

"I brought the book to school."

- *алып* can't be INF because *бар* isn't auxiliary (& contributes lexical meaning to sentence)
- *алып* can't be VADV because it doesn't form contiguous constituent with object *кітапты*
- Together the two verb forms appear to form a single verb, but have internal structure

OUTSTANDING ISSUES: NON-FINITE FORMS WITH COPULAS

- Single predicate formed from NFV + copula?

(14a) *Мен кіманханаға барған едім.*^(kaz)

miən kətarχanaqa ばған iədəm
I library-DAT go-vN? COP-PST-1SG

"I had gone to the library."

(14b) *Мен кітепканага барсам әкен.*^(kir)

men kitərpqanaqa barsam eken
I library-DAT go-VADV?-1SG MIR-COP.NPST.3

"I wish I could go to the library."

- Finite verb form grammaticalised from NFV + copula?

(15) *Мен кіманханаға барғанмын.*^(kaz)

miən kətarχanaqa ばғанmən
I library-DAT go-PAST-1SG

"I went to the library."

CONCLUSIONS

- In-depth study of Turkic NFV-forming morphology
- Traditionally assumed categories not coherent
 - Syncretism and historical factors led to incorrect groupings
 - Also focus on similarity of functions (syntax) without considering morphology or semantics
- New approach takes into account morphology, syntax, and semantics

THANK YOU!

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- Jeremy Fahringer for feedback on the map

APPENDIX SLIDES

VERBAL VS. DEVERBAL (NOUNS)

Дөңгөлөк чоң жолдо жарылышы мүмкүн.^(kir)
døŋgøløk tʃon dʒołdo dʒarwılaʃısh mymkyn
tyre big road-LOC make.explode-PASS-VN-POSS.3 possible-COP.NPST.3

"The tyre might explode on the highway."

Чоң жолдогу дөңгөлөктүн жарылышы өтө кайғылуу болду.^(kir)
tʃon dʒołdogu døŋgøløktyn dʒarwılaʃısh øtø qaıkawlu: bołdu
big road-LOC-ATTR tyre-GEN explosion-Poss.3 very woe-fullLOC be-PAST

"The explosion of the tyre on the highway was really awful."

morpheme	example form	VN	VADJ	VADV	INF	morpheme	example form	VN	VADJ	VADV	INF	morpheme	example form	VN	VADJ	VADV	INF
-GAn	ішкен	✓	✓			-GAn	ичкен	✓	✓			-Ar	иңэр	✓	✓		
-EtIn	ішетін	✓	✓			-(A)(:)r	ичәэр	✓	✓			-Blt	испит	✓	✓		
-(A)r	ішер	✓	✓			-E elek	иче	✓	✓			-IAx	иңиәх	✓	✓		
-(I)w	ішу	✓					элек					-A ilik	иңә	✓	✓		
-GIs	ішкіс		✓			-(U)U	ичүү	✓					ИЛИК				
-(I)p	ішіп		✓	✓		-tʃU	иччүү		✓			-IAn	иңиә	✓			
-E	іше		✓	✓		-GIs	ичкис		✓			-DAx	истәххә	✓			
-GAI	ішкелі		✓	✓		-(I)p	ичип		✓	✓		-AAtʃʃI	иңәәччи	✓			
-GAnʃA	ішкенше		✓			-E	иче		✓	✓		-(A)n	иңән		✓	✓	
-sA	ішсе		✓			-GAnl	ичкени		✓	✓		-A	иңә		✓	✓	
						-GAnʃA	ичкенче		✓			-ImInA	иңиминә		✓		
						-sA	ичсе		✓			-BAkkA	испәккә		✓		
												-AArl	иңәэри		✓		

morpheme	example form	VN	VADJ	VADV	INF	morpheme	example form	VN	VADJ	VADV	INF	morpheme	example form	VN	VADJ	VADV	INF
-GAn	әчкән	✓	✓			-mIʃ	içmiş	✓	✓			-GAn	ишкен	✓	✓		
-(V)r	әчәр	✓	✓			-dlk	içtik	✓	✓			-(V)r	ижер	✓	✓		
-AçAK	әчәчәк	✓	✓			-(j)AcAk	içecek	✓	✓			-GAIAK	ишкелек	✓	✓		
-(I)w	әчү	✓				-(V)r	içer	✓	✓			-GI deχ	ишки дег	✓	✓		
-mAk	әчмәк	✓				-mA	içme	✓				-GIʒe	ишкиже	✓		✓	
-E	әчә		✓			-mAk	içmek	✓				-(I)p	ижип	✓	✓		
-(I)p	әчеп		✓	✓		- (j)Iʃ	içiş	✓				-E	иже	✓	✓		
-GAnçl	әчкәнче		✓			- (j)An	içen		✓			-GAI	ишкеле		✓		
-GAç	әчкәч		✓			- (V)rken	içerken		✓			-vIʃA:n	ишпишаан		✓		
-sA	әчсә		✓			- (j)ArAk	içerek		✓			-GAʃ	ишкеш		✓		
						- (j)IndʒA	içince		✓			-zA	ишсе		✓		
						- (j)Ip	içip		✓	✓							
						-sA	içse		✓								