

The Turkmen Verb System: Motion, Path, Manner and Figure

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### Abstract

In his 1991 paper, “Path to Realization: A Typology of Event Conflation,” Talmy introduced an updated set of associations that remains very promising in building a cross-linguistic classification of verb systems. Talmy proposed classifications of languages based on the verb versus satellite-framing of a variety of core schema, including Path, Aspect, State Change, and Realization, as well as S-relations such as Manner and Cause. Additional research in the area has also implicated the telicity or boundedness of an event as relevant to conflation patterns (Aske 1989, Jackendoff 1990, Slobin and Hoiting 1994). In the current paper, data was elicited in picture descriptions by native Turkmen speakers and an initial classification of Turkmen was made. Based on Talmy’s 1991 framework, Turkmen is classified as verb-framed. However, because of the discovery of inconsistencies in conflation patterns that remained unexplained by the Telic variable, the relationship between Figure and Manner of Motion was considered as an explanatory variable.

Talmy’s (1991) typological classification of verb systems introduced an updated set of associations that remains very promising in terms of building a cross-linguistic classification of verb systems. Expanding on his original framework (1985), Talmy posits connections between what he terms “core schema” and “supporting relations” in a “macro-event” and the syntactic or grammatical forms through which they are expressed in the verb systems of the world’s languages.

Based on Talmy’s concepts of core schema and s-relations in macro events, this paper proposes an initial classification of the verb system of Turkmen, a Turkic language with strong Russian influences, spoken primarily in Turkmenistan. The paper then presents structures representing inconsistencies that complicate the classification. After considering the variable of telicity, following Aske (1989), which explains some but not all inconsistencies, this paper introduces the semantic relationship between Figure and Motion as an explanatory variable to resolve apparent conflicts between the occurrence of verb-framed and satellite-framed structures in the language. Finally, there is a presentation of individual findings and suggestions for further study in this area.

Background

#### *The Macro-Event*

For Talmy, four semantic components are of interest in a macro-event such as a Motion event: 1) Figure (the object in motion or located relative to the Ground); 2)

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Ground (the space in which the Motion of the Figure occurs or the Figure is located, whether explicit or implied); 3) Motion (the presence of motion or location of the Figure in the event); and, 4) Path (the direction followed or location held by the Figure in relation to the Ground). A macro-event, such as Motion, then, is a conflation of main and subordinate events in a structurally simple construction, presenting a complex event in a simplex structure. Path, along with concepts including Aspect, State Change, Realization and Correlation, comprise the “core schema” conveyed in a Motion event. “Supporting relations” (s-relations), those that can but need not be conveyed, include features such as Manner and Cause. The location of core schema in the verb root or satellites of a language results in its classification as verb-framed or satellite-framed, respectively. For example, in a verb-framed language, the verb carries the core schema and is the primary structure. On the other hand, in a satellite-framed language, a satellite (preposition, postposition, adverb) carries core schema and is the primary structure. Supporting information would be carried by the alternative, non-primary structure.

Although both patterns can occur in a single language (affected by additional variables), languages are typically classified as dominant in one or the other. In much work in this area, Spanish is presented as the prototypical verb-framed language, usually conflating Motion/Path in the verb root while placing Manner in a satellite, (a).

(a) La botella	<b>entró</b>	<b>flot – ando</b>
Figure	Motion + Path	Manner + part
The bottle	go + in	floating

On the other hand, English exhibits typical satellite-framed structures, lexicalizing Motion/ Manner in the verb root and placing Path in a satellite, (b).

(b) The bottle	<b>floated</b>	<b>in.</b>
Figure	Motion + Manner	Path

It should be noted that, although “The bottle entered floating” is grammatically acceptable in English, it represents a structure based on the loan of a verb from the Romance languages (e.g. *entrar*) and is considered an exception rather than the rule for English.

In addition to developing a framework for categorizing the encoding of core and supporting information in the macro-event, Talmy notes the existence of implicational relations between the encoding of core schema such as Path, Aspect, State Change, Realization, and Correlation. That is, if Path is encoded on the verb, all other core schema will be encoded on the verb. If one s-relation, such as Manner, is encoded on the verb, other s-relations, such as Cause, will pattern similarly. Therefore, for the purposes of this initial investigation, this paper focuses on the locations of Path as the representative of core information and Manner as the representative of s-relations in the macro event of Motion, assuming that the patterns suggested by the location of these features will be generalizable to the placement of all core schema and s-relations.

## Method

### *Participants*

Four female native speakers of Turkmen participated in the study. The speakers ranged in age from early 20s to late 40s. All four informants were bilingual Turkmen/English speakers. All of the speakers were also fluent in Russian. One of the speakers considered Russian to be her dominant language, having used Turkmen at home as a child but having received all of her schooling in Russian and used Russian at home since her adolescence.

### *Elicitation Task*

A total of ten pictures were used. Each picture represented a motion event, ranging in scope from the movement of people from one location to another to the movement of a variety of figures within the same arena.

### *Design and Procedures*

Each informant was shown the pictures and asked to describe the event(s) in writing in Turkmen. Where necessary in order to elicit the target structure, the researcher prompted the informants, in English. However, at no time did the researcher provide an English description to be translated into Turkmen as it was felt this might contaminate the elicited data.

Following the collection of the samples, the researcher led each informant through a stimulated recall. This debriefing allowed the researcher to ascertain the most appropriate translation of the original descriptions into English and to clarify some apparent inconsistencies in descriptions (see discussion below).

## Discussion

In establishing an initial classification of Turkmen, this paper first considers events involving intransitive verbs of Motion with the expression of Path and/or Manner. There was complete agreement among the informants regarding the structures used to describe each event.

Preliminary findings suggested that the primary pattern in Turkmen, like Turkish, is verb-framed. The following examples illustrate the conflation of Motion/Path in the verb root. Note that in (c) - (g) Path is conflated in the roots of the various verbs of motion. There is redundancy in the case marking of the nouns in the predicates, each of which take the “goal”<sup>1</sup> or dative case suffix. In the English translations, appropriate Latinate verbs are used to reflect the conflation of Motion and Path on the verb. In addition, the redundant marking of Path through the use of the nominal case marker (goal) is acknowledged in parentheses as appropriate.

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<sup>1</sup> “Goal” is used as an alternative to “dative” case in the Turkmen grammar and is not intended to imply “goal” in the sense of an achievement or accomplishment in Vendler’s (1967) classification.

- |     |        |               |                      |
|-----|--------|---------------|----------------------|
|     | adam   | mekdev – e    | gir – di             |
| (c) | Figure | Ground – goal | Motion + Path – past |
|     | man    | school – to   | went + in            |

The man entered (into) the school.

- |     |        |               |                      |
|-----|--------|---------------|----------------------|
|     | adam   | mekdev – e    | gel – di             |
| (d) | Figure | Ground – goal | Motion + Path – past |
|     | man    | school – to   | went + to            |

The man approached (to) the school.

- |     |        |               |                      |
|-----|--------|---------------|----------------------|
|     | adam   | mekdev – e    | bar – dy             |
| (e) | Figure | Ground – goal | Motion + Path – past |
|     | man    | school – to   | went + towards       |

The man arrived (to) the school.

- |     |        |               |                      |
|-----|--------|---------------|----------------------|
|     | adam   | ashgabat – a  | git – di             |
| (f) | Figure | Ground - goal | Motion + Path – past |
|     | man    | Ashbagat – to | went + away from     |

The man went away from (undetermined location) to Ashgabat. > The man left (to) Ashgabat. > The man left for Ashgabat.

- |     |        |               |                            |                      |
|-----|--------|---------------|----------------------------|----------------------|
|     | adam   | ashgabat – a  | ug – up                    | git – di             |
| (g) | Figure | Ground – goal | Manner - part <sup>2</sup> | Motion + Path – past |
|     | man    | ashgabat – to | flying                     | went + away from     |

The man went away from (undetermined location) to Ashgabat flying. > The man left to Ashgabat flying. > The man flew to Ashgabat.

In (c) – (f) the intransitive verbs of motion conflate Path. Manner is not a variable in these examples. However, in (g) we see that in intransitive events including the notion of Manner, the conflation of Motion/Path still occurs in the verb root while Manner is expressed through a satellite participial form, as would be expected in a verb-framed language. Note that, in this case, motion from one place to another (from the point of origin to the destination) illustrates even more clearly the conflation of Path in the verb (away from) with the corresponding goal (to) marked by the case suffix on the noun representing the destination.

Given these limited initial examples, it appeared that Turkmen clearly fit the verb-framed pattern of its cousin, Turkish. However, consideration of additional examples raised questions regarding this classification. In (h) below, the s-relation of Manner is coded on the verb with Path relegated to the case ending of the Ground, a satellite position.

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<sup>2</sup> Part here represents “participial”

- (h) adam kanal-dan jYth – di  
 Figure Ground - Path Motion + Manner – past  
 man canal-source swam

The man swam across the canal.

Unlike in the previous examples, then, in (h) the structure allows for the conflation of Motion/Manner on the verb with Path relegated to a satellite form. Furthermore, structures such as that in (i) complicated the classification, as it represents a verb-framed structure conveying, apparently, the same meaning as in the satellite-framed structure in (h).

- (i) adam kanal-yng YstYn-den jYth-Yp git-di  
 Figure Ground – Loc through - source Manner - part Motion + Path - past  
 man canal through swim went + away from

The man went away from (undetermined location) swimming through the canal > The man left, swimming across the canal. > The man swam across the canal.

However, in stimulated recalls the informants indicated that there is, in fact, a difference in the interpretations of (h) and (i). Whereas (h) requires an atelic<sup>3</sup> interpretation, (i) requires a telic<sup>4</sup> interpretation. In other words, in (h) the man is conceptualized as swimming across the canal with no assumption that he reaches the opposite side. The focus is on the Motion of his swimming on a Path across a Ground rather than reaching a target Location. On the other hand, in (i), it is understood that the man in swimming along a Path across the Ground reaches a target Location (ostensibly, the opposite side of the canal). The difference in the structural framing of relevant information in the Motion event led to consideration of a variable identified by Aske (1989) as an explanation for these types of apparent inconsistencies.

#### *The TELIC variable*

Aske (1989) conducted research contrasting English and Spanish systems in order to address inconsistencies in the verb-framed system of Spanish. Aske pointed out that while it is not possible to say “La botella flotó a la cueva” (The bottle floated into the cave), it is possible to say “La botella flotó hacia la cueva” (The bottle floated towards the cave). He attempted to explain such inconsistencies by referencing telicity, described by Vendler (1967) in his verb-classification system. Specifically, Aske posited that while verbs describing a telic action or event could not accept a conflation of Manner/Motion, those describing an atelic action or event could accept conflation of Manner/Motion and encode Path on a satellite form. This explanation seemed to be upheld in predicates containing intransitive verbs that lexicalize Manner in Turkmen. In example (h) above, Motion/Manner are conflated on the verb with an atelic interpretation. In (i), Motion/Path are conflated on the verb, allowing a telic interpretation. The distinction between the telic and atelic quality of the events described by various structures in Turkmen is illustrated again in examples (j) and (k).

<sup>3</sup> Unbounded or non goal-oriented

<sup>4</sup> Bounded or goal-oriented

- |     |        |               |                        |
|-----|--------|---------------|------------------------|
| (j) | balyk  | kanal – dan   | jYth – di              |
|     | Figure | Ground - Path | Motion + Manner - past |
|     | fish   | canal across  | swam                   |

The fish swam across the canal. (atelic)

- |     |        |              |                   |               |                      |
|-----|--------|--------------|-------------------|---------------|----------------------|
| (k) | balyk  | kanal – yng  | YstYn – den       | jYth-Yp       | git – di             |
|     | Figure | Ground - loc | Location - source | Manner – part | Motion + Path – past |
|     | fish   | canal        | through           | swimming      | went away            |

The fish went away from (undetermined location) swimming through the canal > The fish left, swimming across the canal. > The fish swam across the canal. (telic)

In (j) the conflation of Manner/Motion is used in conjunction with a case suffix indicating Path (source) on the Ground (kanal-dan). As in (h) above, this is an atelic structure in which it is understood that the swimming is an unbounded activity with no completion. In other words, in this construction, the fish has no particular goal in swimming across the canal; it is simply swimming randomly, perhaps most clearly translated in English as “The fish swam around in the canal.” However, the alternative telic construction represented in (k), in which there is conflation of Motion/Path with Manner indicated through the satellite participial form, conveys a situation in which the fish crossed to the opposite side of the canal, completing a bounded activity.<sup>5</sup>

Based on these examples, the TELIC variable appears to explain inconsistencies in the system. When an event is conceptualized as atelic (unbounded), conflation of Manner and Motion can occur on the verb. However, when an event is conceptualized as telic (bounded), Manner is relegated to the satellite and Path and Motion are conflated on the verb. Further investigation, however, suggested that the TELIC variable may not explain all such rogue structures.

In additional sentences, see examples (l) – (o) below, Turkmen appeared to allow conflation of Motion and Manner on the verb with the Path relegated to satellite position.

- |     |         |               |                        |
|-----|---------|---------------|------------------------|
| (l) | samolet | ashgabat – a  | ug – dy                |
|     | Figure  | Ground – Path | Motion + Manner – past |
|     | plane   | ashgabat – to | flew                   |

The plane flew to Ashgabat. (telic)

- |     |        |                            |                        |
|-----|--------|----------------------------|------------------------|
| (m) | gush   | ijmit – e                  | ug – dy                |
|     | Figure | Ground <sup>6</sup> – Path | Motion + Manner – past |
|     | bird   | food – to                  | flew                   |

The bird flew to the food. (telic)

<sup>5</sup> Interestingly, although no destination is specified in this construction, all the informants insisted that the telic interpretation was correct. Compare this with an explicit destination in the telic structure in (l) – (o) below.

<sup>6</sup> “Ground” in an abstract sense, in that the location of the food is the relevant position in relation to which the motion occurred.

(n)	adam Figure man	gam – a Ground – Path boat - to	jYth – di Motion + Manner – past swam
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The man swam to the boat. (telic)

(o)	balyk Figure fish	gam – a Ground – Path boat - to	jYth – di Motion + Manner – past swam
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The fish swam to the boat. (telic)

In these telic structures, Motion/Manner are conflated on the verb. Therefore, a variable other than TELIC must be identified to explain such patterns.

### *The FIGURE variable*

The TELIC variable initially appeared to explain the inconsistencies in the system, with atelic structures assumed to be the only structures allowing conflation of Motion/Manner. However, additional structures were discovered that, although conveying telic events (believed to be the context for conflation of Motion/Path on the verb), also allowed the conflation of Motion/Manner (l) – (o). The occurrence of these verb confluations without corresponding semantic alternatives (cp. (h) and (i) with (j) and (k) respectively) suggested that while the TELIC variable explains some inconsistencies in the verb system, there must be additional variables affecting conflation patterns. In fact, further examples forced consideration of semantic features of the FIGURE in relation to the Manner of Motion as influencing the conflation patterns.

The events in (p) – (r) are telic; based on Aske's theory, and on the previous examples in this paper, it would be predicted that in a verb-framed language such as Turkmen, Path would be coded on the verb. However, while Path is coded on the verb in (p), Manner is coded on the verb in (q) – (r).

(p)	adam Figure the man	ashgabat – a Ground - goal ashgabat – to	ug – up Manner flying	git - di Motion + Path – past went + away from
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The man left to Ashgabat flying > The man flew to Ashgabat.

(q)	samolet Figure the plane	ashgabat – a Ground – goal ashgabat – to	ug – dy Motion + Manner – past flew
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The plane flew to Ashgabat.

(r)	gush Figure the bird	ijmit – e Ground – goal food – to	ug – dy Motion + Manner – past flew
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The bird flew to the food.

The question now arises as to what might explain such a variation in conflation of Manner/ Motion in a verb-framed language in examples such as (p) and (q). Whereas Aske's TELIC variable allows conflation of Manner/Motion in atelic events, it does not explain the dissimilarity in conflation patterns in (p) and (q), in sentences that are, with the exception of the Figure, identical in meaning.

One possibility for explaining such an inconsistency is the semantic content of the Figure in relation to the Motion/Manner of the event. In Turkmen, the association between Figure and Manner of Motion seems to rely on literal interpretation, contrasting with relationships in a system such as English. For example, while it is perfectly acceptable to say "The man **flew** to New York" in the same way as one can say "The plane **flew** to New York," in English (with the understanding that this does not imply that the man got to New York under his own power but as a metaphorical extension of the craft which transported him) the statement in (r) demonstrates that such a construction is unacceptable in Turkmen. In other words, while planes and birds may **fly** in Turkmen, people do not.

The conflation of elements, such as Manner, appears to be affected, then, by the relationship between the Figure and Manner of Motion in an event. Specific manners of motion may be uniquely associated with certain figures. This is not to suggest that Figure is conflated in the verb in Talmy's terms. Rather, it is proposed that Manner verbs in verb-framed languages, because of the dominant pattern conflating Motion/Path and the subsequent development of a rich inventory of such verbs (see discussion in Naigles and Terrazos 1998), do not generalize to usage with Figures other than those for whom they express the main or unique Manner of Motion. Note, for example, that while a man may not fly, as in (r), he can swim, (s).

(s)	adam	gam – a	jYth – di
	Figure	Ground - goal	Motion + Manner – past
	the man	boat – to	swam

The man swam to the boat.

In both (r) and (s), the events are telic, yet the conflation patterns do not match. This discrepancy requires explanation beyond that contained in a telic analysis. Therefore, it is proposed that the FIGURE in relation to the Manner of Motion in an event may need to be added to the list of variables considered as impacting conflation patterns.

### Conclusions

The possibility that the association of Figure and Manner of Motion affects the conflation patterns within a language raises some interesting issues. For example, Manner may possess qualities that make it unique to certain figures in a way that is not relevant for Path. In other words, while Figures, animate or inanimate, can be described as moving in a given direction, only certain Figures can be described as moving in a particular Manner. Furthermore, the degree to which Figures are core members of a group acting in a given manner may be reflected in the conflation pattern used in relevant structures.

Therefore, the lexicalization of concepts in a language could be predicted on the basis of the primary frame of its verb system.

In addition, although this is merely an intuitive supposition at this point, this type of interaction between the semantics of Figure and Manner might have implications for cross-linguistic prototype theory. In other words, if a language that is verb-framed reserves conflation of Manner only for specific Figures, one could posit that the creation of prototype groupings in the language might be affected. For example, if, as it seems is the case in Turkmen, the Manner of Motion involved in flying is restricted to use with birds and planes (more data is needed to establish the Manner of Motion of balloons, dirigibles, etc.), the prototypical category “bird” might be more closely tied to “flight” than in other languages, with this characteristic serving as a bounding element in establishing the periphery of the category. On the other hand, metaphoricalization of the verb “fly” in English, for example, might have a bleaching effect so that the periphery of the category “bird” might be drawn on characteristics other than “flight.”

Yet another area in which the framing system might have ramifications is the passive construction. In Turkmen, the causative transitive “fly” (as in “to pilot”) is lexicalized differently than is its intransitive counterpart. The construction “samolet cyrmek” (plane to drive > to drive a plane) is used. Therefore, while it is possible to say that “A plane flew to Ashgabat,” it is not possible to say, as in English, “He flew a plane to Ashgabat” or, as in the object-passive construction, “The plane was flown to Ashgabat.” Rather, the expression “He went to Ashgabat driving the plane” must be substituted. It is unclear at this stage what the exact ramifications of the passive construction may be, but it seems only logical that a difference in framing systems must inevitably lead to a variation in passive structuring as well.

Finally, the relationship between lexicalization and cognition may be clarified by the framework and its underlying assumptions. The potential for learning to express such events in languages with different framing systems has been contrasted in Korean and Spanish by Choi and Bowerman (1991). They point out that while both Korean and Spanish are verb-framed languages, Korean, unlike Spanish, encodes Motion in the inflected “full” verb and Path/Manner in pre-final verbs. Having just encountered this additional analysis of the verb system, I am not prepared to determine the relevance it might have for explanation of the Turkmen system or for cross-linguistic analysis in general. However, Choi and Bowerman (1991) suggest that lexicalization patterns have ramifications for learning to express these events in various languages and might even provide insight into the relationship between nonlinguistic and linguistic spatial cognition.

In future research a more in-depth investigation of the Turkmen verb system will be pursued. As a pilot study, this paper has served to raise more questions than it has answered. In addition, the discovery of the Choi and Bowerman article provides yet another interpretation of Talmy’s system that merits consideration. The next step in the research series will be to review the variables proposed by authors investigating various languages in an attempt to consolidate them in relation to Talmy’s latest work. Subsequently, an extension of this original study will be pursued. Turkmen seems to be an excellent language for study as it exhibits characteristics of both Spanish and Korean systems of verb-framing. Following the conclusion of this background work, findings in

other languages can be reviewed and reanalyzed, yielding perhaps a more complex and comprehensive empirical framework.

Future research will also require investigation of Talmy's original "core schema" and "supporting relations" in Turkmen in light of other findings in the field. The primary approach to interpretation of verb systems has been to assume that core schema remain constant and lexicalization patterns vary. Another interpretation is that lexicalization patterns actually reflect the schematic cores of languages and these cores vary cross-linguistically. In this interpretation, then, English could be called a "Manner" language whereas Spanish, Korean and Turkmen would be termed "Path" languages.

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