



The Description of Motion in Tunisian Arabic: A Thinking-for-Speaking Approach*

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Motion event typology predicts that languages can be divided into either satellite-framed, verb-framed or serial-framed languages. However, an increasing number of studies show that languages within the same type predispose their speakers to describe motion events differently. Based on the narrative behavior of 15 native speakers, we provide evidence that suggests Tunisian Arabic (TA) is an untypical verb-framed language. On the one hand, TA conflates motion and path meanings in the main verb, and native speakers adhere to the boundary-crossing constraint. On the other hand, the availability of a rich manner verb lexicon combined with the availability of mono-verbal clauses ready to be coordinated *asyndetically*, encourages TA speakers to attend to the manner of motion more often than reported for a typical verb-framed language (e.g., Spanish). Based on these findings, we conclude that predictions based on motion event typology are best considered as guidelines, and not as an accurate reflection of how motion meanings may be lexicalized and expressed in individual languages.

Keywords: satellite-framed, verb-framed, Path, Manner, boundary-crossing

Introduction

Background: Motion Events in Grammar and Discourse

Dependent on where the semantic meaning of path versus manner of motion is encoded in a clause, Talmy (1985; 2000; 2007) proposed a typology.¹ Languages that conflate (i.e., fuse) the semantic meaning Path with motion in the main verb but leaves Manner to be coded onto adjuncts are categorized as verb-framed (henceforth: V-Language). Examples of V-languages include Romance languages, like Spanish and French, as well as Semitic languages, like Arabic and Hebrew (Talmy, 1985, pp. 113-114). However, languages that conflate Manner with Motion in the main verb, but leaves Path to be coded onto satellites (i.e., spatial particles like *into/out*) are satellite-framed (henceforth: S-language). Examples of these are Germanic languages like English, German, and Danish (Talmy, 1985, pp. 113-114).

Motivated by Talmy's (1985) grammatical typology, Berman and Slobin (1994) and Slobin (1996b) compared the verbal performances of speakers of different S- and V- languages. They concluded "typologies of

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¹ Semantic components will be glossed with an initial capital letter as follows: Manner, Path, Motion. However, the reference to word classes will be in lower case as follows: path verbs, manner verbs.

grammar have consequences for typologies of rhetoric” (Slobin, 1996b, p. 218).² According to Slobin (1996b), the way typical S- and V- language speakers describe motion events is influenced by their typological affiliation and can be reliably measured against the following parameters.

First, S-narratives differ from V-narratives in the number, quality, and types of manner verbs used to describe motion events. Typically, an S-language like English has more manner verbs than a V-language like Spanish (Slobin, 2004) and these S-language verbs are much more descriptive in terms of the quality of the manner meanings they encode. According to Slobin (1996b), the disparity concerning verb count has implications for how manner details are attended to in general. He postulated that when manner can be conflated with motion in obligatory constituents of a clause (i.e., the main verb), a degree of cognitive ease becomes the prerogative of speakers of this type of language. Conversely, when manner is “pushed out” of the main verb to be coded onto optional constituents (e.g., subordinate clauses and adjuncts), a cognitive load is incurred on V-language speakers. Presumably, this cognitive load would discourage V-language speakers from focusing on manner details overall (Slobin, 2000, p. 113).

Second, V- and S- language speakers respond differently to what Slobin and Hoiting (1994) called the boundary-crossing constraint. According to this hypothesis, V-language speakers do not usually describe the manner of motion using main verbs when a boundary is being crossed. For instance, where an owl emerges out of “a hole in a tree” in the storybook *Frog, Where Are You?* (Mayer, 1969), English speakers are reported to say “The owl flew out of the hole,” while Spanish speakers avoid describing the crossing of the boundary (Slobin, 2004, p. 226).

Clause-compacting (Talmy, 1985, p. 104) is the third parameter of variation between S- and V- languages. As example (1) illustrates that English licenses the use of a single verb and several prepositional phrases to describe one motion event. However, as example (2) shows to render an equivalent of the same utterance, a V-language like Spanish forces its speakers to insert a verb for each translocative event.³

(1) He went out of the house, into the garden, across the gate, and into the field.

(2) He went out of the house. Then, he walked to the garden. After that, he crossed the gate. Finally, he found himself in the field.

Following Talmy’s (1985) and Slobin’s (1996a; 1996b) proposals, a considerable amount of research into the typological status of individual languages and the narrative behavior of their respective speakers have emerged (e.g., Berman & Neeman, 1994 studied Hebrew; Sebastián & Slobin, 1994 for Spanish; Özçalışkan & Slobin, 1999 for Turkish; Wilkins, 2004 for Irerrante; Ibarretxe-Antuñano, 2004, 2009 for Basque; Cadierno, 2010 for Danish; Cardini, 2010 for Italian; Oschsenbauer & Hickmann, 2010 for German; Feiz, 2011 for Persian; Yinglin & Hohenstein, 2014 for Mandarin Chinese). Despite this widespread interest, a prominent language like Arabic with its many varieties has not received the same attention. While insights into how the domain of motion is rendered in actual usage may be found in studies with lexicographic (Dana, 2013),

² Slobin’s discourse typology is also known as the thinking-for-speaking (TfS) hypothesis (Slobin, 1987; 1996a; 2000). In brief, the TfS hypothesis claims that habitual ways of fitting one’s thoughts into the linguistic forms of native languages develop into “habits of mind.” From this follows the prediction that S- and V- framed languages “train” their speakers to talk about motion events differently as a result of the different lexicalization patterns inherent in each language (Slobin, 1996b, pp. 88-89). Since this article does not focus on the influence of language on conceptualization, I refrain from using the technical term “thinking-for-speaking.” Instead, I use neutral expressions, like “verbal/discourse” and “behavior or habits.”

³ Slobin (1996b) claimed that adding more clauses to describe a motion event is cognitively taxing. This will encourage V-language speakers to focus on setting the scene where the event is taking place or the psychological state of the figure more than on the dynamics of motion and its manner (Özçalışkan & Slobin, 2003).

psycholinguistic (Stutterheim & Nüse, 2003), dialectological (Brustad, 2000) orientations, and the study of Arabic within Talmy's and Slobin's frameworks are scarce.⁴ In this article, we aim to fill this research gap by investigating one variety of Arabic, namely, Tunisian Arabic (TA).

The outline to this article is as follows. First, we provide a brief linguistic and sociolinguistic background to TA. Next, we explain our methodology. Then, we report on our findings, and last but not least, we discuss the status of TA within Talmy's typology and the implications of our findings for the TfS hypothesis.

Tunisian Arabic

Arabic is a Semitic language with many spoken varieties (Brustad, 2000), one of which, is Tunisian. According to Versteegh (1997), the similarities between Semitic languages are less controversial than those between Indo-European languages. Semitic languages tend to share many common features that mark them as Semitic.⁵ However, as Versteegh (1997, p. 11) claimed, Semitic languages are also characterized by individual variations mainly due to historical factors (e.g., migration and contact with a variety of other languages). Tunisian Arabic, for instance, has been subject to Berber and French language influences (Versteegh, 1997, p. 198).

Versteegh has described the linguistic situation in Tunisia as diglossia. Diglossia refers to a linguistic situation where two or more languages co-exist, usually with a division of labor (Ferguson, 1959). In Tunisia, Modern Standard Arabic and French are prestige languages used in education, the media, and bureaucracy. TA is the language spoken in informal everyday situations and does not have a standard written form. Recently though, TA has grown to be accepted as the primary medium of chat shows and social networking (e.g., Facebook).

Methodology

Objectives and Hypotheses

In this study, we seek linguistic evidence to determine (a) how TA lexicalizes the semantic components Manner and Path, and (b) which aspects of a motion event are typically salient for TA speakers. Since TA is a Semitic language, it is expected to show characteristics of a typical V- language, namely:

- (a) Path is habitually lexicalized in the main verb.
- (b) The number of manner verbs is limited.
- (c) Types and quality of manner verbs should be quite basic.
- (d) Manner verbs are not used when describing boundary-crossing events.

(e) Narrators tend to focus on scene-setting rather than on the dynamics of movement because of a limited manner verb lexicon, the unavailability of clause-compacting strategies, and a comparatively limited number of spatial particles than narrators of an S-language, like English.

⁴ An anonymous reviewer has brought our attention to a paper presented by Saidi (2007) at the proceedings of *LingO*, which has addressed the typological status of Tunisian Arabic. Although the conclusion this paper has reached is marginally similar to the one offered in this article, the respective experimental designs of each study, the evidence, and the arguments each one presents are quantitatively and qualitatively different. Due to space limit, we will not comment further on the quality of the concerned article. However, suffice it to say that Saidi's analysis concerning TA is barely four pages long (i.e., 297-202) and that it suffers from several inconsistencies both in terms of the semantic analysis of the provided data and the conclusions which follow from them.

⁵ Versteegh (1997, p. 11) discussed several features: Triradicalism, the presence of emphatic/glottalized consonants, a special relationship between vowels and consonants, paratactic constructions, a verbal system with a prefix and suffix conjugation and a large number of lexical correspondences

Participants

The participants in this study are 15 Tunisian adults. They were recruited using convenience sampling. They divide into 10 males and five females, aged between 17 and 57.⁶

Material, Data Collection, and Coding

In line with Berman and Slobin (1994), we used the children story *Frog, Where Are You?* (Mayer, 1969) to elicit responses. The booklet consists of 24 wordless pictures about a boy who has lost his pet frog and went on a search journey till he has found it.⁷ The plot of the story contains several twists and turns of events, which make it possible to elicit suitable data for the investigation of spatial categories (Slobin, 1996b, p. 197). We asked our subjects to leaf through the booklet first, so they get an overall idea about the plot. Then, we record them as they page through the pictures and verbalize their narratives.

Since, clauses make it possible to assess how many predications are packed together in a single event in the different narratives (Berman & Slobin, 1994, p. 26); we have used the clause as the minimum unit of our analysis. A clause is “any unit containing a unified predication, whether in the form of a verb or adjective” (Berman & Slobin, 1994, p. 26). In this sense, a mono-lexemic utterance like ‘*hbat*’ ‘(he) climbed down’ or an attribute like ‘*ḫaiḫ*’, and ‘(he) was scared’ are considered clauses. Being a pro-drop language, no overt forms for the subject pronoun “he” and the copular verb “be” is needed in Tunisia Arabic.

Each clause is first transcribed (see Appendix 1 for Arabic phonetic sounds) and then given two ID codes one for the clause and one for the respondent. The prefix of the ID consists of four elements and specifies the subject ID (a, b, c, etc.), nationality, age, and gender. The data portion of the ID specifies the utterance number and the picture he/she is describing. To illustrate, a code like [M-T-40-M/16-02] informs that the participant is identified as [M], a Tunisian, aged 40, and Male. The slant line introduces the data portion. It informs that the utterance is Number 16 in the narrative and that it describes the events in Picture 2 of the frog story.

Results

Path Verbs

As predicted for V-languages, the collected data show that path information is usually lexicalized in the main verb. Motion verbs expressing acts of “entering” and “exiting” bounded spaces tend to be mono-lexemic.⁸ All 15 subjects used either *dxal* ‘enter’ or *xraʒ/tʔaʕ* ‘exit.’ These are path verbs that do not express any manner information. Similarly, for “upward” and “downward” motion, all subjects have consistently used the verb *tʔaʕ* ‘ascend’ to express an ascending motion; *hbat*^f ‘descend’ for acts of descending motion. A full list of these verbs is presented in Table 1.

⁶ As far as we are aware, the grammatical category gender has not been reported to be a viable variable in motion event typology research; hence why, the number of female and male participants has been randomized here.

⁷ Due to copy right issues, we cannot share the pictures of the story. Free, online access is available at: <https://uk.search.yahoo.com/search?fr=mcafee&type=C211GB91020D20140517&p=pictures+of+the+frog+where+are+you&guccounter=1>

⁸ Motion verbs are translated into their Latin-derived equivalents to preserve their mono-lexemic status as in the language of origin. For instance, *yataʕ* and *yahbit*^f are translated into the Latinate ‘ascend’ and ‘descend’ respectively rather than the colloquial English verbs “climb up” and “climb down.”

Table 1

Path verbs in TA Narratives

TA	English gloss
<i>xraʒ</i>	'exit'
<i>tʔaʃ</i>	'exit'
<i>hbatʃ</i>	'descend'
<i>tebbaʃ</i>	'follow'
<i>rawwah</i>	'return home'
<i>ðʔhor</i>	'appear'
<i>rʒaʃ</i>	'go back'
<i>faqq</i>	'traverse'
<i>qasʃ</i>	'cross'
<i>da:r</i>	'circle/go around'
<i>lhaq</i>	'join (someone)'
<i>xlat</i>	'join (someone)'
<i>wsʔill</i>	'arrive/reach'
<i>bʔid</i>	'distance.oneself' (from someone)
<i>qa:m</i>	'get.up'
<i>na:ðʃ(z)</i>	'get.up' (physically)

Note. (z) = Zeramdine indicates that this verb is unique to the dialect spoken in that town.

Table 1 shows 17 path verbs elicited from the TA frog stories. Motion activities depicting general direction of movement in space (e.g., returning, crossing, arriving, reaching a destination, catching up with someone) have been consistently described with mono-lexemic verbs. The verbs in Table 1 confirm that TA speakers use mono-lexemic path verbs that express path/direction information but no manner.

Boundary-Crossing

The frog story has at least three identifiable “exit” scenes where a spatial boundary is crossed. These are scenes where the frog, a gopher, and an owl move from an enclosed boundary (i.e., a jar, a hole in the ground, and a hole in a tree, respectively). Whether TA speakers opt for [manner verb + spatial particle] constructions or bare verbs with inherent meaning of “exiting” is what we are interested in here.

The results summarized in Figure 2 show only one of the participants used a manner verb plus a satellite to describe boundary-crossing events. Ninety-seven point forty-three percent of all the participants used path verbs either in their bare forms or accompanied with prepositional phrases. More precisely, 43.58% have used bare path verbs, and 35.89% have used prepositional phrases headed by the preposition *min* ‘from’ when indicating the source of motion. Only one case has been recorded where the subject has used a bare manner verb (2.56%) and only three instances (7.69%) with a bare manner verb (e.g., *ðebb* ‘jump,’ *nağğʔz* ‘jump,’ and *fʒaʃ* ‘escape’) and a from-type prepositional phrase:

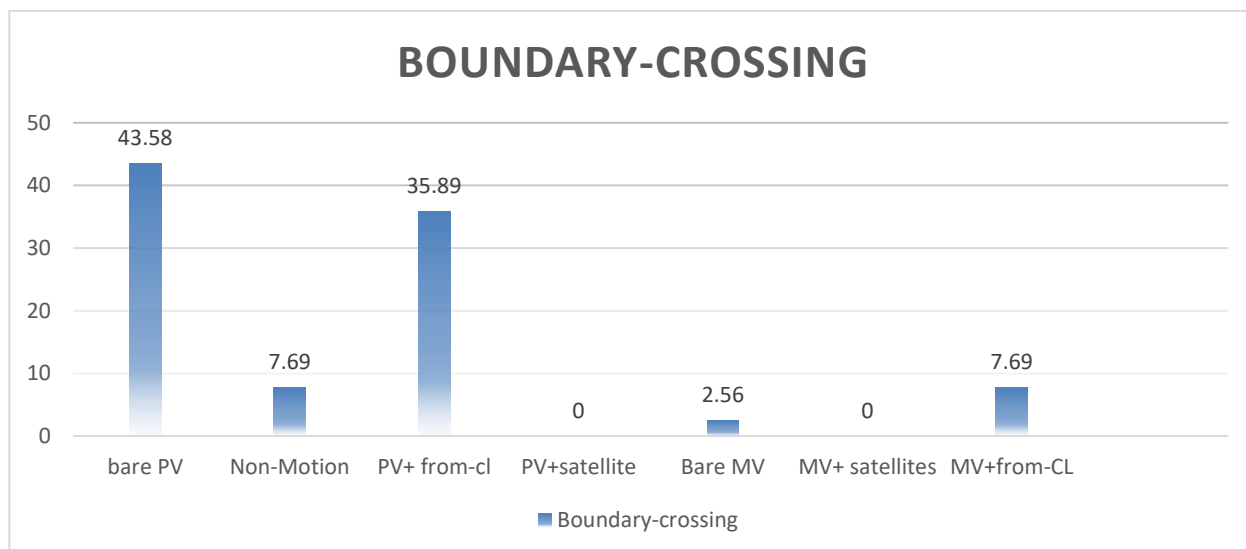


Figure 1. Boundary-crossing in TA (PV = Path Verb; MV = Manner Verb; from-cl = from clause).

Slobin's predictions for the expression of boundary-crossing events, therefore seem to materialize. The total number of verbs used to describe these exiting scenes are limited to just five types: *ṭaʕ* 'exit,' *xraʒ* 'exit,' *naġġiz*, *ḍebb* 'jump,' *ʒé*: 'arrive.' Moreover, on three occasions, the non-motion verbs *ṭal* 'look(at)' and *lqa* 'find' have been used to describe the sudden appearance of the gopher and the owl, respectively. Consequently, the conflation of Path with Motion in the main verb, together with the lack of manner expressions in boundary-crossing situations using single clauses, act as a second evidence that TA belongs to the V-framed language type. However, deeper analysis of this data also shows that the current participants capitalize on various lexical, morpho-syntactic, and discourse features that enable them to override expected typological inhibitions when the dynamics of movement and its manner are in focus.

Manner Verbs

According to Talmy (1985), V-languages tend to have fewer manner verbs than S-languages and Slobin suggests that even "V-language use engenders a habitual rhetorical style in which Manner is not highly salient" (2004, p. 257). However, as Table 2 shows, in this study the Tunisian participants have used a total of 28 manner verbs:

Table 2

Manner Verbs in TA Narratives

TA	English gloss
<i>naġġiz</i>	'jumped'
<i>ḍebb</i>	'jumped'
<i>qfiʒ</i>	'jumped'
<i>tsalliq</i>	'climbed'
<i>tʔaʕ</i>	'climbed'
<i>mʕé</i>	'walked'
<i>rkib</i>	'rode/got on'
<i>ʒraé</i>	'ran'
<i>tʔa:r</i>	'flew'

(Table 2 continued)

TA	English gloss
<i>hrab</i>	'ran.off'
<i>ʕa:m</i>	'swam'
<i>ħbis</i>	'stopped firmly'
<i>darrig</i>	'hid' ⁹
<i>tʕāħ</i>	'fell'
<i>whil</i>	'got.stuck' ¹⁰
<i>zriff</i>	'squeezed in/past quickly'
<i>zriġ</i>	'appeared suddenly (popped.out),' usually associated with undesirable animals, like snakes
<i>txattil</i>	'walked slowly'
<i>daʕṭir</i>	'stumbled'
<i>srah</i>	'roamed' (for animals)
<i>takka</i>	'leaned on/laid down'
<i>lhim</i>	'attacked' by consuming an entity, like fire does to objects
<i>héz</i>	'attacked' by overwhelming and overpowering the victim
<i>tsayyib</i> (<i>ʕli:h</i>)	'released'/or free oneself to wage an attack
<i>tʕāʕbiʕ</i>	'climbed with increasing difficulty'
<i>telbiʕ</i>	'climbed with difficulty'
<i>tfarrit</i>	'dispersed'
<i>fʕaʕ</i>	'escaped fast'

What is interesting about the motion verbs listed in Table 2 is that they show both basic and fine grained manner meanings. Meanings that are basic to the verb tend to describe semantically prototypical acts of “walking,” “jumping,” “running,” “escaping,” “flying,” “stopping,” and “climbing.” To take one example, consider the path verb *tʕāʕ* ‘exit.’ Participants in this study have also used several tokens of this type. The verb *zriġ*, for instance, expresses a sudden and unexpected appearance of some creatures. Similarly, the verb *zriff* implies an unprecedented, swift movement of some figure resulting in “squeezing” past an obstacle (e.g., a door or a narrow opening). Both these verbs have been used to describe the sudden emergence of the owl from the hole in the tree.

Equally compelling is that manner verbs in this data differ in their types and tokens from those reported on for Spanish (Slobin, 1996a) and for Basque (Ibarretxe-Antuñano, 2004). For instance, Table 2 shows that the semantic category of [ATTACK via MOTION] has more verb types than any other verb in this data.¹¹ As well as the idiomatic expression *zré fi: zurtu:* ‘run in his footsteps,’ the participants described the attack waged by the bees on the dog and the owl utilizing the manner verbs *tsayyib*, *héz*, and *lhim* as follows:

⁹ An anonymous reviewer has raised concerns about the classification of this verb as a motion verb. However, it is important to remember that within the current framework a motion event describes both motion (e.g., roll) and stasis (lay) as follows (Talmy, 1985, p. 61):

a. The pencil lay on the table.

b. The pencil rolled off the table. However, see footnote 8.

¹⁰ See footnote 6.

¹¹ An objection may be raised that “attack” verbs may not be manner verbs (i.e., a point raised by a unanimous reviewer). However, where the participants have consistently used subtypes of manner verbs to describe various figures moving in on the boy to attack him, the category [ATTACK via MOTION] becomes validated. This is reminiscent of the verb category [sound-emission via motion] and Path of Vision (see Levin, 1993; Talmy, 1985; Slobin, 2009).

- (4) *L.kelb t.sayyb.it l.manħla*
 ART.d REFL-release-3PL.F.PF ART.hive
 ‘The dog was attacked by the hive.’ [M-T-57-F]

The verb *tsayyib*, when conjoined with the preposition *ħá* ‘on,’ depicts a scenario where a caged animal broke free and waged an attack. Similarly, the verb *ħáj* in extract (5) describes an agent who was calm, became enraged, and made a move on the victim:

- (5) *T^šaħit ħák l.bi:t mtaħ in.nħal w ħáz ħi:h*
 Fall-3SG.F.PRF that ART.hive of ART.bees CONJ swarm-3SG.M.PRF on.him
 ‘The beehive fell down.’ ‘And [the bees] swarmed him.’ [E-T-50-M]

Still, within the semantics of [ATTACK via MOTION], the mono-lexemic verb *ħim* has been used to describe two different “attack scenes”: when the bees swarmed the dog and also when the owl “swooped” over the boy. Usually, the verb *ħim* is used to describe fire. When a fire is said to *liħmit*, it means that the fire “gets more and more fierce”. In example (6), subject [I] describes the bees’ attack on the dog to a fire surrounding and consuming an object, i.e., overwhelming the dog:

- (6) *Lihmit fi:h in.ħnal*
 Swarm-3F.PRF In.3PR.SG.M ART.bees
 ‘(And the dog) was ravished (by the bees).’ [I-T-39-M]

Similarly, in example (7), the verb *ħim* is used by subject [G] to describe the attack of the owl on the boy when it popped out of the hole:

- (7) *L.bouma liħm.it fi ħák lu.wllyed*
 ART.owl attack-3SG.F.PF in that ART.boy
 ‘The owl swarmed the boy.’ [G-T-40-M]

It is important to note that the number of manner verbs collected from this data far exceeds the number of manner verbs reported on for other V-framed languages. For instance, Slobin (1996b) reported nine manner verbs from Spanish frog story narratives, 31 for the English narratives. Similarly, Ibarretxe-Antuñano (2009) reported 11 manner verbs for Basque. A detailed comparison is provided in Table 3.

Table 3

A Comparison of Manner Verbs in Four Languages

Manner	English	Spanish	Basque	Tunisian
Type	31	9	11	28
Percentage	65%	30%	23%	63.63%

It is interesting that the manner verbs in TA make 63.63% of the total motion verb types as compared to 30% for Spanish, 23% for Basque, and 65% for English. What is equally significant is that the narrators in this study have used linguistic resources other than verbs to elaborate on Motion and its Manner. This is addressed in the next section.

Description of Manner beyond the Main Verb Slot

According to Slobin (2004), the relatively reduced attention to Manner information at the level of the verb is not compensated for by V-languages in extended narratives. In Slobin's view, adding more subordinate clauses, adjuncts, or other syntactic means to describe manner outside the main verb is dispreferred because it is cognitively demanding. Furthermore, he points out "even when considering alternative expressions of Manner, S-languages texts still show relatively greater attention to Manner, in both quantitative and qualitative terms" (Slobin, 2004, p. 232).

However, these predictions are not borne out. As well as the 28 manner verbs collected from the frog stories, the participants in this experiment used other linguistic strategies to elaborate the semantic component of Manner further. We have identified the following types:

(a) **Motion verbs + spatial particles.** On several occasions, the participants have used both path and manner verbs in conjunction with spatial particles. For instance, some subjects have used the path verbs *hbat* 'descend,' *tʃaʃ* 'ascend' with locative prepositions like *l.utʔa* 'to.down' and *l.fu:q* 'to.up' respectively, as in the following examples:

- (8) *Ki.wiqfit*¹² *i.ʃti:ba* *l.fu:q*
 When.stand-3SG.F.PF ART.deer to.up
 'When the deer stood up.' [F 37-M]

Equally interesting is that the locative preposition *l.fu:q* 'to.up' was also used with manner verbs to elaborate the path the jumping activity followed:

- (9) *Ynaǧǧiz* *l.fu:q* *bás* *y.habbaṭha* ¹³
 3SG.M-Jump-IPFV to.upward in.order.to 3SG.M.make.descend-IPFV.3F.POSS
 'He jumps up to bring it (the hive) down.' [M-57-T-F]

These constructions could well be likened to those typically used in S-languages. This hypothesis gains more momentum when we see the locative preposition *l.fu:q* 'to.up' is used with both *naǧǧiz* 'jump' (describing Manner of Motion) and *wquf* 'stand' (indicating a static location).

Besides, the locative expression *lutʔa* 'down' is used with both the verb *ta:h* 'fall' and *hbat*^f 'descend.' Introspective evidence supports this preliminary remark. For instance, as well as the locative preposition *l.fu:q* 'to.up,' the verb *ynaǧǧiz* 'jump' may combine with *l.barra* 'to.outside,' *l.daxil* 'to.inside,' or *lutʔa* 'to.own.'¹⁴ The use of these locative expressions seems to add more information about the jumping trajectory—namely whether the direction of the jump is horizontal, vertical, from inside a bounded space heading out or the other way round. In short, our participants have used locative particles with both path and manner verbs to fine-tune directional meanings.

¹² A unanimous reviewer has objected that *wquf* 'stand.up' may not be a manner of motion verb. However, see footnote 6 and 7.

¹³ It is important to note that a single word in TA texts amounts to a whole clause in English. For instance, the utterance *ynaǧǧiz* carries several grammatical morphemes. It indicates that the agent doing the jumping is male (M), third person singular (3SG). It also indicates that the action is taking place in the perfective aspect (PF).

¹⁴ *L.utʔa* 'to.down/ward' is ambiguous between direction and location. Where it is used with dynamic verbs of ascending/descending, *L.utʔa* receives a directional interpretation. However, a locative reading obtains when it accompanied with the locative verb like "sit" or "lie".

(b) Idiomatic expressions: Motion verbs + adjuncts. In extract (10), the participant describes the manner in which the frog escaped from the jar by describing it as literally “escaping with its skin” which may translate as “run for dear life”:

- (10) *Iz.ʒrana faʃʃit b.ʒild.hé*
 ART.frog escape-3SG.M.PRF with.skin.3SG.F.POSS
 ‘The frog ran for her life.’ [F-T-37-M].

The verb *fʃaʃ* ‘escape’ conflates Manner with Motion. It is further modified for manner using the prepositional phrase. While the verb *hrab* entails ‘ran off/escaped,’ the verb *fʃaʃ* implies escaping but with an added meaning of “breaking loose from something”. In this case, there is a tendency to picture the protagonist performing the act with a lot of swiftness.

In the following extract, another subject uses a prepositional phrase to add more manner information to the participle of the verb “escape.” The dog is not just “running off,” but it is described as running for its life because the bees are chasing it:

- (11) *Hârib b.ʒalluhu*
 Run.3SG.M.IPF with.life.3SG.M.POSS
 ‘He is running for his life.’ [F-T-40-M/108-15]

(c) Path verbs + gerunds. Manner information has also been described using gerund forms of motion verbs. In the following extract the verb “escape” has been modified with the verb “run” to yield the literal English equivalent of “He escaped running”:

- (12) *Hawna hrab yizri:*
 There ran.off-3SG.M.PRF 3SG.M-run-IPF
 ‘There he goes, running off for his life.’ [M-57-F]

(d) Path verbs + emphatic pronoun + verb-initial subordinate clauses. As well as the above strategies, subjects have also used manner constructions composed of two motion verbs intercepted by subject pronouns. For instance, in extract (13), the verb *tʃadda* ‘pass’ in the sense of “passing from one point to another,” has been modified by the verb *tkarbis* ‘roll’ to describe the manner in which the boy fell from the cliff when the deer stopped suddenly. The subject pronoun is used to mark a change from the deer as a topic to the boy. It is not required by the grammar since the verb *tʃadda* indicates that the subject is a male (third-person singular) and that the action has been completed. From a syntactic point of view, therefore the pronoun *huwa* is redundant:

- (13) *Tʃadda huwa yitkarbis*
 3SG.pass.M.PF 3SG.M.PR 3SG.M-roll-IPF
 ‘He [the boy] went tumbling down.’ [F-37-M]

The morpho-syntactic features listed in (a) through to (d) are supplemented by unique discourse features that seem to add further weight to the proposal that TA deviates from the V-language norm. The author develops this point presently.

Syndetic & Asyndetic Coordination in the Expression of Spatial Boundaries

A useful framework for the analysis of our data at a discourse level is the distinction between what Quirk and Greenbaum (1990, as cited in Brustad, 2000, p. 193) called syndetic and asyndetic coordination. Syndetic coordination refers to the use of an overt coordinating conjunction to signal the close association of two lexical items, phrases, or clauses. In asyndetic coordination, however, no coordinating conjunction is explicitly used. Armed with this distinction, we have analyzed our data to see how preponderant this syntactic feature is in the collected data and whether its use has any impact on the attention to manner especially in boundary-crossing situations. We found compelling evidence that, the use of both syndetic and asyndetic coordination, seems to encourage TA speakers to focus on the dynamics of motion and its manner. This is true across situations—boundary-crossings and otherwise.

To illustrate this point, in extract (14) the verb *hrab* ‘ran off’ is preceded by the verb *ʒil* ‘scared off.’ The verb *ʒil* is typically used for animals when they are “scared off.” It conflates motion meaning with a description of the emotional state that caused the deer to run off. The fact that no overt coordinating conjunction has been used between the two verb phrases/clauses projects a cause-and-effect relationship—the animal ran off because it got scared.

- (14) *Lahné li.ʒzel ʒil (.) hrab*
 Here ART.deer scare-3SG.M.ACC.PRF (.) ran.off-3SG.M.PRF
 ‘Here the deer got scared off.’ [A-44-M]

Importantly, the participants have treated boundary-crossing situations as if they take place in two stages. In stage one, the description takes the trajectory up to the borderline of an enclosed ground. In stage two, it takes the trajectory out of the enclosed boundary utilizing other clauses. We would like to propose that this rhetorical style is made easier because of the availability of asyndetic coordination on the one hand, and on the other hand, an entire clause in TA can be as small as a single lexeme. Extract (15) showcases even more the preponderance of this rhetorical style in this data:

- (15) *Tʕalʕit hæk l.bouma (.) tifʒaʕ tʕa:h*
 Exit-3SG.F.PRF that ART.owl (.) ACC-scare-3SG.M.PF fall-3SG.M.PF
 ‘That owl popped out and pushed the boy down onto the ground.’ [B-40-M]

Extract (15) contains three verb-initial clauses coordinated asyndetically. The motion activity is described up to the point where the boy was located through the verb *tʕalʕit*. Then, using an asyndetic verb-initial clause, the boy is described as having been scared, which causes him to fall off the tree. While this example acts as evidence that our participants have obeyed the boundary-crossing constraint at mono-verbal clauses, the stringing together of various clauses asyndetically seems to override this constraint. These linguistic strategies seem to have encouraged the participants to attend to manner details when they are least expected to do so.

Summary and Discussion

Analysis of 15 frog stories has yielded a total of 45 different motion verbs. These divide into 17 path verbs and 28 manner verbs. These results are significant because they show TA speakers have access to a substantial set of motion verbs. The significance of these results is even more appreciated when compared to a typical

S-language like English, a typical V-framed language like Spanish, and an untypical V-framed language like Basque. Table 4 compares findings from each language based on the number, type, and quality of motion verbs and the number of the source of the data for each language:

Table 4

Comparison of TA, English, Spanish, Basque Motion Verb Data

Languages	Total verbs	Type		Participants
		Path	Manner	
TA	45	17	28	13
English	47	16	31	148
Spanish	27	18	9	138
Basque	58	47	11	15

Table 4 reveals significant numbers. First, TA motion verbs almost match the English verbs and surpass the Spanish verbs. Second, the verb stocks in English and Spanish came from a significantly higher number of frog stories than the one collected here. Third, TA narratives produced almost many manner verbs as the English, and substantially more than both the Spanish and the Basque narratives. Note also that unlike Basque, TA narrators have used more manner verbs than path verbs. This suggests that even at the level of the lexicon, Manner is salient for the TA participants in this data.

It is also significant that specific semantic fields (i.e., [ATTACK via MOTION], [SUDDEN APPEARANCE] of a figure) seem to have more verb types than what has been reported in Berman and Slobin's (1994) data for English and Spanish. Although it is not known whether they counted such verbs as motion verbs, the current analysis suggests that attention to Manner versus Path may not only be influenced by morpho-syntactic and extra-linguistic factors (i.e., cultural or genre-related elements) but also seems to be domain-related (i.e., [ATTACK via MOTION]).

Crucially, Slobin's prediction for the boundary-constraint principle in typical V-language narratives materializes for the case of TA at mono-verbal clauses. However, there is also evidence that manner-saliency surface in other respects in TA. Rather than treating the crossing of boundaries as a single event (as is the case of English), TA narrators tend to treat them as two-tiered events expressing the cause and effect of motion. The use of syntactically separate yet semantically/conceptually bonded verb-initial clauses describing the cause of motion and its result in boundary-crossing scenes is preponderant in this data.

One direct implication of the findings reported on here relates to Slobin's (2000, p. 113) and Özçalışkan and Slobin's (2003, p. 259) claimed that compensating for Manner using different clauses adds cognitive load to processing. This cognitive "cost," they argue, acts as a psychological deterrent in that it re-directs attention towards scene-setting or the psychological state of the figure, rather than towards dynamics of movement and the description of Manner. However, the verbal behavior of the participants in this study suggests that this is not the case. The participants have used different manner and path verbs, motion-based idiomatic expressions, adjuncts, and emphatic pronouns at a bi-clausal level, to elaborate the dynamics of movement and its manner. The availability of syndetic and asyndetic coordination is—to the best of my knowledge—a prerogative of spoken varieties of Arabic that has neither been reported for other V-framed languages nor has been explicitly discussed with reference to motion event discourse typology. Consequently, the association of cognitive ease with the lack of clause-compacting strategies purported to be viable for languages, like Spanish and Turkish, does not seem to hold for the participants in this study. We would like to suggest that the expression of manner

using asyndetic coordination does not seem to exert any additional cognitive cost as Slobin (2000, p. 113) suggests. While this proposal is purely intuitive, it is a worthy observation and future research might want to explore its psychological validity.

Conclusion

Slobin (1996, p. 214) noted that “typologies leak” and the evidence reported in this study may be considered as a testimony to that. The linguistic and narrative evidence reported on in this study encourages the conclusion that TA is best thought of as an atypical member of the verb-framed group. Predictions based on Talmy’s grammatical typology and Slobin’s discourse typology are best considered as guidelines, and not as an accurate reflection of how motion events may be conceptualized and expressed in individual languages.

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Appendix 1: Arabic phonetic sounds

(Adapted from: https://en.wikipedia.org/wiki/Romanization_of_Arabic)

Name	IPA
hamzah	ʔ
<i>alif</i>	a:
<i>bā'</i>	b
<i>tā'</i>	t
<i>thā'</i>	θ
<i>jīm</i>	ʒ
<i>hā'</i>	ħ
<i>khā'</i>	x
<i>dāl</i>	d
<i>dhal</i>	ð
<i>rā'</i>	r
<i>zayn/zāy</i>	z
<i>sīm</i>	s
<i>ṣād</i>	s ^ʕ
<i>ḍād</i>	d ^ʕ
<i>ṭā'</i>	t ^ʕ
<i>ẓā'</i>	ð ^ʕ ~ z ^ʕ
<i>ʿayn</i>	ʕ
<i>ghayn</i>	ɣ
<i>fā'</i>	f
<i>qāf</i>	q
<i>kāf</i>	k
<i>lām</i>	l
<i>mīm</i>	m
<i>nūn</i>	n
<i>hā'</i>	h
<i>wāw</i>	w, u:
<i>yā'</i>	j, i:
<i>alif maddah</i>	ʔ a:
<i>tā' marbūṭah</i>	a, at
<i>alif lām</i>	(var.)

Appendix 2: Typographic conventions and abbreviations

MOTION	Semantic notions, initial capital letter e.g. Path, Manner, Cause, Figure, Ground
[ATTACK]	Semantic fields, in brackets and SMALL CAPS e.g., [ATTACK] [SUDDEN APPEARANCE]
'runs'	glosses of foreign texts in inverted commas
<i>yiʒri:w</i> :	Phonemic transcription of foreign texts in <i>italics</i> Colon indicates a long vowel (underlined here but not in the main text). e.g., <i>yiʒri:w</i>
(is) English	Parentheses in glosses indicate a category that is normally coded in English but is not in Tunisian Arabic. A case in point is the copular verb <i>be</i> : <i>xaif</i> <i>l.iʒzel</i> (is).scared ART.deer 'The deer is scared'
1/2/3	First-/Second-/Third-person
ART	Article (definite)
ACC	Accusative
CONJ	Conjunction
F	Feminine
IPF	Imperfect aspect
M	Masculine
(.)	Short pause
.	Marks a morphological boundary between the root and the affixes that may attach to it because of assimilation processes in speech production
PF	Perfect aspect
PL	Plural
POSS	Possessive
REFL	Reflexive (<i>sayyib</i> 'to release'; <i>tsayyibit ʕli:h</i> 'release oneself')
SG	Singular
TA	Tunisian Arabic
TfS	Thinking for Speaking