A STUDY OF MOTION EVENTS IN TURKISH STORY BOOKS FOR 7 TO 11 YEAR-OLDS

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Abstract

The aim of this study is to examine the use of motion events in selected Turkish story books designed for 7 to 11 year-olds. 8 Turkish story books were selected and 223 sentences related to motion events were investigated. All the "Path", "Manner", and "Deixis" verbs used in the stories are examined and the metaphoric sentences are also noted. "Path" was found to be more silent and frequently used among others. Although the verb types of "Deixis" are low, the tokens are more than any of the "Path" or "Manner" verbs. Also, it seems that "rapid Manner verbs" can be used solely without "Path" or "Deixis" verbs, which suggests that "Path" may not be essential in motion events. Finally in this study, more than one fourth of the sentences were found metaphoric, which indicates the ability to comprehend basic metaphors such as time may be already developed before 7.

Key Words: *Motion Events, Turkish, Path, Manner, Deixis, Co-events, Language Acquisition, Early Childhood*

Öz

7-11 Yaş Türkçe Çocuk Kitaplarında Hareket Olayları Üzerine bir Çalışma

Bu çalışmanın amacı, Türkçe hikaye kitaplarının içinde bulunan hareket bildiren olayları incelemektir. Hareket bildiren eylemlerin kullanımsal düzlemlerinin betimlenmesi amacından hareketle, nitel ve nicel gözlemler yapılabilmesi için 7-11 yaş çocukları için tasarlanmış 8 Türkçe hikaye kitabı seçilmiştir. Kitap içeriklerindeki hareket bildiren 223 tümce çözümlenmiştir. Hikayelerin içinde kullanılan bütün "yol", "tavır" ve "gösterim" eylemleri ve eğretilemeli tümceler de çalışma kapsamına alınmıştır. "Yol" eylemlerinin diğer eylemlere göre daha baskın olduğu ve sıklıklarının daha yüksek olduğu görünmektedir. Gösterim eylemlerinin ise türü az olmasına rağmen "yol" ve "tavır" eylemlerine göre daha çok kullanıldığı

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görülmektedir. Ayrıca bu çalışmada "hızlı tavır" eylemlerinin bağımsız olarak kullanılabildiği saptanmış ve bu gözleme dayalı olarak da "yol" ve "gösterim" eylemleriyle birlikte olmak gereksiniminin olmadığı sonucuna da ulaşılmıştır. Son olarak, veri tabanında bulunan tümcelerin %25'inde eğretileme kullanılmış olması bulgusundan hareketle, zaman gibi basit eğretilemelerin çok erken dönemde anlamlandırılmaya başladığını da söylemek olasıdır.

Anahtar Sözcükleri: *Hareket Olayları, Türkçe, Yol, Tavır, Gösterim, Ortak-olaylar, dil edinimi, Erken Çocukluk Dönemi*

1. Introduction

1.1 Language and Thought

Whether language influences thought or thought influences language has long been discussed. While Chomskian believes that language device is universal, Sapir-Whorfian thinks people who speaks different languages view the world differently(Gentner and Goldin-Meadow 4, 5). Cognitive studies show that our conceptual structure arises from embodied experience (Evans and Green 233; Taylor 9). Our interaction with the world forms the conceptual structure, which is therefore reflected on semantic structure. However, it may not be true that all human beings "think" in the same way because of the same embodied experience. Language itself may also help us to form spatial representations. Speakers of different languages may convey different information for a single scene. A well known example is that some languages like Turkish indicates if an event is heard of witnessed but some languages like English don't. Language structure may therefore direct our use of language as a habitual pattern. Slobin's thinking-for-speaking hypothesis suggests that language influence thought when one is thinking with the intent to use language, indicating that thought could be separated as linguistic and non-linguistic (71).

Space is of interest in recent studies because all animals have some extent of spatial sense of their location, and spatial domain is also considered to be one of the most basic domain (Bowerman 387). However, although human beings perceive the world in the same way, it is suggested that prelinguistic infants can already form spatial schemas such as containment and support ((Evans and Green 46). Choi and Bowerman also suggest the different categorization of spatial verbs in Korean and English (88). Recent findings showed that infants of 18 months who had acquired spatial words paid more attention to spatial relationships, which indicates a correlation between spatial particles acquired and visual attention (Casasola and

Bhagwat 9). It may lead us to the conclusion that although human beings all have the same biological basis, language use can be different and may direct our attention in a different way.

1.2 Motion Events

Despite language reflects conceptual structure, the habitual patterns of language use may also be constraints. Talmy suggested that semantic elements such as Path, Manner, Figure, Ground, and cause can be separated from surface expression and different language users have different tendencies to describe motion events (21). Followed by Talmy's assumption, motion events have been studied in the recent decade. Talmy suggested that a motion event consists of an object (the Figure) with respect to another object (the Ground). The Figure may move with different Manners (i.e. *roll, fly, run, walk*) along different Paths (i.e. *in, out, on, down*). A motion event can also be stationary (i.e. *The phone lay on the desk*). According to his example, a Figure (*The pencil*) is located in a Manner (*lay*) along a Path (*on*) with respect to the Ground(*the table*) (26).

The study of motion events is surrounded with verb roots. The main discussion is on the conflation of Motion+Co-event and Motion+Path. Talmy suggested a verb root pattern that expresses motion and a co-event together in one verb root. Motion+Manner and Motion+Cause are the usually seen examples (29). According to Talmy, a sentence like *I ran down the stairs* can be destructed as *[I **WENT** down the stairs] WITH-THE-MANNER-OF [I ran]*. A sentence like *the rock rolled down the hill* can be seen as *[the rock **MOVED** down the hill] WITH-THE-MANNER-OF [the rock rolled]*. In other main verb root patterns of Motion+Path, conflated semantic elements in Spanish such as moved-in, moved-out, moved-by, moved-through, moved-up, moved-down, moved-away, moved-back, moved-around, moved-across, moved-along, moved-about, moved-together, moved-apart, moved-ahead/forward, moved-in the reverse direction, moved-closer(approach), moved-to the point of(arrive at), moved-along after(follow) are the examples (49).

1.3 Motion Events and Typology

Recent studies show that whether verbs combine with Manner or Path may influence the rhetical expressions, gestures during speech, and even second language acquisition(SLA) between languages (Talmy 21; Özçalışkan 14; Choi and Bowerman, 109; Brown and Chen 622; Spring and Horie 705; Chen and Guo 1761). Studies continue with the discussion of the dichotomy of motion events: the satellite (S. Languages) and the verb-framed (V. Languages) (Slobin 2; Bylund and Athanaspopoulos 3).

That is when a S. Language speaker uses a Manner verb (i.e. *run*) and a particle (i.e. *up*) to describe a motion event, a V. Language speaker uses a Path verb (i.e. French *monter*) solely more frequently. According to Talmy, examples of satellite languages are English, Germanic languages, Chinese, Russian, etc; verb-framed languages are like Romance, Japanese, Polynesian, Turkish, etc (60).

Researches followed by Talmy showed the possibility of other categorization beyond S. and V. languages. Slobin proposed languages in the world represented as a continuum of Manner salience rather than the dichotomy propose (8). Choi and Bowerman also suggested Korean as a conflated language of Manner, Path, and Deixis (94). As the explanation of Choi and Bowerman, it is common for Korean speakers to combine Manner, Path, and Deixis in a single clause, in which all the Manner, Path, and Deixis are represented as verbs. Chinese also shows a similar structure as Korean (Chen and Guo 1755). The different semantic structures from S. and V. languages therefore falls in the third group called equipollently-framed language (E. Languages) (Slobin 9).

Slobin suggests that the lexicon of Manner verbs are richer in S. Languages (12). Özçalışkan also proved that English lexicon indeed consists of dominatly more Manner types and tokens than Turkish. When shown with pictures of boundary crossing events, while Turkish speakers preferred Path verbs (e.g., *he <u>entered</u> the house, he <u>exited</u> the house*), English speakers used more Manner verbs (e.g., *he <u>crawled</u> in the house, he <u>dashed</u> out of the house*) instead (8). Besides, because of the lexical structure of Turkish prevents users to use Manner in a single simple clause, a high proportion of Turkish users convey Manner with separated sentences or subordinated clauses. According to Özçalışkan's findings, Turkish speakers use more Manner expressions in temporally extended boundary crossing events (*run into, tumble into, crawl into, fly out, creep out, crawl over*) than sudden ones (*dive into, leap over, flip over, jump over, dash out, sneak* out). It seems that Manner verbs may have different patterns depending on the semantic contents (14).

As Slobin and Özçalışkan found, Gentner and Goldin-Meadow also found that S. Languages have more Manner verbs types. She found that when asked to list motion verbs, English speakers tend to list more Manner verbs (87%) and of 107 Manner verb types.[1] Therefore she suggests that

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[1] They are *amble, barge, bike, bounce, bound, canter, caravan, careen, charge, chase, climb, coast, crawl, creep, dance, dart, dash, dawdle, dive, drag, drift, drive, edge, fall, flit, flitter, float, fly, gallop, glide, hike, hop, hurry, inch, jaunt, jet, jog, jump, leap, limp, lollygag, lope, march, meander, mosey, pace, pedal, plod, pony, prance, promenade, race,*

Manner verbs are easier to access for S. Language users. She also examined motion events in novels in Spanish, Turkish, English, and Russian. In the study, Manner verbs in English (41%) and Russian (56%) novels are used more than it in Turkish (21%) and Spanish (19%). She concludes that S. Language writers give more information to readers than V. Language Users (167).

1.4 Motion Events in Early Language Acquisition

The distinction of description style is also found in early language acquisition (Choi and Bowerman 109) The finding of Choi and Bowerman showed later acquisition of motion events by Korean-speaking children because of the constraints of semantic structure than English-speaking children while English-speaking children begin producing motion events through verb particles early by the age of 2. In a recent study, Shanley Allen and her colleagues researched in Turkish, English, and Japanese children of the mean age 3;8 on motion events with salient Manner and Path (40). The result showed both universal and language specific influence early before 4 years old. According to their finding, children at the late age of 3 have already developed conceptual construction related to space and have shown the ability to map subtle semantic structures as adults. Chouinard and Mucetti also found that English speaking children before 7 use more Manner verbs (*bump, chase, climb, crawl, creep, dance, float, flop, fly, hike, hop, jog, jump, march, paddle, pounce, race, roll, run, rush, scoot, skip, slide, slip, sneak, step, swim, tread, trip, trot, walk and wiggle*) compared to the children who speak Spanish, French, or Italian (climb, dance, fly, jump, run, swim, walk) (qtd. in Gentner and Goldin-Meadow 169)

Options of linguistic devices can also provide language users conventional structures for motion events description. Studies have shown that children can produce adult like structure when encoding Path and Manner in their speech at least from three years old (Hickmann, Taranne and Bonnet 735; Ochsenbauer and Hickmann 231). They encode Path and Manner together, or Path or Manner only. They also showed that although Manner+Path structures are available in French, French speaking children express Path alone more often than S. language children do (i.e. German and English). In their studies, it is also showed that Manner+Path responses increase with age both in French and English data, but English speakers predominately produce Manner+Path structures more frequently for both adults and children.

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ramble, ride, roll, rollerblade, run, rush, sail, sashay, saunter, scale, scamper, scoot, scurry, scuttle, shoot, shuffle, skate, ski, skip, skitter, slide, slink, slip, slither, somersault, speed, spin, sprint, stalk, step, stomp, stride, stroll, strut, stumble, swagger, sweep, swim, swing, thrust, tiptoe, toboggan, traipse, trap, trot, truck, tumble, twirl, waddle, walk, waltz, wander, wiggle, zip, zoom.

It is suggested that when only one component expressed, children tend to use Path (Hickmann, Taranne and Bonnet 733). However, Manner-only responses are also available in crossing events when other events (up, down) are not. It is found that both French and English children express more Manner-only crossing events by age three. In the finding, children express more organized regard as Figure and Ground, and they acquire more options to encode Manner and Path with age by using other linguistic devices (734). German children are also shown using more light verbs *gehen* (*to go*) (Ochsenbauer and Hickmann 226), which is considered to be Deixis by Choi and Bowerman (86), from early stage of acquisition and the proportion decreases with age, but the usage of other linguistic devices (adverbs, prefixes, subordinate clauses, etc.) increases with age.

2. Method

2.1 Purpose

In this study, the use of motion events in selected stories are examined in details. Path, Manner, and Deixis are listed and calculated. Also, metaphoric items are also noted. Most studies examining motion events were by showing cartoons, videos or pictures and requesting description, but few were examined through the actual use of language. This study aims at examining the actual use of motion events description in stories for children between 7 and 11 years old. Without potential influence by the stimuli, more natural data are expected in this study. The purpose of this study is to obtain more natural utterances written in a simple Manner for children, and to investigate the use of motion events in Turkish.

2.2 Criteria

All motion event descriptions are examined according to Choi and Bowerman's criteria that the semantic elements are categorized in Ground, Path, Manner, and Deixis (86). This study aims at the examination of motion, but the category of locatedness (*lay, stand, lean*) and causation (*push, throw, kick, put*) are not in our discussion. Additionally, metaphorical motion events are separated in another category to compare with the concrete ones.

All motion events related to Motion+Path and Motion+Co-events were investigated and the semantic elements of Figure, Ground, Path, Manner, and Deixis were separated in different columns. The metaphoric sentences were also noted. The original sentences were recorded. A total of 223 motion events were taken for examination.

2.3 Expectation

Since Turkish is considered to be a verb-framed language in Talmy's criteria(60), it is expected there are more frequent use of Path and Deixis verbs. Second, given the stimuli from the stories, more semantically complex sentences are expected. Third, it is expected that the children's stories designed for 7 to 11-year-old consists of contents as adults' expressions semantically. The conceptual structure should have been developed in the areas of space and time.

2.4 Material

The data were collected from the Turkish children's literature, Gülten Dayıoğlu's Turkish written series designed for elementary school children. Four books from the series were chosen, which are Uçurtma, Küskün Ayıcık, Kır Gezisi, and Deli Bey (Dayıoğlu, 2005a; Dayıoğlu, 2005b; Dayıoğlu, 2005c; Dayıoğlu, 2005d). Each book was opened twice and the chapters opened were selected. A total of 8 chapters were selected in the end, which are Cengiz'in yeni arkadaşları, Deli bey, Kara benekli kuzu, Gülünecek bir şey mi var?, Minik tay, İpek'in doğum günü, Kara kedi, and Ak kuzu.
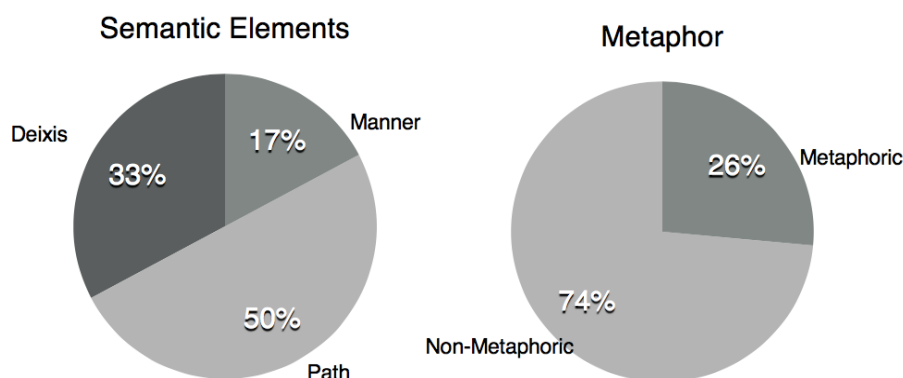

Fig. 1. The proportion of the semantic elements and metaphoric items from this study

3. Results

Of the 223 sentences examined, 40 Manner verbs, 120 Path verbs, and 78 Deixis verbs were found. As shown above, while Deixis is separated from Path verbs, Path verbs are still more than Manner verbs and Deixis verbs. Of all the verbs in this study, Manner verbs occupies 17%, Path verbs 50%, and Deixis 33%. A total of 59 sentences were found metaphoric. It occupies about 26% of all the sentences selected.

For the verb types, 40 different verb types were found from the 223 sentences selected. The types of Manner verbs are more than the types of Path verbs. 12 of the verbs are Manner verbs, 26 are Path verbs, and there are only 2 Deixis verb types, *gel-(come)* and *git-(go)*.

For the Manner verb tokens in this study, as shown below in Table 2, there are only 2 verb types which have tokens more than 10%. They are *koş-(run) 42%,* and *atıl-(rush, dash, leap) 20%.* "Run" in Turkish Manner verbs is dominant. It occupies more than one third of the Manner verbs.

Table 1. Manner Verbs from this study

Manner Verbs	Tokens	Percentage	Manner Verbs	Tokens	Percentage
koş-(run)	17	42%	dal-(dive)	1	2%
atıl-(dash, rush, leap)	8	20%	sürtün-(crawl)	1	2%
sıyrıl-(wriggle out)	3	8%	süzül-(glide)	1	2%
fırla-(bounce)	2	5%	uçuş-(fly)	1	2%
tırman-(climb)	2	5%	yürü-(walk)	1	2%
yuvarlan-(roll)	2	5%			
ak-(flow)	1	2%	Total	40	100%

As shown below in Table 2, the Path verb tokens more than 10% are *çık-(exit) 20%,* and *gir-(enter)* 15%.   There are more types of Manner verbs and the difference of tokens between Manner verbs are closer.

Table 2. Path Verbs from this study

Path Verbs	Tokens	Percentage	Path Verbs	Tokens	Percentage
çık-(exit)	24	20%	sokul-(move closer)	2	2%
gir-(enter)	18	15%	taşın-(move)	2	2%
dön-(return)	11	9%	yolu tut-(depart)	2	2%
geç-(pass)	10	8%	bin-(move on)	1	1%
düş-(fall)	9	8%	dolan-(move around)	1	1%
ayrıl-(move apart)	6	5%	kaçış-(escape)	1	1%
çekil-(move backward)	6	5%	sona er-(move to the end)	1	1%
takıl-(follow)	4	3%	toplan-(move together)	1	1%
var-(arrive at)	4	3%	toplaş- (move together)	1	1%
yaklaş-(approach)	4	3%	uzaklaş- (move apart)	1	1%
çek-(move backward)	3	2%	yağ-(fall)[2]	1	1%
dağıl-(scatter)	2	2%	yüksel-(move up)	1	1%
dolaş-(move around)	2	2%			
kaç-(escape)	2	2%	Total	120	100%

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[2]   In the story, the word yağ- is more similar to düş-(fall) semantically.

In the category of Deixis verb tokens, the ratio of *gel-(come)* to *git-(go)* is 3:2. Of total 78 Deixis verbs, 47 "come" and 31 "go" were found in the 8 stories.

Of 223 sentences, there are 13 sentences in which the Manner verb, Path verb, or Deixis are conflated, which are formed as Manner-Path, Manner-Deixis, or Path-Deixis conflations. Only three of them use the subordinate clause marker "-arak"(i.e. *...koşarak evden çıktı./ She [**MOVED** out of the house] **WITH-THE-MANNER-OF** [running].*) Most comflated motion events are like *"İyileşince döner gelirim."(I will [**MOVE** back] **WITH-THE-DEIXIS-OF** [I will come] as soon as I get better.)*, or *"Çeker giderdi."(He or she will [**MOVE** backward] **WITH-THE-DEIXIS OF** [he or she will go])* The connection marker "-ıp" is not seen as subordinate marker because of the equal value of the verb, but as conflations semantically. In sentences like *"Odadan çıkıp gitti."(He or she [**MOVED** out of the room] **WITH-THE-DEIXIS-OF** [he or she went.])* or *"Bir solukta koşup .... arasına girdi."(He or she [**WITH-THE-MANNER-OF** [he or she ran] [**MOVED** in to the space between ....]in one breath),* the motions are considered as conflated instead of two different events. Sentences like *"At öteden ... koştu geldi."(The horse [**MOVE**] **WITH-THE-MANNER-OF** [it ran] **WITH-THE-DEIXIS-OF** [it came])*, therefore, are also considered as one event.

4. Discussion

In Turkish, rapid Manner verbs like *"koş-(run)"* and *"atıl-(dash, rush, or leap)"* seems to be a kind of co-event with which no further Path verbs are required. It is totally grammatical to convey *"Kapıya koştu.(He or she ran to the door.)*, or *"Üstüne atılıyor."(He or she is leaping on it.)*)" It can also be boundary crossing events although not clearly mentioned (i.e. *Odasına koştu.(He/she ran to his/her room.) Mutfağa koştu.(He/she ran to the kitchen.)*). However, if additional information is needed, conflations are used(i.e. *"Bir solukta koşup .... arasına girdi."(He or she [**WITH-THE-MANNER-OF** [he or she ran] [**MOVED** in to the space between ....]in one breath)*). It seems that the kind of rapid events are not occasional use by Turkish speakers as Özçalışkan supposed (9).

The most frequently used Path verbs, *çık-(move out/exit),* and *gir-(move in/enter),* are boundary crossing events. It seems that motion events like *"move in"* and *"move out"* are more salient among other Path verbs. Besides, the verbs "*düş-(move down/fall)*" acting without any other forces is neutral, so that it excludes other Manner or Deixis verbs.

Deixis verbs *"git-(go)"* and *gel-(come)* separated from other Path verbs, are still more than any of the other Path verbs. The total tokens of Deixis

verbs is also higher than Manner verbs, which indicates that Turkish speakers rely heavily on Deixis verbs that can also be conflated with other semantic elements like Path and Manner verbs. However, no sentences consisted of Path, Manner and Deixis altogether in this study.

Not only Path verbs are more dominant than Manner verbs as tokens, the type of Path verbs are also more than Manner verbs in this study. Beside rapid Manner verbs such as "*koş-"(run)* and *"atıl-"(dash, rush, or leap),* Turkish people rely heavily on Path verbs. Turkish speakers seem to prefer more Path verb uses conventionally.

As for metaphoric use, there are more metaphors in some stories and fewer in others. The average proportion of metaphoric use is slightly more than one fourth of all the motion event sentences selected. Some of them are related with time such as *"Yaz geldi.(The summer came.)",* and some are abstract motions such as *"Herkesin başına gelebilir.(It can come to everyone.)".* It also suggests the metaphor that "down equals negative", as the use of *"Şimdi bu durumlara düşmemek için...(Now in order not to fall into this situations...)".*

5. Conclusions

In this study, different semantic patterns were found in Manner verbs. Whether a Manner verb is rapid or time-expended may influence the usage of it. The use of rapid Manner verbs without Path verbs in one expression seems to be totally grammatical as seen in this study. It correlates with the findings of Hickmann and his colleagues found in French (710). Also, the use of Deixis verbs seems not only in young children's speech, but also used as a more common pattern as the adult use. Unlike the use of Deixis verbs only by small German children (Ochsenbauer and Hickmann 235), Deixis is a more dominant feature in Turkish.

As expected, there are more frequent Path and Deixis uses than Manner verbs. Many semantically complex sentences are found in this study. Conflated motion events such as Manner-Path, Path-Deixis, and Manner-Deixis combinations are found. Finally, the language use in the story books suggests an adult-like patterns which motion events and the basic metaphoric use of language is understood by 7 to 11-year-old children. Further researches can be aimed at the actually use of language in daily circumstances. The use of motion events can be also investigated in other age groups. Besides, not only Motion+Path and Motion+Co-event but also causation and locatedness can be also investigated in further researches.

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