# On the Semantics and Syntax of Persian 'become'

## Negin Ilkhanipour and Ayaka Sugawara

### 1 Introduction

Persian *fodæn* 'to become' occurs with different predicate classes in intransitive (and passive-like) sentences, as shown in (1) and (2).

(1) ?ab særd fo-d water cool become-PST.3SG 'The water became cool./The water cooled.'

(2) goldan fekæst-e fo-d vase break.PST-PTCP become-PST.3SG 'The vase was broken.'

The present study investigates the aspectual properties and the syntactic nature of Persian *fodæn* 'to become'. The two objectives of the paper are:

- (i) To show that *fodæn* is **not** inherently telic (contra Karimi-Doostan 1997, Folli et al. 2005, cf. Megerdoomian 2009) and that it is resultativity that gives rise to telicity in Persian complex predicates (CPrs) with *fodæn*. The property of resultativity is brought about by the preverb (PV) (Ramchand 2001, 2008).
- (ii) To argue, based on the so-called passive form of Persian CPrs, that Voice and (little) v are two distinct projections (Harley 2013) and that fodeen is a Non-Active Voice head.

The structure of the paper is as follows. Section 2 reviews the theoretical issues on telicity and its determination with different predicate classes. In Section 3, our first objective is met based on the careful examination of degree-achievement predicates in Persian. Section 4 deals with our second objective and shows that *fodæn* is a Non-Active Voice head. Section 5 is dedicated to some concluding remarks.

### 2 Theoretical Prelude

In this section, we briefly review the theoretical issues that are the bases of our study. This includes a working definition of telicity and its determination for events expressed by different predicate classes.

#### 2.1 What is Telicity?

Telicity, also called *terminitivity*, *delemitedness* and *maximality* by Tenny (1992) and Rothstein (2004), among others, is attributed to predicate-argument relation referred to as the "ADD-TO" property (Verkuyl 1972, 1993), "measuring out" (Tenny 1987, 1992, 1994), "graduality" (Krifka 1998, 1992), "incremental theme" (Dowty 1991), and "structure-preserving binding relations" (Jackendoff 1996), and is defined as the property of an event indicating whether or not a predicate encodes an inherent endpoint.

More recently, Beavers (2011a, 2011b, 2012, 2014) reckons the determination of telicity to be conditioned by two factors: (i) the quantity of the patient as expressed by the predicate, and (ii) what the predicate says about the ultimate result. Beavers defines telicity as in (3).

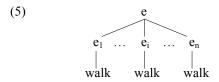
(3) ∀X⊆ U<sub>E</sub>[TEL<sub>E</sub>(X) ↔ ∀e∀e' ∈ U<sub>E</sub>[X(e) ∧ X(e') ∧ e' ≤<sub>E</sub> e → FIN<sub>E</sub>(e', e)]] "A predicate X over events is telic iff for any event it describes it does not describe any non-final subevent of that event."

Typically, there are two diagnostic tests for telicity. First, as can be seen in (4a-b), telic

events are compatible with *in x time* expressions, whereas atelic events are compatible with *for x time* expressions.

(4) a. Neda ate the apple \*for/in an hour. (telic)b. Neda walked along the river for/\*in an hour. (atelic)

Second, atelic events, unlike telic events, are homogeneous, that is, the subevents (e.g.,  $e_1$ ,  $e_i$ ,  $e_n$ ) can be uttered by the same predicate expressing the whole event (e). (5) illustrates the homogeneity of the atelic event in (4b). Note that for the telic event in (4a), only the final subevent is uttered by the same predicate expressing the whole event (i.e., *eat the apple*).

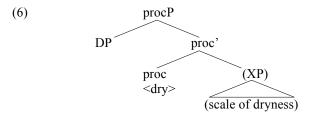


### 2.2 Predicate Classes and Telicity

According to Rappaport Hovav and Levin (2010), change-of-state and directed motion verbs are scalar predicates that may involve a two-point scale as in *crack* and *arrive*, or a multiple-point scale. The multiple-point scale can be a bounded (close) scale as is the case for *empty* and *return* or can be an unbounded (open) scale as in *cool* and *rise*. Predicates with two-point scales are true achievements and predicates with multiple-point scales are degree-achievements.

Ramchand (2008) discusses that degree achievements are classically alternating in transitivity, ambiguous between telic and atelic reading, and often "deadjectival". Based on the event-structure participanthood of their arguments, Ramchand (2001, 2008) puts forth different verb classes: (i) initiation-process verbs (e.g., transitive *push* and *drive*, or intransitive *run* and *dance*), and (ii) initiation-process-result verbs (e.g., transitive *break* and intransitive *arrive*).

Regardless of the cause subevent, for Ramchand (2008), the verbs that participate in transitivity alternation can be either a process-result verb, [proc, res], like *break* as in *The glass broke* or a deadjectival degree-achievement verb like *dry*, which is ambiguous between process [proc] and process-result [proc, res]. The complement of the degree-achievement is actually an implicit property scale that can be contextually bound, in which case it gives rise to telicity. This is illustrated in (6). The key point is that the result component of the event, whether encoded in the lexical entry of the verb or implicitly specified in the context, brings about telicity.



## 3 Telicity in Persian CPrs with fodæn

In this section, after a brief review of three different approaches to the determinants of telicity in Persian CPrs, we argue that telicity is not encoded in the lexical entry of *fodæn* and that telicity is obtained from resultativity which may be encoded in the lexical entry of the PV.

### 3.1 Determinants of Telicity in Persian CPrs: A Review

There are three diverse approaches to telicity in Persian CPrs. Karimi-Doostan (1997:119) claims

that "[light verbs] LVs, and not PVs, are responsible for the relationship between (a)telicity and the realization of the different types of arguments of PVs." He divides Persian LVs in two classes: initiatory LVs that are associated with an external argument and does not imply any information about the (a)telicity of the event (as in (7a)), and transition LVs that impose telicity on VPs (as in (7b)).<sup>1</sup>

(7) a. æli be moddæt-e/\*dær jek sa?æt deræxt pejvænd zæd for/in one hour strike.PST.3SG tree graft 'Ali grafted trees for/\*in an hour.' (Karimi-Doostan 1997:118, (86a)) \*be moddæt-e/dær jek sa?æt b. deræxt-ha pejvænd xor-d-ænd for/in one hour collide-PST-3PL tree-PL graft 'The trees were grafted \*for/in an hour.' (Karimi-Doostan 1997:118, (87a))

According to Karimi-Doostan (1997:149), fodæn 'to become' is a transition LV and is thus telic in nature.

(8) nævar-ha \*be moddæt-e/dær jek sa?æt tæksir ʃo-d-ænd tape-PL for/in one hour reproducing become-PST-3PL 'The tapes were reproduced \*for/in an hour.'

(Karimi-Doostan 1997:185, (25c))

Folli et al. (2005), on the other hand, argue that the non-verbal element (i.e., the PV) is the determinant of telicity in Persian CPrs. While non-eventive nouns give rise to atelic predicates (as in (9)), adjectives, adverbs, prepositional phrases and particles bring about telicity (as in (10)). Eventive nouns, depending on their aspectual nature, may either call for telicity or atelicity (as in (11a-b)).

- (9) kimija bæraje jek sa?æt/\*jek sa?æt-e ba pæpær dæst dad (atelic) Kimia for an hour/within one hour with Papar hand give.PST.3SG 'Kimia shook hands with Papar for an hour.'
  (Folli et al. 2005:1385, (49a))
- (10) kimija \*bæraje jek sa?æt/?jek sa?æt-e be donja ?amæd (telic) Kimia for an hour/within one hour to world come.PST.3SG 'Kimia was born within one hour.'

  (Folli et al. 2005:1383, (41b))
- (11) a. kimija \*bæraje jek sa?æt/jek sa?æt-e pæpær-o fekæst dad (telic)
  Kimia for an hour/within one hour
  'Kimia defeated Papar within one hour.'
  (Folli et al. 2005:1385, (48a))
  - b. Kimija bæraje jek sa?æt/\*jek sa?æt-e kotæk xor-d (atelic) Kimia for an hour/within one hour punishment collide-PST.3SG 'Kimia was beaten for an hour.'

    (Folli et al. 2005:1384, (46a))

Folli et al. further claim that *fodæn* is inherently telic. They maintain that the sentence in (12) is telic even though the PV is a non-eventive noun. Remember that in their account a non-eventive noun leads the sentence to be atelic as the example in (9) shows. To account for the mismatch, they conclude that *fodæn* is an inherently telic element. In Section 3.3, we show that the event expressed in (12) is not necessarily telic.

<sup>&</sup>lt;sup>1</sup>We believe that the grammaticality pattern in (7a-b) is due not to the diversity of the LVs but to the fact that in (7a), the internal argument 'tree' is non-atomic/non-quantized, and hence the event is atelic, whereas in (7b), 'the trees' is atomic/quantized yielding telicity.

(12) bærf ?ab fo-d snow water become-PST.3SG 'The snow melted.'
(Folli et al. 2005:1387, (55b))

The third account of telicity in Persian CPrs is that of Megerdoomian (2009). Based on the ambiguous readings of Persian semelfactive predicates for telicity, as in (13), and the distinct (a)telic readings the same PV may raise (e.g., telic dærd gereftæn lit. 'pain to catch' vs. atelic dærd kefidæn lit. 'pain to pull'), Megerdoomian proposes that the properties of the LV and potentially the structural relation between the PV and the LV should be taken into account in determining telicity.

(13) nima dær ?ærz-e nim sa?æt/sa?æt-ha xunæ-ro dʒaru zæd Nima in half hour/ hour-PL house-OM broom hit.PST.3SG 'Nima swept the house in half an hour/for hours.' (Megerdoomian 2009:16, (4a))

#### 3.2 fodæn: Not Inherently Telic

Based on two pieces of evidence from degree-achievement predicates (with multiple-point scales) in Persian, here we argue against the proposal that fodcen is inherently telic.

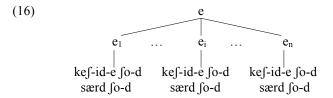
First, as shown in (14), when the participle form of a transitive directed motion verb such as *kefidæn* 'to pull' is the PV, the sentence will be atelic, and hence compatible with *for x time* expressions, even though the internal argument ?an famedan 'that suitcase' is quantized.

(14) ?an tsemedan noh dæqiqe ruj-e zæmin kesid-e fo-d that suitcase nine minute on ground pull-PST-PTCP become-PST.3SG 'That suitcase was pulled on the ground for nine minutes.'

Second, when the PV is a gradual change-of-state predicate (like gradable adjectives), the sentence will be ambiguous for telicity and thus compatible with an expression of duration, as in (15). Only when a specific result is obtained (contextually or via a result phrase), will the sentence become telic. In (15), *særd* 'cool' is a gradable adjective as the comparative form indicates, and thus the scale is an unbounded multiple-point scale. In order to obtain telicity, the scale needs to be bounded explicitly (by a result prepositional phrase, for instance) or implicitly specified (by the context). We will return to this point in Section 3.3.

(15) ?ab bæraje tfænd dæqiqe særd o særd-tær **fo-d**water for some minute cool and cool-CMPR become-PST.3SG
'The water became cool and cooler for some minutes.'

Moreover, as can be seen in (16), both events described in (14) and (15) are homogeneous; the subevents can be uttered by the same predicate expressing the whole event.



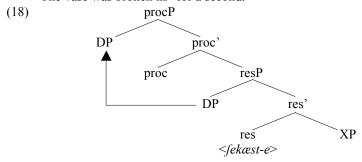
#### 3.3 PV Classes and Telicity

Now that fodæn is not inherently telic, the question is what determines telicity in CPrs with fodæn.

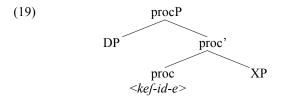
Here, applying Ramchand's (2001, 2008) verb classes to the PVs that occur with *fodæn*, we show that telicity is obtained from resultativity which may be encoded in the lexical entry of the root.<sup>2</sup>

As shown in (17), when the PV is of process-result type (i.e., when the root has the feature specification [proc, res], as in *break*), the sentence will be telic and compatible only with *in x time* adverbials. The structure will be as in (18) where the PV is base-generated as the result head. DP is the resultee which then moves to Spec,procP, identifying the undergoer as well. XP is the rheme or the rhematic object that, according to Ramchand (2008), refers not to subject of any subevent but to a part of the description of the predicate.

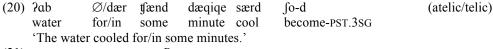
(17) goldan \*Ø/dær jek sanije fekæst-e fo-d (telic) vase for/in one second break.PST-PTCP become-PST.3SG 'The vase was broken in/\*for a second.'

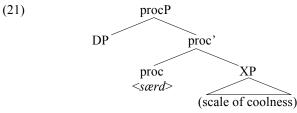


The next type of PVs is the past participle of directed motion verbs with process, [proc], in its lexical entry. The example is kef-id-e 'pull-PST-PTCP', as in (14). Since resultativity is not specified, we expect atelicity and we see that (14) is atelic compatible with  $for\ x\ time$  adverbials. The structure of (14) is as in (19) with kef-id-e in the process head.



Another type of PVs is gradable adjectives, such as *særd* 'cool' as in (20). The sentence is ambiguous between telic and atelic readings, just as claimed by Ramchand for degree-achievement predicates. The structure is as in (21). The rhematic material is the scale of coolness. If contextually bounded, telicity comes about, if not, atelic reading is available (cf. (6) above).





<sup>&</sup>lt;sup>2</sup>It should be noted that telicity is a compositional aspectual property of an event determined by several factors, including the quantizedness of the theme, the boundedness of the path and the specification of an ultimate result, as pointed out by Beavers (2011a, 2011b, 2012, 2014). Resultativity, on the other hand, lexically encoded in the root or obtained via a secondary predicate, is a component that brings about the specification of the ultimate result.

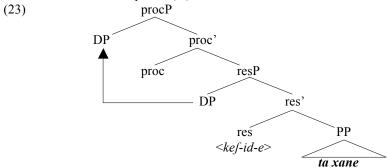
The same scenario is true for (12) by Folli et al. (2005). Although the PV *?ab* 'water' is a noun and does not take the comparative morpheme to make the durativie process of melting in the atelic reading more tangible, a scale of melting (i.e., more and more solid snow changing to liquid water) is retrievable from the context. Therefore, (12) is also ambiguous for telicity.

Thus far we have shown that PVs occurring with *fodæn* can be classified in two groups: process-result PVs that give rise to telicity and process PVs that give rise to ambiguity in telicity.

Resultless PVs with [proc] in their lexical entry, such as directed motions, can be augmented to a process-result with an addition of a secondary predicate (e.g., a PP), and hence be rendered as telic. This resultative augmentation has been studied in detail in the literature and has received various labels, such as "accomplishment formation" (Parson 1990, Pustejovsky 1991), "template augmentation" (Levin and Rappaport Hovav 1995), and "telic pair formation" (Higginbotham 2001).

The atelic sentence with *kef-id-e* 'pull-PST-PTCP' in (14) can be rendered as telic by adding the goal PP *ta xane* 'to the house', as shown in (22). The structure will then be as in (23) with this time, *kef-id-e* as the result head to which the goal PP is the complement.<sup>3</sup>

(22) ?an tsemedan dær noh dæqiqe ta xane kes-id-e so-d that suitcase in nine minute to house pull-PST-PTCP become-PST.3SG 'That suitcase was pulled (in)to the house in nine minutes.'



To sum up, in this section, we have shown that *fodæn*, unlike LVs, does not play any role in determining the (a)telicity of CPrs. This leads us to hypothesize that *fodæn* is not at all an LV. In the next section, building on Harley (2013), we uphold this hypothesis.

# 4 A Voice Account of sodæn

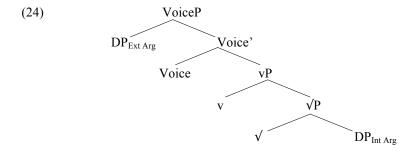
A source of misconsidering *fodæn* as inherently telic by Karimi-Doostan (1997) and Folli et al. (2005) is that they regard this element as an LV, and hence the little v head. Here, based on the occurrence of *fodæn* with other LVs in the so-called passive constructions, we show that *fodæn* cannot be the v head. Also, following Harley's (2013) system that separates Voice from v, we claim that *fodæn* is a Non-Active Voice head.

### 4.1 Voice and v: A Separation

Based on the interaction of applicative and causative morphology, the existence of two kinds of causatives, and the interaction of passive and verbalizing morphology in Hiaki, Harley (2013) ar-

<sup>&</sup>lt;sup>3</sup>There seems to be some inconsistency in the structures proposed for directed motion verbs: when atelic, the root is the head of the process phrase (19), whereas it is the result head in an augmented telic sentence (23). Ramchand (2008) assumes that verbal roots may attach to multiple positions. This assumption, however, goes against Rappaport Hovav and Levin's (2010) Lexicalization Constraint which says only a one-to-one association of roots and positions in event schemas is possible. The question is: do we have lexical or syntactic ambiguity, or is it just a problem of movement from result to process in different syntactic contexts? We leave this issue for further research.

gues for a tripartite internal structure of the verb phrases, made up of VoiceP, vP and a lexical projection ( $\sqrt{P}$  or VP) and distinguishes the external-argument introducing projection VoiceP (Kratzer 1996), which makes no lexical-semantic contribution, from vP whose head hosts causative and verbalizing morphology (Marantz 1997). Harley's account of Voice/v distinctness is illustrated in (24). For passive sentences, no specifier position is provided by Voice (see also Pylkkänen 2002, Collins 2005, Alexiadou et al. 2006, Merchant 2013).

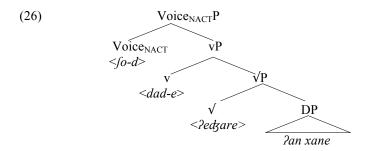


### 4.2 Jodæn: A Non-Active Voice Head

To show that *fodæn* is a Non-Active Voice head, our argument comes from the so-called passive form of some Persian CPrs, such as *Pedgare dadæn* 'to rent' and *nefan dadæn* 'to show'. These are problematic constructions for Karimi-Doostan's (1997) and Karimi's (2005) accounts of Persian CPrs since they consider *fodæn* 'to become' an LV merged as the v head. In (25a-b), however, the v head is occupied by another LV, *dadæn* 'to give' (see also Samvelian 2012, Samvelian and Faghiri 2014:fn. 6).

- (25) a. ?an xane ?edʒare dad-e fo-d that house rent give.PST-PTCP become-PST.3SG 'That house was rented.'
  - b. neʃan dad-e ʃo-d ke ʔin ʔonsor kæranmænd ni-st show give.PST-PTCP become-PST.3SG that this element telic NEG-be.3SG 'It was shown that this element is not telic.'

If we follow Harley's system that separates Voice from v, enough space will be provided for both verbal elements, as illustrated in (26) for (25a). Note that in (25a-b), the external argument can appear only in a prepositional phrase (and not as the subject of the sentence). This yields the idea that the Voice head in these sentences is a Non-Active Voice which projects no specifier.<sup>4</sup>



Interestingly, if we consider *fodæn* as the Voice head and preserve v to be responsible for causal relations, this provides an account for the grammaticality pattern in (27a-b). In (27a), the

<sup>&</sup>lt;sup>4</sup>We take the term "Non-Active" from Alexiadou and Doron (2012) where it is used as a cover term for passive and middle. The delineation of passive/middle distinction in Persian CPrs with *fodæn* is not in the scope of this paper but it is a very interesting topic for further research.

light verb zædæn 'to hit' establishes the causal relation and hence the sentence is compatible with the adverb zædæn 'intentionally'. Note that the Non-Active Voice head fodæn itself disallows the occurrence of an external argument. Thus, it is safe to say that the compatibility of 'intentionally' in (27a), signalling the existence of an external argument, results from the LV zædæn, not from fodæn. In (27b), on the other hand, the LV gereftæn 'to get' does not introduce external causation and thus the sentence is ungrammatical with the intentional adverb.

(27)	a.	?an	xane	?æmdæn	?atæſ	zæd-e	∫o-d
		that	house	intentionally	fire	hit.PST-PTCP	become-PST.3SG
		lit. 'That house was fired intentionally.'					
	b.	?an	xane	(*?æmdæn)	?atæ∫	gereft	
		that	house	intentionally	fire	get.PST.3SG	

Harley (2013) points out that VoiceP makes no lexical-semantic contribution and is only an external-argument introducing functional projection. Our syntactic account of *fodæn* as the Non-Active Voice head is along the lines of her analysis, and correctly predicts that the existence of *fodæn* does not determine the (a)telicity of the whole predicate.

### 5 Conclusions

In this paper, to meet our first objective, we discussed the determinants of (a)telicity in intransitive sentences with *fodæn* 'to become' and argued that this element is not inherently telic and that telicity in Persian CPrs with *fodæn* is the result of resultativity brought about by the PV (as for process-result predicates) or a secondary predicate (as for directed motion predicates). In order to meet our second objective, we provided evidence from the so-called passive form of a group of Persian CPrs whose LVs do not alter with *fodæn* but are kept in the participle form below it. Based on this, we showed that *fodæn* is a Non-Active Voice head above vP, and thus is not involved in the determination of the (a)telicity of Persian CPrs.

## References

Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schäfer. 2006. The properties of anticausatives crosslinguistically. In *Phases of Interpretation*, ed. M. Frascarelli, 187–211. Berlin: Mouton.

Alexiadou, Artemis, and Edit Doron. 2012. The syntactic construction of two non-active voices: Passive and middle. *Journal of Linguistics* 48:1–34.

Beavers, John. 2011a. An aspectual analysis of ditransitive verbs of caused possession in English. *Journal of Semantics* 28:1–54.

Beavers, John. 2011b. On affectedness. Natural Language and Linguistic Theory 29:335-370.

Beavers, John. 2012. Lexical aspect and multiple incremental themes. In *Telicity, Change, and State: A Cross-Categorial View of Event Structure*, ed. V. Demonte and L. McNally. Oxford: Oxford University Press.

Beavers, John. 2014. Incrementality in lexical aspect. Keynote talk at CHRONOS 11, Pisa.

Collins, Chris. 2005. A smuggling approach to the passive in English. Syntax 8(2):81–120.

Dowty, David. 1991. Thematic proto-roles and argument selection. Language 67:547-619.

Folli, Rafaella, Heidi Harley and Simin Karimi. 2005. Determinants of event type in Persian complex predicates. *Lingua* 115:1365–1401.

Harley, Heidi. 2013. External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua* 125:34–57.

Higginbotham, James. 2001. Accomplishments. Master's thesis, Oxford University.

Jackendoff, Ray. 1996. The proper treatment of measuring out, telicity, and perhaps event quantification in English. *Natural Language and Linguistic Theory* 14:305–354.

Karimi, Simin. 2005. A Minimalist Approach to Scrambling: Evidence from Persian. Berlin: Mouton de Gruyter.

Karimi-Doostan, Gholamhosein. 1997. Light Verb Constructions in Persian. Doctoral dissertation, Essex University, Colchester.

Kratzer, Angelika. 1996. Severing the external argument from its verb. In *Phrase Structure and the Lexicon*, ed. J. Rooryck and L. Zaring, 109–137. Dordrecht: Springer.

Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. In *Lexical Matters*, ed. I. Sag and A. Szabolcsi, 29–53. Stanford: CSLI.

Krifka, Manfred. 1998. The origins of telicity. In *Events and Grammar*, ed. S.D. Rothstein, 197–235. Dordrecht: Kluwer Academic Publishers.

Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, MA: MIT Press.

Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In *U. Penn Working Papers in Linguistics 4.3*, ed. A. Dimitriadis, H. Lee, L. Siegel, C. Surek-Clark, and A. Williams, 201–225.

Megerdoomian, Karine. 2009. Telicity in Persian complex predicates. Snippets 19:15–16.

Merchant, Jason. 2013. Voice and ellipsis. Linguistic Inquiry 44(1):77–108.

Parson, Terence. 1990. Events in the Semantics of English: A Study in Subatomic Semantics. Cambridge, MA: MIT Press.

Pustejovsky, James. 1991. The syntax of event structure. Cognition 41:47-81.

Pylkkänen, Liina. 2002. Introducing Arguments. Doctoral dissertation, MIT.

Ramchand, Gillian C. 2001. Aktionsart, l-syntax and selection. Paper presented at the Utrecht Conference on Aspect. URL http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.14.6714&rep=rep1&type=pdf.

Ramchand, Gillian C. 2008. Verb Meaning and the Lexicon: A First-Phase Syntax. Cambridge: Cambridge University Press.

Rappaport Hovav, Malka, and Beth Levin. 2010. Reflections on manner/result complementarity. In *Lexical Semantics, Syntax, and Event Structure*, ed. M. Rappaport Hovav, E. Doron and I. Sichel, 21–38. Oxford: Oxford University Press.

Rothstein, Susan D. 2004. Structuring Events: A Study in the Semantic of Lexical Aspect. Oxford: Blackwell. Samvelian, Pollet. 2012. Grammaire des Prédicats Complexes. Les Constructions Nom-Verbe. Paris: Lavoisier

Samvelian, Pollet, and Pegah Faghiri. 2014. Persian complex predicates: How compositional are they? *Semantics-Syntax Interface* 1(1):43–74.

Tenny, Carol. 1987. Grammaticalizing Aspect and Affectedness. Doctoral dissertation, MIT.

Tenny, Carol. 1992. The aspectual interface hypothesis. In *Lexical Matters*, ed. I. Sag and A. Szabolcsi, 1–28. Stanford: CSLI.

Tenny, Carol. 1994. Aspectual Roles and the Syntax-Semantics Interface. Dordrecht: Kluwer Academic Publishers.

Verkuyl, Henk. 1972. On the Compositional Nature of the Aspects. Dordrecht: Reidel.

Verkuyl, Henk. 1993. A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure. Cambridge: Cambridge University Press.

Negin Ilkhanipour Department of Linguistics University of Tehran Tehran, Iran n.ilkhanipour@ut.ac.ir

Ayaka Sugawara
College of Liberal Arts and Sciences
Mie University
Mie, Japan/
Department of Linguistics and Philosophy
MIT
Massachusetts, USA
ayakasug@ars.mie-u.ac.jp
ayakasug@mit.edu