## Aspectual Composition and Japanese V-V Compounds: the Role of Telic Verbs as Spoilers (for Workshop 1: Achievements)

Lexical V-V compounds (1a-c) have attracted much attention, e.g. Kageyama (1993), Matsumoto (1996), Nishiyama (1998), Fukushima (2005/2007), Yumoto (2005), inter alia. However, they focus on argument-synthesis based on argument-structures of component verbs, e.g. two subject arguments are identified in *odori-tukareru* 'dance-get.tired'. (Im)possible patterns of argument-synthesis have been identified and given accounts of various sorts. Though Fukushima (2007) deals with productivity of such compounds, the perspective is argument-centered as well.

In this paper, a different dimension regarding  $V_1$ - $V_2$  combination is investigated based on the aspectual properties of component verbs. First, it is empirically shown that  $V_1$  cannot be telic (achievement/accomplish)—a 'spoiler'—unless  $V_2$  is also telic. Any other patterns are possible. Second, (im)possible aspectual combinations are shown to be a consequence of ASPECTUAL COMPOSITION based on the analysis of aspectual classes of predicates found in Dowty (1986). [N.B.: Simply 'telicity' is employed here due to (i) achievement and accomplishment are telic and (ii) the latter needs an incremental theme (or VP), which is absent for lexical word-formation.]

In contrast to (1a-c), the ones in (1d) with a telic  $V_1$  and an atelic  $V_2$  are impossible, which are constructed observing possible argument-synthesis patterns. In fact, of 1157 V-V compound examples found in Tagashira and Hoff (1986), there is only one potential counter example for this generalization. We note that as in (1e), there is nothing incompatible about 'regular' conjunction of, for example,  $V_1$  naosu 'repair' and  $V_2$  tukau 'use'. Also noted is the fact that when switched around \*taosi-fumu (telic-atelic) in (1d) becomes a licit compound fumi-taosu (atelic-telic).

Though limited to the resultative type, Li (1993) attempts to characterize (im)possible aspectual combinations in Chinese/Japanese V-V compounds. Central to Li's account is 'temporal iconicity', which states that the temporal ordering of sub-events  $e_1$  and  $e_2$  of e must be directly reflected in the surface linear order of the elements denoting the sub-events. In the case of resultative compounds, this means that  $V_{cause}$  must precede  $V_{result}$ . This accounts for (1a) and (1b), provided that 'manner' is construed as some sort of 'cause'. However, there is no explanation for (1d), for example, with naosi-tukaru we can imagine a situation of repairing something first and then using it, cf. (1e) (likewise for other illicit ones). Even licit tabe-nokosu in (1b) becomes bad when switched around as in \*nokosi-taberu 'leave(telic)-eat(atelic)'. With nokosi construed as a cause/manner, we can imagine a situation where eating takes place thanks to some food set aside first. (In addition, though not directly relevant here, Li's account fails to predict correct argument-synthesis as far as Japanese V-V compounds are concerned.)

The current account draws on Dowty (1986) who classifies aspectual classes of predicates as in (2). [N.B.: Dowty's original definitions classify sentences but they are adapted here for predicates. Krifka (1998) or Filip (2008) is an alternative but simplicity prevails.] Reflecting the basic characteristics, ASPECTUAL COMPOSITION for V-V compounds is stated as in (3). With (3d-(i)) a termination point is imposed on an atelic  $V_1$ , which never-the-less satisfies the properties (2a-b), rendering possible an example like *odori-tukareru* 'dance(atelic $\rightarrow$ telic)-get.tired(telic)'. In contrast, (3d-(ii)) requires a telic  $V_1$  to satisfy (2a-b) but that directly contradicts (2c), rendering, for example, \*naosi-tukau 'repair(telic $\rightarrow$ atelic)-use(atelic) impossible.

The current paper is a contribution to research regarding not only under-explored aspectual properties of V-V compounds but also the nature of aspectual composition of complex entualities.

- (1) a. cause/resultative compound: odori-tukareru 'dance(atelic)-get.tired(telic), i.e. get tired from dancing', obore-sinu 'drown(telic)-die(telic), i.e. die from drowning', etc.
  - b. manner compounds: tabe-nokosu 'eat(atelic)-leave(telic), i.e. leave (food) after eating', koroge-otiru 'roll(atelic)-fall.down(telic), i.e. fall down rolling', etc.
  - c. coordinating compound: *hikari-kagayaku* 'shine(atelic)-glitter(atelic), i.e. shine and glitter', *naki-sakebu* 'cry(atelic)-scream(atelic)', etc.
  - d. \*naosi-tukau 'repair(telic)-use(atelic), (INT.) use after repairing (something)', \*hiroge-uru 'spread(telic)-sell(atelic), (INT.) sell after spreading (merchandise)', \*koware-nokoru

- 'break(telic)-remain(atelic), (INT.) remain after breaking', \*taosi-fumu 'fell(telic)-step.on(atelic), (INT.) step on after felling (something)' [N.B.: cf. fumi-taosu 'step.on(atelic)-fell(telic)), i.e. fell (something) by stepping on it'], etc.
- e. Taroo -ga terebi-o [naosi sosite tukat-ta]
  -NOM TV-ACC repair CONJ use-PAST
  'Taroo repaired and used a TV'
- (2) a. A predicate is stative (atelic) iff it follows from the truth of a sentence  $\phi$  to which the predicate gives rise to is true at an interval I that  $\phi$  is true at all subintervals of I.
  - b. A predicate is activity (atelic) iff it follows from the truth of a sentence  $\phi$  to which the predicate gives rise to is true at an interval I that  $\phi$  is true at all subintervals of I down to a certain limit in size.
  - c. A predicate is achievement/accomplishment (telic) iff it follows from the truth of a sentence  $\phi$  to which the predicate gives rise to is true at an interval I that  $\phi$  is false at all subintervals of I.
- (3) ASPECTUAL COMPOSITION (for V-V compounds):
  - a. A V-V compound represents a single event with sub-events denoted by V<sub>1</sub> and V<sub>2</sub>.
  - b. Aspectual composition is head-driven (i.e.  $v_2$  determines the aspectual property of the whole compound). [N.B.: In principle, Japanese is morphologically head-final.]
  - c. When V<sub>1</sub> and V<sub>2</sub> match in telicity, the whole compound is of the same telicity as the head's.
  - d. When  $v_1$  and  $v_2$  differ in telicity, (i) if  $v_2$  is telic, an termination-point (distinct from an inception-point) is imposed on the interpretation of  $v_1$ , or (ii) if  $v_2$  is atelic, the truth-at-all-subintervals requirement (2a-b) is imposed on the interpretation of  $v_1$ .

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