Nominal Semantic Structure in the Aspectual Composition of Turkish

The interaction between the verb and its arguments is the main concern of the compositional theories of aspect (Verkuyl 1993). Aspectual feature of *telicity*, which describes *terminativity* or *quantization* of internal temporal contour of an event is determined at the VP level. Under the merelogical account of Krifka (1989), telicity includes a mapping between the structure of an argument of a verb and the structure of the event indicated by that verb. In this sense, incremental event predicates (like *eat an apple, write a letter, read a book*) represent the basic idea of merelogical approach successfully. As defined in Dowty (1991) these predicates denote events which involve a homomorphic relationship between their argument denotations and the temporal progress of the event indicated by the incremental theme verbs. In short, the semantic nature of the Incremantal Theme argument has a direct effect on telicity or quantization of the predicate. Telic interpretation originates when the incremental theme argument is quantized as in (1a). Since "a sandwich" is a singular countable noun which denotes a quantized amount of substance, a termination point for the described event in (1a) can be detected as the point at which all the substance in question is consumed. On the other hand, incremental theme predicates with mass or plural nouns yield atelic interpretation (1b).

(1)   a. Mary ate a sandwich in an hour.
           b. Mary ate sandwiches for half an hour.

However, it has been cross-linguistically attested (for Slavic languages Filip 2001; for Chuvash Tatevosov 2002; for Greek Sioupi 2002) that aspectual composition does not always obey Krifka's generalization. Turkish is one of these languages. In Turkish, undetermined count singular Incremental Theme arguments can be interpreted either as indefinite/ plural or pseudo-incorporated NPs depending on the context in which they occur. Hence, this paper primarily analyses the effect of variable interpretations of the above mentioned arguments on quantized/cumulative predicate interpretation. This study will also illustrate that singular countable definite arguments of incremental theme verbs in Turkish do not guarantee the quantization of the predicates. Verbs of consumption, creation, performance as the typical members of incremental theme verbs constitute the data base of our study.

In Turkish, incremental event predicates can have undetermined singular count nominal arguments as their objects. Such nouns are indefinite direct objects with neither an indefinite article nor any case marking on the head noun. For countable nouns singular / plural distinction is neutralized. Since these bare singular count nouns are number neutral they are treated as "categorial nouns", which constitute an integral part of the meaning of the verb. Incremental theme verbs with undetermined singular count nominal arguments yield either telic (2) or atelic (3) interpretations.

(2)   Deniz 10 dakikada arkadaşına mektup yazdı.
        Deniz 10 minute-LOC friend-DAT letter write-PER-Ø
        'Deniz wrote a letter to her friend in ten minutes.'

(3)   Deniz 10 dakika boyunca mektup yazdı.
        Deniz 10 minute long   letter write-PER-Ø
        (i) 'She was involved in the activity of letter-writing for ten minutes.'
        (ii) 'She wrote a letter for ten minutes.'
        (iii) 'She wrote letters for ten minutes.'

In (2) "a letter" in the predicate *mektup yaz-* 'write a letter' is interpreted as indefinite, singular and quantized NP which maintains that the act of writing a letter is completed. Its co-occurrence with a durative adverbial confirms this reading. In (3) we see that the same predicate is compatible with a time span adverbial which indicates that *mektup yaz-* 'write a letter/letters' can also be interpreted as a cumulative predicate. In this case, (3i) is the canonical interpretation of this predicate. The noun "letter" is categorial here. It is related to the concept of "letter" and categorizes "the activity of writing" as one of "letter-writing". The agent in (3i) was involved in "letter-writing activity" for a certain period of time without giving any implication of the completion of the letter in the process of being written. (3ii) and (3iii) are two other possible interpretations which also emphasize that the event does not attain its result state. A similar observation on singular countable Incremental Theme

arguments has been done on Chuvash, which belongs to the same language family (Altaic) as Turkish. Therefore, following the proposal of Tatevosov (2002) for Chuvash data, we claim that there are two types of undetermined count singular object NPs in Turkish : one of them is quantized, singular in meaning and it denotes a whole entity (as in 2), the other one (as in 3) is cumulative, categorial (showing class membership) which refers to a collection of the parts of an entity. Only incremantal theme verbs allow their arguments to have more than one reading: an 'holistic' reading and a 'part' reading. Note that accomplishement verbs with undetermined count object NPs as their arguments do not allow for holistic interpretations in Turkish. For instance, the predicate *balık tut* 'catch fish' is ungrammatical with a time span adverbial, '*Deniz bir saatte balık tuttu.' '*Deniz caught fish for an hour.'

This study will also focus on the definite object NPs which are associated with the role of Incremental Theme. Accusative case marks definitness and specificity in Turkish. Accusative marked, definite and singular count Incremental Theme arguments are expected to give rise to necessarily quantized events. Yet, this is not the case in Turkish, as well as in English, as understood from the acceptability of the English counterparts of Turkish sentences in (5).

(5)   a. Deniz mektub-u bir saat boyunca / bir saatte yazdı.
       Deniz letter-ACC one hour long / one hour-LOC write-PER-Ø
       'Deniz wrote the letter for an hour / in an hour.'
      b. Deniz elmay-ı on dakika boyunca / on dakikada yedi.
       Deniz apple-ACC ten minute long / ten minute-LOC eat-PER-Ø
       'Deniz ate the apple for ten minutes/ in ten minutes.'

Data presented above display the fact that Incremental Theme arguments by themselves do not ensure the occurrence of quantized verbal predicates. At this point, our study will pave the way to a discussion of explanation of variable telicity observed in incremental event predicates. Adopting the assumptions of scalar semantics (Tenny 1994, Jackendoff 1996, Caudel 1999, Hay, Kennedy & Levin 1999, Kennedy & Levin 2000) we argue that incremental theme verbs describe events in which gradable property of their arguments undergoes a gradual change by degrees along a scale. Under this view, telicity is determined in terms of mapping between the structure of degree of change in the property of argument and the structure of the event denoted by the verb. Scalar representation, in this way, reanalyzes the notion of Incremantal Theme. Moreover, scalar representation assumes that the effect of inherent scale structure on the event quantification of the above mentioned verbs is pragmatic in nature. In taking this assumption into consideration, this study will illustrate that adverb duality, which is observed in (5) can be explained by pragmatic means (world knowledge of the nature of object and the process) along with widely accepted purely linguistic means.

Our study not only shows how languages can vary in representing quantization and cumulativity of undetermined singular count NPs as Incremental Theme arguments but it also attempts to clarify the variable telicity observed in incremental theme verbs under scalar semantic approach through a discussion of evidence from Turkish.

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