ARGUMENT STRUCTURE AND (A)TELICITY:
EVIDENCE FROM KARACHAY-BALKAR

EKATERINA LJUTIKOVA
Moscow State University

PROBLEM. There is a number of common assumptions about the relation between argument structure and (a)telicity. One of them, adopted within compositional theories of aspect (Verkuyl 1993, 1999; Krifka 1989, 1992, 1998), is that telicity of verbal predicates is determined, under appropriate conditions, by properties of the Patient. In particular, under Krifka’s analysis, quantized internal arguments yield telic verbal predicates while cumulative arguments contribute to the atelic interpretation provided that they stand in incremental relation to the event denoted by the predicate. Thus, *eat an/the apple* and is telic (quantized) as *an/the apple* is quantized whereas *eat apples* is atelic (cumulative) since *apples* is cumulative.

In this paper, I will argue that in Karachay-Balkar (and presumably, in other Turkic languages as well) atelicity can come from two different sources: incremental change associated with the Patient and activity performed by the Agent.

DATA. First, in Karachay-Balkar, there are result verbs (as opposed to manner verbs, see Rappaport Hovav & Levin 1998, Ramchand 2003) which, unlike their English counterparts, do not exclude atelic interpretation:

(1)  xaly zyrt-ty.
Fatima thread-ACC tear-PST
1. Fatima tore a thread (in 5 minutes) {telic}
2. Lit. Fatima tore a thread (for 5 minutes) {atelic}
   (‘Fatima spent 5 minutes attempting to tear a thread’)

Secondly, quantized arguments standing in incremental relation to events can yield both telic and atelic interpretations, as represented in (2):

(2)  baxca-sy-n sUr-gen-di.
Alim kitchen.garden plough-PST-3:SG
1. Alim ploughed the kitchen garden (in two hours) {telic}.
2. Lit. Alim ploughed the kitchen garden (for two hours) {atelic}
   (‘Alim spent two hours ploughing the field’)

Intuitively, it might seem that what happens in (1) and (2) is the same. In (1), as attempts at tearing a thread advance, at some moment the thread would have been torn, but the agent’s activity stops before this moment is reached. In (2), as the ploughing advances, at some moment the garden would have been ploughed to completion, but the process terminates earlier, and only a part of the garden has been ploughed. If it had been the case, both (1) and (2) could have received a unified account, for instance, in terms of Koenig & Muan-suwan’s (2001) semi-perfectivity.

However, (1) and (2) are not alike as to their aspectual properties. In (3), the passive counterpart of (1), the atelic interpretation disappears, while in (4), the passive counterpart of (2), it survives:

(3)  xaly zyrt-y-l-dy.
thread-tear-ST-PASS-PST
1. The thread has been torn (in two minutes) {telic}.
2. Lit. *The thread has been torn (for two minutes) {atelic}
   (‘the thread was about to tear for five minutes’)

(4)  baxca sUr-U-l-du.
kitchen.garden plough-ST-PASS-PST
1. The kitchen garden has been ploughed (in two hours) {telic}.
2. Lit. The kitchen garden has been ploughed (for two hours) {atelic}.
   (‘the kitchen garden underwent the process of being ploughed that lasted for two hours’).
ANALYSIS. To account for these data, we propose that (1) and (2) represent two essentially different sources of atelicity: whereas in (1) atelicity emerges through the Agent’s activity that causes change of state of the internal argument, in (2) it is bound to the material extent of the Patient itself.

Consider result verbs like ‘tear’ in (1). Assuming, with Rappaport Hovav & Levin 1998 (who rely heavily on Dowty 1979), the decompositional analysis of such verbs, one can suggest that they must be decomposed into two subevents, a causing subevent and a resultant state. For (1), existentially binding the state variable at some level of representation builds the property of events which cause the emergence of state of being torn:

\[ (5) \| \text{Fatima tear a thread} \| = \lambda e \exists s [\text{tear} (e) \& \text{Agent} (\text{Fatima}, e) \& \text{cause} (e, s) \& \text{become} [\text{torn} (s)] \& \text{Holder} (\text{thread}, s) ] \]

Note that the event predicate in (5) is quantized: it does not hold for proper parts of e, correctly representing the fact that if one performs less activity than needed to tear a thread the resulting state does not come into existence. For this reason, a shift from events which are in the extension of the predicate in (5) to their parts is exactly what we need to capture the atelic reading in (1) which signals that unsuccessful attempt of tearing a thread occurred:

\[ (6) \| \text{Fatima tear a thread} \| = \lambda e \exists e' \exists s [ e \leq e' \& \text{tear} (e') \& \text{Agent} (\text{Fatima}, e') \& \text{cause} (e', s) \& \text{become} [\text{torn} (s)] \& \text{Holder} (\text{thread}, s) ] \]

e is not necessarily a proper part of e’, so (6) correctly predicts both telic (e = e’) and atelic (e < e’) readings of (1). Besides, the fact that the latter reading is absent in passive (3) is not unexpected either. Passive sentences disregard a causing subevent associated with the agent, foregrounding the change of state associated with the patient. As it is exactly a causing subevent which is the source of atelicity in (1), this results in an unambiguously telic interpretation of (3).

(6) is derived from (5) by the operator that maps an entity into its parts. As far as event predicates are concerned, this job is normally done by the imperfective/progressive operator (Krifka 1992, Filip 1999). This agrees with what Koenig & Muansuwan’s 2001 suggest for languages like Thai: Impfv operator is embedded into the lexical representation of accomplishments, thus capturing the fact that they do encode completion of the event.

Manner verbs like ‘plough’, on the other hand, do not include reference to the resultant state in their lexical representation; whether or not they are telic is determined by reference properties of the internal argument. Accordingly, it is these properties that must be responsible for both readings of (2).

To account for (2), let us assume change in the nominal predicate that allows it to refer to parts of entities in its original extension. This amounts to the claim that the phonologically empty partitive operator \[ \text{PART} = \lambda P \lambda y \exists x [P(x) \& y \leq x] \] (Krifka 1992) applies to the nominal predicate in (7) yielding a predicate in (8):

\[ (7) \| \text{baxCa} \| = \text{field} \quad (8) \| \text{baxCa} \| = \lambda x \exists y [\text{field}(y) \& x \leq y] \]

Unlike the predicate field, which is quantized, the predicate \[ \lambda x \exists y [\text{field}(y) \& x \leq y] \] is cumulative: if the individual x is a part of the object y, and the individual x’ is a part of y, then their sum x \( \oplus \) x’ is also a part of y. Due to the fact that the ‘field’ is the Incremental Theme, its reference properties are mapped into the event denoted by the verbal predicate yielding both telic (x=y, the whole field has been ploughed) and atelic (x \( \leq \) y, the part of the field has been ploughed) interpretations. As shift in the denotation happens to the internal argument and affects a corresponding event only indirectly, telicity of predicates like plough a field is not expected to change in passive sentences; cf. (4).

Therefore, in both (1) and (2) the atelic reading results from partitivity, but in considerably different ways: by selecting a portion of the agent’s activity which is less then needed to cause change in the internal argument, and by selecting a portion of the Incremental Theme, thus implying that not the whole object has been involved in the event referred to.
REFERENCES


