

## Telicity does not match countability, but dynamicity does

**THE PROBLEM.** A line of research going back to Mourelatos (1978) proposes that there is a set of cross-categorial primitives that seem to be manifested in the major lexical categories N, V and A. Within this program, Mourelatos (cf. also Bach 1986, Jackendoff 1991) proposes that the same [boundedness] property is responsible for the telic / atelic contrast in verbs (1) and the count / mass contrast in nouns (2).

- (1) a. John ran three miles in one hour.  
b. John ran for one hour.
- (2) a. many poems  
b. much poetry

Primitive sublexical features present in more than one lexical category are needed, among other things, because some properties of nouns influence some properties of verbs when the predicate compose (eg., [*to write [a poem]*<sup>count</sup>]<sup>telic</sup>, [*to write [poetry]*<sup>mass</sup>]<sup>atelic</sup>, \**[to write [a poem]*<sup>count</sup>]<sup>atelic</sup>). However, the proposal that boundedness underlies both telicity and countability faces a strong empirical challenge: the behaviour of complex event nominalisations with respect to countability is not predicted.

**THE DATA.** An approach where [boundedness] translates as telicity in V and as countability in N predicts that, *ceteris paribus*, telic verbs should produce count nouns in their complex event nominalisation (a bona fide case of transposition, Grimshaw 1990, Beard 1995) and atelic verbs should produce mass complex event nominalisations. Any (systematic) divergence from this pattern should be due to either the verbal base of the nominalisation containing grammatical aspect that blurs the role of [boundedness], or the nominaliser suffix introducing its own countability value.

This prediction is not borne out in Spanish, a language where deverbal nominalisations never include grammatical aspect morphemes, also in cases where no overt nominaliser is present or a suffix compatible with both mass and count nouns is used. In what follows, we take combination with cardinal numerals without semantic reinterpretation as evidence for the countability of a noun (Pelletier 1975).

While telic verbs do tend to produce count nouns in this context (*atacar* 'to attack' > *(dos) ataques* 'two attacks'), atelic verbs fall into two groups. Verbs like *bailar* 'dance', *deslizarse* 'slide', *desplazarse* 'displace', or *pasear* 'stroll' have complex noun nominalisations that are clearly count:

- (3) a. los tres rápidos bailes de María en la boda                      *baile*  
the three fast dances of María in the wedding
- b. los tres deslizamientos de tierra por la ladera                      *desliz-a-miento*  
the three slidings of land across the hillside
- c. los tres desplazamientos de María a Bilbao                      *desplaz-a-miento*  
the three displacements of María to Bilbao
- d. los tres paseos de María por la ciudad                      *paseo*  
the three strolls of María around the city

This first group of atelic verbs includes movement verbs like (3), searching verbs like *buscar* 'look for', emission verbs of sound and other substances (*gritar* 'shouting') and action verbs designated atelic activities (*pelear* 'fight', *practicar* 'practice'...).

In contrast, a second group of atelic verbs, where *aguantar* 'support', *mantener* 'maintain', *proteger* 'protect' or *inhibir* 'inhibit' are included produce mass nouns in their complex event reading (exclude the result noun reading in the following cases):

- (4) a. \*los tres aguantes de Juan con María *aguante*  
the three supportings of Juan with María  
(Intended: the three instances where Juan supported María)
- b. \*los tres mantenimientos del statu quo *manten-i-miento*  
the three maintaining of.the statu quo  
(Intended: the three instances where someone maintained the statu quo)
- c. \*las tres protecciones del presidente por los agentes *protec-ción*  
the three protections of.the president by her bodyguards  
(Intended: the three instances where the agents protected the president)

As atelic verbs fall at least into two groups, (non-)boundedness cannot correlate with (non-)countability.

**THE ANALYSIS.** Atelic verbs in the second group denote non-dynamic activities (called D-states, in Maienborn 2003); they denote events where an agent acts so that changes are avoided, protecting or controlling a state of affairs, or inhibiting some change. Atelic verbs of the first group are always dynamic and include unbounded processes where the state of affairs undergoes modifications (movements in the case of 'running', sound vibrations in the case of 'shouting', etc.). Telic verbs, necessarily, must be dynamic, because without a change it is impossible to reach a culmination. The generalisation, then, is that the dynamicity of the predicate and not the boundedness of the predicate matches whether the entity expressed by N is mass or not.

The correlation makes sense from the following perspective: a mass noun is divisible in arbitrarily small portions; an event where there is no internal change, bounded or not, is equally divisible in arbitrarily small intervals. As soon as the event includes dynamicity, the change codified –irrespective of whether it leads to a culmination or not– introduces a minimal size, defined by the nature of that change, which contradicts arbitrary divisibility –eg., a portion of running that is small enough does not count as running–. We furthermore propose that boundedness actually correlates with cumulativity, and therefore is closer to the contrast between individual and collective nouns when manifested in N: mass nouns and collective nouns are cumulative, as they can be arbitrarily expanded, like atelic predicates. Telic predicates cannot be arbitrarily expanded, like individual nouns.

**THE CONSEQUENCES.** Our approach maintains the desideratum that some specific sub-lexical features are shared by V and N, and avoids the wrong empirical prediction of using [boundedness] for countability. Moreover, as stative verbs are by definition non-dynamic and telic verbs must be dynamic, it keeps the right prediction that stative verbs produce mass event nominalisations and telic verbs produce count event nominalisations.

References. Bach, E. 1986. The Algebra of Events. *Linguistics and Philosophy* 9, 5-16. // Grimshaw, J. 1990. *Argument structure*. Cambridge, MA: MIT Press. // Jackendoff, R. 1991. Parts and boundaries. *Cognition* 41, 9-45. // Maienborn, C. 2003. *Die logische Form von Kopula-Sätzen*. Berlin: Akademie-Verlag // Mourelatos, A.P.D. 1978. Events, processes and states. *Linguistics and Philosophy* 2, 415–434 // Pelletier, F.J. 1975. Non-Singular Reference: Some Preliminaries. *Philosophia* 5. 451-465.