Some natural forces are animate agents

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Animate referents are inherently more prominent than inanimate ones when it comes to grammatical constructions. This prominence distinction is manifest in a broad range of grammatical phenomena where expressions referring to animate referents show a different, and usually a more finely nuanced, grammatical behavior than expressions referring to inanimate referents (e.g. split-ergative systems, plural formation, etc.). The well-known animacy hierarchy is one widely used construct to account for the manifold manifestation of this distinction (cp. Yamamoto 1999).

While the basic structure of this hierarchy is clear, with humans being more prominent than non-human animates, which in turn are more prominent than inanimates, there are many details that are still unresolved. One issue concerns the role of controlling or dynamic entities which are generally considered to be inanimate. With regard to such entities, it has been observed that expressions referring to intelligent machines and some kinds of natural forces are allowed to occur in argument functions otherwise mainly restricted to animates (Dixon 1972:306-311; Enghels 2007).

In this paper, we are concerned with natural forces such as thunderstorms, earth quakes, wind and the sun. We have two goals. First, we will provide cross-linguistic evidence for the hypothesis that whenever constructional options for animate and inanimate arguments differ, some natural forces regularly pattern with animates when occurring in agentive function. Examples are provided on the next page. Second, we show that not all natural forces behave in this way. Rather, some natural forces, e.g. the sun, regularly pattern with inanimates with regard to constructions sensitive to animacy distinctions. Furthermore, some natural forces (e.g. the wind) allow for alternative construals, sometimes patterning with animates, sometimes with inanimates. Consequently, the question arises what motivates the differing grammatical propensities of the two (or three?) classes of natural forces. We hypothesize that the ability for (forceful?) motion has a role to play.

The grammatical patterning of natural forces is of more general relevance, as it promises to provide further insights into which properties of animates makes them particularly good agents. In this regard, Lowder & Gordon (2015) claim that the natural forces at issue here are not only grammatically, but also cognitively processed like animate entities.

To support our claims, we present data from several unrelated language families (see next page).

References
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Examples
a) Turkish: Differential object marking
In Turkish, direct objects as in (1) are optionally marked with the accusative suffix -(*y*)*I* if the subject is animate. Inanimate subjects invoke a strong shift towards an accusative marking preference. Our observations from a forced choice study show that some natural forces like *storm*, *draft* or *river* grammatically pattern with animate subjects in allowing for optional marking (2). In contrast, others like the *sun*, *fire* or *quake* pattern like inanimate subjects in triggering an accusative marking preference on the direct object (3).

(1) a. *Öğretmen bir karton*(-***u***) *kes-ti*.
    teacher a cardboard-ACC cut-PST
    'The teacher cut a cardboard.'
   b. *Makas bir karton*[??](-***u***) *kes-ti*.
    scissors a cardboard-ACC cut-PST
    'The scissors cut a cardboard.'
(2) *Fırtına bir gemi*(-***yi***) *bat-ır-dı*.
   storm a ship-ACC sink-CAUS-PST
   'The storm sank a ship.'
(3) *Güneş bir çorba*[??](-***yı***) *ısı-t-tı*.
   sun a soup-ACC warm-CAUS-PST
   'The sun warmed a soup.'

b) Western Austronesian languages: Limited-control constructions
In Western Austronesian languages, limited-control constructions such as the Tagalog one in (4a) are used when the ability of the agentive argument to control the eventuality expressed by the predicate is at issue. This construction generally excludes inanimate agents, as these, by definition, lack the ability to control eventualities. Nevertheless, some natural forces are allowed in them (cf. example (4b)).

(4) Tagalog   (Himmelmann 2004:105)
   a. ***na****-dalá ko ang libró*
    RLS.POT.PV-carried 1.SG.POSS SPEC book
    'I took the book by accident.'
   b. *ang dahun ay* ***na****-dà-dalá ng tubig*
    SPEC leaf PM RLS.POT.PV-RDP-carried GEN water
    'The leaf was being carried along by the current, …'

c) Tima: Middle voice constructions
A further example are middle-voice constructions in Tima (Niger-Congo). These constructions allow for construals with animate agents (such as *ìhwáà* 'people' in (5a)) but, generally, do not accept inanimate agents as subjects. However, an exception within inanimate agents are, again, natural elements such as *íídí* 'water', which, just like animate agents, are judged acceptable in a construction like (5b).

(5) Tima
   a. *ìhwáà ì-cím-**ɟl**=á=ṯáŋ*
    people PAST-gather-**MV**=SOURCE=LOC3P
    'the people gathered (at one spot)'
   b. *íídí àŋ-cím-**ɟl**=á=ṯáŋ*
    PL:water 3P:PRF-gather-**MV**=SOURCE=LOC3P
    'the water has gathered (in one place)'