Polysynthetic word-internal adjectives and verb-like adjectives in Inuit

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1. Introduction

1.1. Background

- Previous work on Eskimoan languages has claimed that they lack a category of adjectives (as well as a category of adverbs).
- For instance, Fortescue (1984, pp. 202-3) recognizes only nouns and verbs as lexical categories in West Greenlandic (WG):

> West Greenlandic words (excluding enclitics) fall with few exceptions into three easily distinguishable major classes: nominals, which take number, case, and personal possession inflections; verbs, which take mood, person and number inflections; and particles, which remain uninflected.

- Similarly, Sadock (2003, p. 4) only recognizes nouns and verbs as lexical categories in WG:

> The morphology of WG distinguishes between nominal and verbal forms. Patterns of inflection and derivation show that there are two major morphological classes in WG. To a large extent, these also correspond to the two major classes of words in the syntax [...] and will therefore be called nouns and verbs. There are subtypes of each of these major classes, but no other comparable morphological classes in WG.

- Dorais (2010, p. 70) makes an analogous claim for Arctic Quebec Inuktutit:

> In the Nunavik dialect, as in the Inuit language in general, there are four basic types of words: nouns, verbs, localizers/demonstratives, and small words.

- De Reuse (1994)’s analysis of Central Siberian Yupik and Jacobson (1995)’s grammar of Central Alaskan Yup’ik employ similar categories, with both excluding adjectives.

1.2. Assumptions precluding an adjective class

- Such work has often made two assumptions that precluded adjectives (and adverbs) from constituting separate lexical categories.
  - First, it has been assumed that lexical categories should have distinct inflectional morphology.

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1 Unless otherwise indicated, examples are from the South Baffin dialect of Inuktitut and were elicited by the author, except for those from Spalding (1998)’s dictionary, which are from the Aivilik dialect of Inuktitut. Abbreviations include: ABS=absolutive; ALLAT=allative; BECAUSE=becausative mood; DEC=declarative mood; DIST.FUT=distant future tense; DIST.PAST=distant past tense; ERG=ergative; OBL=oblique/instrumental case; PL=plural; POSS=possessive; REC.PAST=recent past; SG=singular. Transcription conforms to a broad IPA except that <ng> = [ŋ], <nng> = [ŋŋ], <g> = [ɣ], <jj> = [ɗʤ] and <r>=[ʁ]. Thank you to Saila Michaels (my language consultant), Alana Johns, Diane Massam, Cristina Cuervo, Simona Herdan, and Michela Ippolito.
Second, in approaches that assume the Lexicalist hypothesis, subparts of “words” will presumably be excluded from constituting their own lexical categories.


- While Inuit and other languages have been claimed to lack adjectives, work by Dixon and Baker suggests that language-internal criteria can be discerned to differentiate adjectives from both nouns and verbs cross-linguistically.
  - Dixon (2004, p. 1) “suggest[s] that a distinct word class ‘adjectives’ can be recognized for every human language”.
  - Baker (2004) argues that all languages have a discernable class of adjectives (p.191).
- We can test these predictions against Inuktitut, which has been widely claimed to lack adjectives.

1.4. Two potential adjective classes in Inuit

- Inuit exhibits two classes of elements that are potential candidates for an adjective class:
  - Fortescue (1980)’s analysis of affix ordering in West Greenlandic includes a set of derivational morphemes which he calls “nominal modifiers”. This set of approximately 45 suffixes attach to nouns.
    1. saaq-jjuaq
table-big
    ‘the/a big table’
    2. iglu-tuqaq
house-old
    ‘the/a old house’
  - We also observe a relatively larger number of stative intransitive ‘verbs’ with prototypically adjectival meanings.
    3. taki-juq
tall-DEC.3SG
    ‘(he/she/it) is tall’
    4. sukka-juq
fast-DEC.3SG
    ‘(he/she/it) is fast’
- I argue that both of these sets constitute adjective classes in Inuit:

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2 While Fortescue lists 46 “nominal modifiers” for West Greenlandic, the exact number and their meanings vary across Inuit. Fortescue (1983) lists 50 entries for Tarramiut (Arctic Quebec Inuktitut), 27 entries for Copper (Western Canadian Inuktitut), and 34 entries for North Slope (Alaskan Inupiaq). Analogous cognates for many of these exist in Yupik as well.
First, I argue that Fortescue’s “nominal modifiers” constitute a class of suffixal strictly-attributive adjectives. Second, I argue that stative intransitive ‘verbs’ with stereotypically adjectival meanings constitute a class of verb-like adjectives.

2. Evidence for a class of strictly-attributive adjectives

2.1. Syntactic function

- Dixon (2004) notes considerable variation in how adjectives can be used cross-linguistically. While in some languages they can act as intransitive predicates (e.g. Japanese), in others they can be copular complements (e.g. English). Conversely, Fortescue’s “nominal modifiers” lack such possibilities and can only modify nouns attributively:

(5) umingma(g)-juaq
    muskox-big(ABS.SG)
    \verb|√|‘the/a big muskox’
    *‘The/a muskox is big.’

- While the inability to be used predicatively could be construed as evidence against treating these elements as adjectives, Dixon notes that adjectives in Malayalam, Hua, Yoruba, and Dagbani are similarly restricted to “function as modifier[s] within an NP” (p.28).
- Furthermore, English possesses a small set of adjectives that cannot be copular complements and appear restricted to attributive modification (e.g. mere, sole, live, former, etc.).

2.2. Position

- The position of “nominal modifiers” between nouns (including nominalizers) and their case, number, and possessive marking is consistent with analyses of the DP (e.g. Svenonius 2008) in which adjectives merge above nP but below other functional structure:

(6) ulu(g)-ju-a-ra
    ulu-big-1SG.POSS.ABS.SG
    ‘my big ulu (a traditional woman’s knife)’

(7) pisuk-tunga kuu-ralaa-kkut
    walk-DEC.1SG river-small-VIALIS.SG
    ‘I’m walking across the little river.’

(8) uqalimaar-vig-juaq
    [read-LOCATIVE.NOMINALIZER]-big(ABS.SG)
    ‘big library’
2.3.  **Stacking and variable ordering**

- As we might expect if “nominal modifiers” are adjoined APs, they can be stacked and exhibit variable ordering:

  (9)  qarisauja-ralaa-kulu-tuqa-nnguaq  
       computer-\textit{small-adorable-old-pretend}  
       ‘old adorable small pretend computer’ (e.g. in a toy store)

  (10)  
  a.  qarisaujat-tsiava-ralaq  
       computer-\textit{good-small}  
       ‘small good computer’
  
  b.  qarisauja-ralaat-tsiavaq  
       computer-\textit{small-good}

- In some cases it is possible to discern different meanings based on scope:

  (12)  
  a.  ‘Bush’-ru lu-nnguaq  
       B.-\textit{darn-pretend}  
       ‘pretend, darn Bush’ (=you may like the doll/image, but not Bush)
  
  b.  ‘Bush’-nngua-ru luk  
       B.-\textit{pretend-darn}  
       ‘darn, pretend Bush’ (=you may like Bush, but not the doll/image)

2.4.  **Productivity and compositionality**

- Adjective-noun combinations in languages like English are widely productive and highly composition. Similarly, Inuit “nominal modifier”-noun combinations appear to exhibit a high degree productivity and compositionality:

  (13)  gavama-taasaar-nut  
       government-\textit{new-\textsc{allat.pl}}  
       ‘by new government[s]’

   (Legislative Assembly of Nunavut, 2006, p. 1433)
However, just as other languages exhibit some lexicalized/idiomatic adjective-noun combinations (e.g. little person ‘dwarf’, raisin sec ‘raisin; lit. dry grape’), we find similar combinations in Inuit:

(15) qimmi-jjuaq
dog-big
‘horse’

(16) ataata-tsiaq
father-good
‘grandfather’

Furthermore, just as, for instance, little person in English can be used with its compositional, non-idiomatic meaning, my consultant was able to use (15) with its non-idiomatic meanings of ‘big dog’.

2.5. Degree modifiers, comparatives/superlatives, and depictives/resultatives

Baker (2004) points to compatibility with degree modifiers, comparatives and superlatives, and depictive/resultative constructions as diagnostics for differentiating adjectives cross-linguistically, however I have not been able to find “nominal modifiers” in such constructions.\(^3\)

This incompatibility may be due to their non-predicative, strictly attributive status, since in English strictly-attributive adjectives also appear to be incompatible with these constructions:

(17) the (*very/too) live/mere/former specimen

(18) the (*more/most) live/mere/former specimen

(19) *proved the specimen live/mere/former

2.6. Adverbial usage

Dixon also states that “in some languages adjectives may also modify verbs, either in plain form or via a derivational process” (p. 11).

\(^3\) While trying to elicit comparatives/superlative constructions involving “nominal modifiers”, I encountered the following construction:

(i) saaq-ju-(ng)u-niqsa-u-juq
table-big-COPULA-COMPARATIVE-COPULA-DEC.3SG
‘It is the bigger table.’

However, there is a copula intervening between the adjective and comparative morpheme, suggesting that the comparative is likely modifying the entire incorporated NP ‘big table’.
• Indeed, we find examples of “nominal modifiers” modifying verbs:

(20) niri-tsiq-tuq
eat-good-dec.3sg
‘He/she is eating very well.’

(21) sini-juaq-lauq-tuq
sleep-big-dist.past-dec.3sg
‘He/she slept for a long time.’

• Such examples mirror similar adverbial uses of adjectives in English (e.g. He’s eating good).

3. Evidence for a class of verb-like adjectives

• Verb-like adjectives exhibit the same person, mood, tense, etc. marking as intransitive verbs.

3.1. Comparatives and superlatives?

• We might expect adjectives to be uniquely compatible with comparative and superlative constructions. While verb-like adjectives are compatible with such constructions…

(22) John taki-niqaq Miali-mit
John tall-COMPARATIVE Mary-OBL.SG
‘John is taller than Mary.’

(23) John taki-niqpaaq (asivaqti-nit)
John tall-SUPERLATIVE (hunter-OBL.PL)
‘John is the tallest (of the hunters).’

• … so are verbs:

(24) John sining-niqaq asivaqt-i-mit
John sleep-COMPARATIVE hunter-OBL.SG
‘John slept more than the hunter.’

4 Comparative and superlative constructions involving the copula are also possible, suggesting that the comparative and superlative morphemes are nominalizers:

(i) John taki-niqa-u-juq Miali-mit
John tall-COMPARATIVE-COPULA-DEC.3SG Mary-OBL.SG
‘John is taller than Mary.’

(ii) John taki-niqpaa-(ng)u-juq
John tall-SUPERLATIVE-COPULA-DEC.3SG
‘John is the tallest.’

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Accordingly, comparative/superlative constructions don’t allow us to differentiate verb-like adjectives.

### 3.2. Compatibility with degree heads?

- Similarly, compatibility with degree heads doesn’t appear to disambiguate verb-like adjectives and stative verbs:

(26) qarlii-t⁶ miki-luaq-tut  
    pants-ABS.PL small-DEGREE-DEC.3PL  
    ‘The pants are too small.’

(27) nunasiuti sukka-luaq-tuq  
    car(ABS.SG) fast-DEGREE-DEC.3SG  
    ‘The car is too fast.’

- Verbs are also compatible with -luaq- ‘too’:

(28) sini-luaq-tuq  
    sleep-DEGREE-DEC.3SG  
    ‘He/she is sleeping too long/much.’

(29) nuluaq pukta-luaq-tuq  
    fish.net(ABS.SG) float-DEGREE-DEC.3SG  
    ‘The fish net is floating too much.’

- (Similarly, Doetjes (2008) observes that degree modification by trop ‘too’ in French is not restricted to adjectives.)

### 3.3. Compatibility with depictives/resultatives?

- Unfortunately (for me), Inuktitut appears to lack depictive/resultative constructions. As mentioned above, suffixal adjectives are strictly attributive and thus can’t act as depictives/resultatives. Furthermore, verb-like adjectives project clausal structure, yielding a second clause when we attempt to get depictives/resultatives:

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⁵ The segment ‘ng’ [ŋ] is inserted before the noun-incorporating copula ‘u’ to avoid a phonologically illicit sequence of three vowels.

⁶ Note that in dialects that possess dual number inflection this word normally bears dual number; i.e. qarliik ‘pair of pants or trousers’ (Spalding, 1998, p.110). My consultant’s dialect lacks the dual.
In sum, depictives/resultatives are not possible in Inuktitut, and thus cannot be used to differentiate adjectives from verbs.

### 3.4. Compatibility with modals and nominalizations under modals

- I tested the compatibility of verb-like adjectives and stative intransitive verbs with modals, and while the consultant often had to nominalize verb-like adjectives, there were exceptions that made this test inconclusive.
- However, one difference that did emerge was that while the verb-like adjectives were compatible with the nominalization construction below modals, real verbs were not:

  (32) taki-ju-u-qu-guviuk taki-ju-u-gonnaq-tuq
tall-DEC-COPULA-want-CONDITION.2SG.3SG tall-DEC-COPULA-can-DEC.3SG
‘If you’d like it to be tall, it can be tall.’

  (33) angi-ju-u-qu-guviuk angi-ju-u-gonnaq-tuq
big-DEC-COPULA-want-CONDITION.2SG.3SG big-DEC-COPULA-can-DEC.3SG
‘If you want it to be big, it can be big.’ (e.g. cooking bannock)

  (34) *sini-ju-u-qu-guviuk sini-ju-u-gonnaq-tuq
sleep-DEC-COPULA-want-CONDIT.2SG.3SG sleep-DEC-COPULA-can-DEC.3SG
(INTENDED: ‘If you want him/her/it to sleep, he/she/it can sleep.’)

  (35) *pukta-ju-u-qu-guviuk pukta-ju-u-gonnaq-tuq
float-DEC-COPULA-want-CONDITION.2SG.3SG float-DEC-COPULA-can-DEC.3SG
(INTENDED: ‘If you want it to float, it can float.’)

- So, compatibility with nominalization under a copula and a modal appears to be a diagnostic for being a verb-like adjective in Inuktitut.

### 3.5. Compatibility with negative marker -it-

- Compatibility with the negative marker -it- which creates antonyms also differentiates verb-like adjectives from verbs (examples from Spalding (1998)’s dictionary):
(36)  
  a. akau-juq  
      good-DEC.3SG  
      ‘it is good’  
  b. aka-it-tuq  
      good-NEG-DEC.3SG  
      ‘it is bad’  

(37)  
  a. aklu-juq  
      poor-DEC.3SG  
      ‘he is poor’  
  b. aklu-it-tuq  
      poor-NEG-DEC.3SG  
      ‘he is rich’  

- While -it- also occurs with nouns, it never modifies a real verb directly.  

3.6. An inflectional difference in the Siglitun dialect

- Finally, I have recently learned from Schöneborn (2002) that at least one western dialect,  
  Siglitun, does in fact make an inflectional distinction between verbs and verb-like adjectives  
  when used predicatively (p. 106; using his glossing but IPA; emphasis in original):

(38)  
  ani-jua-q  
  go.out-INDIC-3SG  
  ‘he went out’  

(39)  
  nakuu-ju-q  
  be.fine-INDIC-3SG  
  ‘it is fine, good’  

- Such phenomena suggest that stative intransitives with prototypically adjectival meanings do  
  indeed constitute a class of verb-like adjectives.

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7 For instance, -it- can modify an adverbial such as gajuk ‘frequently’ that is in turn modifying a verb:

(i)  
  pi-gajuk-tuq  
  do-frequently-DEC.3SG  
  ‘he does s.t. or gets s.t. frequently or always’  

(ii)  
  pi-gaju-it-tuq  
  do-frequently-NEG-DEC.3SG  
  ‘he does s.t. or gets s.t. hardly ever or seldom’

8 Schöneborn uses the term Property Denoting Lexeme (PDL) to refer to the classes I have argued to be adjectives.  
He notes that while Siglitun uses -jua- and -ju- to differentiate verbs and PDLs when they’re used predicatively, in  
attributive constructions (which I have argued elsewhere to be cases of a nominalized clause in apposition with the  
head noun) the distinction is instead one of definiteness.
4. Conclusion

- In sum, I have argued for a class of STRICTLY-ATTRIBUTIVE ADJECTIVES in Inuit based on:
  - Position in DP with respect to functional heads (K, #, Poss)
  - Stacking and variable ordering
  - High degree of productivity and compositionality
  - Adverbal usage of some strictly-attributive adjectives to modify verbs

- Furthermore, I have argued for a class of VERB-LIKE ADJECTIVES in Inuit based on:
  - Compatibility with nominalization under a copula (as compared with verbs)
  - Compatibility with the contrary negator -it- (which is compatible with nouns and verb-like adjectives, but not verbs)
  - The existence of an inflectional difference between verbs and verb-like adjectives in the dialect of Siglitun.

- Consequently, Inuit appears to conform to Baker (2004) and Dixon (2004)’s prediction that all languages possess an adjective class.

References


