The semantics of Inuit adjectives

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1. Introduction

The literature on Eskimo-Aleut languages typically recognizes nouns, verbs, and particles as syntactic categories, sometimes also admitting other members such as locative adverbs, demonstratives, or interjections as additional categories. To a large degree this is due to the Lexicalist Hypothesis (Jackendoff 1972, Selkirk 1982) – the idea that words are built in a morphological module of grammar in which they receive a category, and then these categorized words become the atoms of the syntactic module of grammar. Given that, by and large, words in Inuit are either nominal (e.g., taking case and possessive marking) or verbal (e.g., taking mood, person agreement, etc.), the natural outcome when such a theory of grammar is applied to the language is to categorize most words as nouns or verbs, with the remaining words classified as particles.

However, a growing body of research in the theoretical paradigm of Distributed Morphology (DM) (Halle and Marantz 1993, 1994) argues that words are not the atoms on which syntax operates, and that in fact syntactic structure extends into words. Essentially, in such a theory both words and sentences are built in a single morpho-syntactic module of grammar. Under this new lens, words can contain syntactic structure and thus the

component parts of words themselves possess grammatical categories. It is in this vein that Compton (2012) argues for two types of adjectives inside Inuit words: a class of strictly-attributive suffixal adjectives and a class of verb-like adjectives.

Interestingly, while we might expect both of these adjective classes to contain members with similar types of semantic denotations, there appears to be a restriction on the denotations of the strictly-attributive suffixal adjectives whereby they cannot have intersective denotations. In this paper I begin by briefly examining the evidence for positing adjective classes in Inuit. Next, I examine this semantic constraint on the distribution of denotations between the two classes whereby the strictly-attributive suffixal class lacks members with intersective denotations. Finally, I outline two possible reasons for this unexpected pattern.[1]

2. Adjectives in Inuit

Inuit possesses two kinds of adjectives, a class of strictly-attributive suffixal adjectives, as illustrated in (1) modifying nouns, and a class of verb-like adjectives, as shown in (2).[2]

(1)   STRICTLY-ATTRIBUTIVE ADJECTIVES

    a.   *saakutaaq*
           saa-kutaaq
           table-long
           'a long table'

    b.   *aanniavituqaq*
           aannia-vik-tuqaq
           sick-LOC.NOMZ-old
           'an old hospital'

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[2] The mood glossed herein as participial is typically labeled as such in the literature on Eskimoan languages, in contrast with the indicative mood. However, in many Canadian Inuit dialects it functions as the default declarative mood of main clauses. This patterning is distinct from the behavior of this mood in West Greenlandic, where it is reserved for subordinate positions.

(2)   VERB-LIKE ADJECTIVES[3]

    a.   *Sanngijunga.*
        sanngi-ju-nga
        strong-PART-1SG
        'I am strong.'

    b.   *Takijunga.*
        taki-ju-nga
        long-PART-1SG
        'I am tall.'

In the following subsections I briefly present data to support analysing these elements as constituting a syntactic category of adjectives.

2.1. Strictly-attributive suffixal adjectives

Morphemes like *kutaaq* 'long' and *tuqaq* 'old' from (1) are typically treated as derivational morphology in the literature (Fortescue 1980, 1984; Sadock 2003).[4] However, the evidence for treating them as adjectives includes (i) their syntactic function, (ii) their relative position, (iii) their optionality and near-full productivity, (iv) the possibility of stacking and variable order, and (v) the ability to be modified by degree adverbials. I outline each of these in turn.

As noted by Baker (2004: 192), the "most obvious distinctive characteristic of adjectives is that they modify nouns directly". Modification turns out to be the sole syntactic function of this class of adjectives in Inuit.[5] As shown in (3), this class of adjectives can modify a noun but cannot act as a predicate.

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[3] Note that in the Nunavik dialect adjectives cannot inflect directly for first or second person or moods other than participial (see Dorais 1988).

[4] A notable exception is de Reuse (2009: 20) who proposes what he calls "productive noninflectional concatenation" as a type of morphology distinct from derivation and inflection. Instead, I take his observation of the productivity of polysynthetic morphology in Inuit as evidence for it in fact being syntactic in nature.

[5] A number of the members of this class also have polysemous uses as adverbial modifiers of verbs, but arguably this implies a category change to adverbs. Another potential exception to this is the morpheme *nnguaq* 'pretend', which can also serve as either an adjective or a verb-incorporating verb meaning 'to pretend to X'. However, this also seems to be a case of polysemy or categorial heterogeneity, analogous to how English *pretend* is both an adjective and verb.

(3)   *umingmajjuaq*
         umingmak-jjuaq
         muskox-big
         'the/a big muskox…'
         *'The/a muskox is big.'

Similarly, *jjuaq* cannot act alone as an argument, with or without case morphology. It is for this reason that I adopt the label strictly-attributive for this class of adjectives.

The relative position of these adjectives also corresponds to the expected position of adjectives within the extended nominal projection, between nominalizers (which are closer to the root) and markers of number, possession, and case, which arguably belong to higher functional projections such as Num(ber), D(eterminer), or K(ase). For example, in the following example the adjective big follows the locative nominalizer *vik* and precedes possessive and case morphology.

(4)   …*kanataup katimavijjuanganut*   (Nunavut Government Hansard 1999)
         …kanata-up   katima-vik-*jjuaq*-nga-mut
         …Canada-ERG   meet-LOC.NOMZ-*big*-3SG.POSS.SG-(POSS).ALLAT.SG
         'on Parliament Hill' (Literally: 'to Canada's big meeting place')

Yet another property of these elements that supports them being classified as adjectives is their optionality. On one hand, there exist a number of lexicalized noun-adjective combinations, such as (5)-(6), akin to lexicalised adjective-noun combinations in Indo-European languages.

(5)   *qimmijjuaq*
         qimmiq-jjuaq
         dog-big
         'horse' (also: 'big dog')

(6)   *ataatattiaq*   (Aivilik, Spalding 1998: 13)
         ataata-ttiaq
         father-fine
         'grandfather'

However, outside of such lexicalized or idiomatic combinations, these adjectives are near fully productive optional modifiers; no syntactic construction requires them (except, perhaps, the degree adverbials which modify them, as discussed

below).[6] For instance, in the following example it is clear that 'small library' is not lexicalized and *ralaaq* 'small' is optional.

(7)   *Uqalimaarvi(ralaa)qaqtugut.*
        uqalimaar-vik-(ralaaq)-qaq-tu-gut
        read-LOC.NOMZ-(small)-have-PART-1PL
        'We have a (small) library.'

In sum, these elements are syntactically optional and exhibit near full productivity, as we would expect of attributive adjectives (and of adjuncts generally).

Yet another property consistent with adjectives is the possibility of stacking and variable order. For instance, in the following example four adjectives are modifying the noun *qarisaujaq* 'computer'.

(8)   *qarisaujaralaakulutuqannguaq*
        qarisaujaq-ralaaq-kuluk-tuqaq-nnguaq
        computer-small-adorable-old-pretend
        'an old adorable small pretend computer' (such as a toy computer)

This example further illustrates that we are not dealing with lexicalized combinations and that these modifiers are near-fully productive. Furthermore, certain combinations of these adjectives exhibit variable order with respect to each other, as illustrated in (9) where either ordering of *tsiavaq* 'good' and *kuluk* 'adorable' is possible.

(9)a.   *iglutsiavakuluk*
        iglu-tsiavaq-kuluk
        house-good-adorable

   b.   *iglukulutsiavaq*
        iglu-kuluk-tsiavaq
        house-adorable-good
        'a good adorable house'

Such variability, while uncommon of derivational morphology, is characteristic of adjectives (see Truswell 2009).

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[6] Potential exceptions to this generalization involving the use of *viniq* 'former' and *nnguaq* 'pretend, fake' appear to be pragmatic or semantic in nature. Speakers systematically distinguish live animals, e.g. *tuktu* 'a live caribou', from deceased animals or their meat, e.g., *tuktuviniq* 'dead caribou or caribou meat (lit. former caribou)'. Similarly, speakers systematically distinguish between genuine artifacts, e.g., *iglu* 'house', and representations/facsimiles thereof, e.g., *iglunnguaq* 'fake/model/pretend/toy house'. But crucially, it is the intended meaning that necessitates the use of these adjectives, not the presence of any syntactic construction. See Mahieu (this volume) on *viniq* and also on the meaning of *ksaq/tsaq*.

A final piece of evidence for their status as adjectives is that these elements can be modified by the degree adverbial *vijjuaq* 'really', as illustrated in the following examples:

(10)   *qimmituqavijjuaq*
        qimmiq-tuqaq-vijjuaq
        dog-old-really
        'a really old dog'

(11)   *arnatsiavavijjuaq*
        arnaq-tsiavaq-vijjuaq
        woman-good-really
        'a really good woman'

While degree modification is certainly not limited to adjectives (see, e.g., Doetjes 2008), and although it is only expected to be applicable to adjectives with gradable meanings, the possibility of degree modification is nevertheless an expected property of adjectives as a class.

In the next subsection I present evidence for a class of verb-like adjectives which can be distinguished from intransitive verbs.

2.2. Verb-like adjectives

At first glance, it is difficult to discern a set of predicative adjectives among the predicates traditionally classified as intransitive verbs in the language. For instance, predicates with proto-typically adjectival denotations exhibit the same mood, agreement, and tense morphology as genuine intransitive verbs. Furthermore, even comparative and superlative constructions do not pick out a distinct category of adjectives, at least in Eastern dialects, as illustrated here using the verb-like adjective *taki* 'long, tall' and the intransitive verb *sinik* 'sleep':

(12)a.   *Miali takiniqpaangujuq asivaqtinit.*
         Miali   taki-niqpaaq-(ng)u-ju-q   asivaqti-nit
         Mary(ABS)   tall-SUPER.NOMZ-COP-PART-3SG   hunter-ABL.PL
         'Mary is the tallest of the hunters.'

     b.   *Miali siningniqpaangujuq asivaqtinit.*
         Miali   sinik-niqpaaq-(ng)u-ju-q   asivaqti-nit
         Mary(ABS)   sleep-SUPER.NOMZ-COP-PART-3SG   hunter-ABL.PL
         'Mary slept the most of the hunters.'

And yet, a number of grammatical phenomena converge on a set of verb-like adjectives. These include (i) compatibility with participial mood and the copula in modal constructions in South Baffin, (ii) interactions between person and mood in the Nunavik dialect, (iii) compatibility with the comparative marker *tqi* in the Kangiryuarmiut dialect, and finally (iv) differences in the exponence of mood in Siglit. These properties are outlined below:

While verb-like adjectives like *taki* 'tall' are compatible with the following frame in which they are nominalized in the participial mood and followed by the copula and a modal verb such as *qu* 'want' or *gunnaq* 'can', the same structure is not possible with genuine (intransitive) verbs, such as *pukta* 'float', which must instead combine directly with the modal, as in (13c).

(13)a. *Takijuuquguviuk takijuugunnaqtuq.*
taki-ju-u-qu-guviuk   taki-ju-u-gunnaq-tu-q
tall-PART-COP-want-COND.2SG.3SG   tall-PART-COP-can-PART-3SG
'If you want it to be tall, it can be tall.'

b. **Puktajuuquguviuk puktajuugunnaqtuq.*
pukta-ju-u-qu-guviuk   pukta-ju-u-gunnaq-tu-q
float-PART-COP-want-COND.2SG.3SG   float-PART-COP-can-PART-3SG

c. *Puktaquguviuk puktagunnaqtuq.*
pukta-qu-guviuk   pukta-gunnaq-tu-q
float-want-COND.2SG.3SG   float-can-PART-3SG
'If you want it to float, it can float.'

This same pattern holds of other verb-like adjectives such as *angi* 'big' and *akitu* 'expensive' and is similarly ungrammatical for genuine intransitive verbs such as *uppirisuk* 'believe' and *qaujima* 'know'.[7]

Another phenomenon that appears to pick out a class of verb-like adjectives is compatibility with first and second person forms and moods other than the participial in the Nunavik dialect. Dorais (1988: 114-115) states that the dialect lacks a category of adjectives but goes on to point

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[7] Interestingly, such examples highlight that compatibility with this construction does not appear to be due to the aspectual properties of the predicates. For instance, verb-like adjectives such as *angi* 'big' and *akitu* 'expensive' as well as genuine verbs such as *pukta* 'float', *uppirusuk* 'believe', and *qaujima* 'know' are arguably all stative, durative, and atelic and yet only the former set are permitted in this frame.

that a set of "qualifying name giving words" behave differently from both nouns and verbs. For instance, he notes that a predicate like *piu* 'good' may appear in the third person and in the participial mood, but other moods and persons trigger nominalization and the use of the copula:[8]

(14)a. *Piujuujunga.*   (Nunavik, Dorais 1988: 114-115)
        piu-ju-u-ju-nga
        good-PART-COP-PART-1SG
        'I am good.'

   b. *Piujuugamik.*
        piu-ju-u-gamik
        good-PART-COP-BEC.4PL
        'Because they are good.'

Crucially, this property holds only of verb-like adjectives, with genuine verbs behaving as in other dialects, combining directly with other moods and taking first and second person without the need to undergo nominalization.[9]

While comparative and superlative constructions in Eastern Canadian dialects (illustrated above) do not distinguish a set of verb-like adjectives, the comparative marker in the Kangiryuarmiut (Western Canadian Inuit) dialect appears to do so, as illustrated in (15).

(15)a. *Mikitqijaa.*   (Kangiryuarmiut)
        miki-tqi-ja-a
        small-COMP-PART-3SG.3SG
        'He/she/it is smaller than him/her/it.'

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[8] Dorais uses the somewhat more literal gloss of 'I am someone good' for (14a), however, given that first person agreement is not directly compatible with this predicate, it is not clear that speakers are making such a contrast in meaning. Note also that some authors distinguish the participial mood marker from a homophonous nominalizer.

[9] Furthermore, Dorais (1988: 115) notes that this same set of predicates must also undergo nominalization when acting as the main predicate in an utterance, as illustrated below, whereas regular verbs are not subject to this requirement.

        illu   *aupar-tu-u-vu-q*   (Nunavik)
        house(ABS)   red-PART-COP-INDIC-3SG
        'the house, it is something red (the house is red)'

   However, Marc-Antoine Mahieu (p.c.) notes that *Illu aupartuq* is also possible in Nunavik, except in the Ungava Bay area where it would be *Illu aupaluttaq*. Such forms are arguably nominal predicates.

    b.   *Nakuutqijaa.*
        nakuu-tqi-ja-a
        good-COMP-PART-3SG.3SG
        'He/she is better than him/her.'

    c.   **Puptatqijaa.*
        pupta-tqi-ja-a
        float-COMP-PART-3SG.3SG
        Intended: 'He/She/It floats more than him/her/it.'

    d.   **Sinitqijaa.*
        sinik-tqi-ja-a
        sleep-COMP-PART-3SG.3SG
        Intended: 'He/She sleeps more than him/her.'

Verb-like adjectives are compatible with Kangiryuarmiut comparative marker *tqi*, while genuine verbs are not.

Finally, while most dialects make no distinction between verb-like adjectives and genuine verbs in terms of inflection, the Siglitun dialect actually uses distinct forms of the participial mood marker for verbs and adjectives in the first and third persons.[10] This difference in mood marking, discussed in Lowe's (1984) grammar of Siglitun, is summarized in Table 1 below.[11]

Table 1: Participial mood forms in Siglitun

	GENUINE VERBS	VERB-LIKE ADJECTIVES
1ST PERSON	*jua/tua*	*ju/tu*
2ND PERSON	*ju/tu*	*ju/tu*
3RD PERSON	*jua/tua*	*ju/tu*

Thus, a verb-like adjective across all persons will take the *ju/tu* form of the participial marker, as in (16), while genuine verbs in the first or third person will bear the *jua/tua* form, as illustrated in (17).[12]

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[10] Schöneborn (2002: 106-107) examines this difference in inflection in Siglitun but shies away from using the label of adjective, instead opting for "Property Denoting Lexeme". In fact, even Lowe's (1985) grammar of Siglitun alludes to this distinction, identifying both "action words" and "quality words".

[11] Here and throughout I employ the orthographic convention from Eastern Canadian Inuit of representing the sound [j] with the grapheme <j>, even for Western forms for which <y> is normally used.

[12] Note however that when modifying an argument, instead of taking it predicating it, these forms instead contrast definiteness on the argument (see Lowe 1985; Bourcier, this volume).

(16)a.   *angijuq*   (Siglitun, Lowe 1984: 56)
      angi-ju-q
      'is big'

  b.   *akitujuq*
      akitu-ju-q
      'is expensive'

(17)a.   *siniktuaq*   (Siglitun, Lowe 1984: 38, 41)
      sinik-tua-q
      'sleeps'

  b.   *puptajuaq*
      pupta-jua-q
      'floats'

Once again, the verbs presented above were chosen because they are similar to the adjectives in terms of their aspectual properties, being durative and atelic. Similarly, this categorical contrast appears to cross-cut the distinction between stage level predicates and individual level predicates (Carlson 1977). For instance, the predicates patterning together as adjectives in terms of inflection include both stage level predicates such as *aripa* 'wet' and *qiqau* 'cold (of an object)' as well as individual level predicates such as *tungu* 'blue or green' and *qubjuq* 'blond' (examples from Lowe 2001). Consequently, the difference in patterning with respect to appears to be due to a categorial distinction between adjectives and verbs in the language, and cannot be explained as being to the stage/individual-level distinction.

Having presented evidence for the existence of adjectives as a distinct lexical category in Inuit, in the next section I examine a semantic constraint on the denotation of strictly-attributive adjectives such that intersective meanings are not attested in that class.

3. A semantic constraint on adjective denotations

Given the two classes of adjectives presented above, we might expect the range of possible adjectival meanings to be randomly distributed between the two classes, and indeed there are meanings that do seem to overlap, such as the verb-like *angi* and strictly-attributive *jjuaq*, both meaning 'big'. However, when we compare the two sets of adjectives we find that among

the strictly-attributive set, certain types of denotations are systematically missing.

For instance, Dixon (2004: 3-5) sets out the following list of common "semantic types typically associated with the word class adjective".

(18)   Dixon's (2004) adjective types
   a. DIMENSION – 'big', 'small', 'long', 'tall', 'short', 'wide', 'deep', etc.
   b. AGE – 'new', 'young', 'old', etc.
   c. VALUE – 'good', 'bad', 'lovely', 'atrocious', 'perfect', 'proper(/real)', etc.
   d. COLOUR – 'black', 'white', 'red', etc.
   e. PHYSICAL PROPERTY – 'hard', 'soft', 'heavy', 'wet', 'rough', 'strong', 'clean', 'hot', 'sour', etc.
   f. HUMAN PROPENSITY – 'jealous', 'happy', 'kind', 'clever', 'generous', 'cruel', 'proud', 'ashamed', 'eager', etc.
   g. SPEED – 'fast', 'quick', 'slow', etc.
   h. DIFFICULTY – 'easy', 'difficult', 'tough', 'hard', 'simple', etc.
   i. SIMILARITY – 'like', 'unlike', 'similar', 'different(/strange)', 'other', etc.
   j. QUALIFICATION – 'definite', 'true', 'probable', 'possible', 'likely', 'usual', 'normal','common', 'correct', 'appropriate', 'sensible', etc.
   k. QUANTIFICATION – 'all(/whole)', 'many', 'some', 'few', 'only', 'enough', etc.
   l. POSITION – 'high', 'low', 'near', 'far/distant', 'right', 'left(/strange)', 'northern', etc.
   m. CARDINAL NUMBERS (In some languages these constitute a separate word class.) And 'first', 'last' (together with other ordinal numbers).

According to Dixon, languages with relatively small class of adjectives will possess members with types of meanings near the top of this list, such as dimensions, ages, values, and colours, and as the size of class increases a language is more likely to instantiate meanings further down the list as adjectives.

And yet, while most of these types of meanings are exemplified in the class of verb-like adjectives in Inuit, when we compare the set of strictly-attributive adjectives there are some consistent gaps. For instance, among the first four types of meaning that Dixon notes are common to even very small adjective classes, we find dimension, age, and value meanings instantiated as strictly-attributive adjectives:

(19) DIMENSION

    a. *nanuralaaq*
        nanuq-ralaaq
        polar.bear-small
        'small polar bear'

    b. *ulujjuara*
        ulu-jjuaq-ra
        ulu-big-1SG.POSS
        'my big ulu (a traditional woman's knife)'

    c. *saakutaaq*
        saa-kutaaq
        table-long
        'a long table'

(20) AGE

    a. *iglutaasaaq*   (Aivilik, Spalding 1998: 97)
        iglu-taasaaq
        house-new
        'a new house'

    b. *inutuqavijjuaq*
        inuk-tuqaq-vijjuaq
        person-old-very
        'very old person'

(21) VALUE

    a. *Juusipiruluk anijuq.*
        Juusipi-ruluk   ani-ju-q
        Juusipi-darn/poor go.out-PART-3SG
        'That darn Juusipi went out.'

    b. *qimmitsiaq*
        qimmiq-tsiaq
        dog-good
        'a good dog'

However, colour meanings are completely absent from this class, and are all instantiated as verb-like adjectives (or nominalizations thereof). Also absent from this class are geometric shapes, materials, substances, styles, etc. Why should all such meanings be confined to the verb-like class?

One potential explanation can be found by examining the nature of the adjectival denotations in question. Kamp and Partee (1995) distinguish adjective types based on the meanings they yield in nominal modification. For instance, INTERSECTIVE adjectives are those, like *carnivorous* in

English, which when modifying a noun such as *mammal*, are interpreted as the intersection of the denotations of the adjective and the noun. In other words, *carnivorous mammal* is interpreted as an intersection of those things that are both carnivorous and mammals, as illustrated below in their set-theoretic notation (p. 137):

(22) || carnivorous || = {x | carnivorous (x)}
       || mammal || = {x | mammal (x)}
       || carnivorous mammal || = {x | carnivorous (x) & mammal (x)}
                                    = || carnivorous || ∩ || mammal ||

They provide the following meaning postulate for intersective adjectives like carnivorous:

(23) || carnivorous *N* || = || carnivorous || ∩ || *N* ||

However, they note that not all adjectives behave in this way. For instance, they show that attempting to interpret an adjective like *skillfully* as intersective will yield the wrong results (p. 138):

(24) Mary is a skillful surgeon
      Mary is a violinist
      Therefore Mary is a skillful violinist

They label non-intersective adjectives such as *skillful* as being SUBSECTIVE and explain that they pick out a subset of the noun they modify. Thus, a *skillful surgeon* is interpreted relative to the set of surgeons (p. 138):

(25) || skillful *N* || ⊆ || *N* ||
      || skillful surgeon || ⊆ || surgeon ||

Finally, they note that there are adjectives which are neither intersective nor subsective, such as *former* and *counterfeit*, which cannot be interpreted either as either an intersection or a subset relation (p. 138):

(26) || former senator || ≠ || former || ∩ || senator ||
      || former senator || ⊄ || senator ||

Among this last set of non-intersective, non-subsective adjectives we also find privative adjectives, such as *counterfeit* and *fake*, whose interpretations are arguably entirely disjoint from the nouns they modify.

   Applying these conceptual distinctions to the set of strictly-attributive adjectives in Inuit, we find that while subsective, non-subsective, and

private meanings are represented in this class, intersective denotations are conspicuously absent from this class. For instance, we find meanings picking out relative size, age, and value with respect to the noun they modify, as does *ralaaq* 'small' in (27), meanings that cannot quite be interpreted as picking out a subset of the noun the modify, like *viniq* 'former' in (28), and privative meanings such as that exemplified by *nnguaq* 'fake, pretend' in (29).

(27)   *kuuralaaq*   (SUBSECTIVE)
       kuuk-ralaaq
       river-small
       'a small river; a stream'

(28)   *igluviniq*   (NON-SUBSECTIVE)
       iglu-viniq
       house-former
       'a former house'

(29)   *nanunnguaq*   (PRIVATIVE)
       nanuq-nnguaq
       polar.bear-fake/pretend
       'a fake/pretend polar bear' (e.g., a carving of a polar bear)

And yet, despite instantiating all the other types of meanings outlined by Kamp and Partee (1995), we find no examples of strictly-attributive adjectives with intersective denotations. All colours, geometric shapes, and property-denoting meanings that might be interpreted intersectively are instead manifested in the class of verb-like adjectives, as illustrated in the following examples.

(30)   *Aupaqtuq.*
       aupaq-tu-q
       red-PART-3SG
       'It is red.'

(31)   *Angmalurtuq.*   (Aivilik, Spalding 1998: 10)
       angmaluq-tu-q
       round-PART-3SG
       'It is round (linear roundness); circular; oval.'

(32)   *Qausirtuq.*   (Aivilik, Spalding 1998: 112)
       qausiq-tu-q
       wet-PART-3SG
       'It is wet.'

Given that intersective adjectival meanings are present in the class of verb-like adjectives, why are such meanings systematically absent from the strictly-attributive class? Below I outline two possible accounts that would explain this gap in the range of expected meaning types in this class of adjectives.

3.1. No Predicate Modification

One way of accounting for the absence of strictly-attributive adjectives with intersective meanings would be to propose that the semantic rules of the language rule them out for some reason. But, given that these very same meanings are found in the verb-like class, we need to ensure that the system can avoid their use in modification while still allowing these meanings to be employed predicatively.

The rule of Predicate Modification outlined by Heim and Kratzer (1998: 65) offers such a possibility. Essentially, it is the rule in formal semantics that permits the conjunction of two one-place predicates, illustrated above in (22), and repeated again below.

(33) || carnivorous || = {x | carnivorous (x)}
         || mammal || = {x | mammal (x)}
         || carnivorous mammal || = {x | carnivorous (x) & mammal (x)}
                                      = || carnivorous || ∩ || mammal ||

Essentially, this rule permits intersective modification in semantics. Accordingly, if this rule were to be absent or otherwise constrained in Inuit, we might expect intersective modification to also be absent. Thus, the absence of a rule of Predicate Modification could account for the lack of strictly-attributive adjectives with intersective meanings, since the semantics would have no way to compose them with the nouns they modify.

One complication, though, is that verb-like adjectives not only occur predicatively, but can act as attributive modifiers, as in (34) where *taki(juup)* 'tall' modifies the subject.

(34)   *Takijuup arnaup nirijanga aapu.*
         taki-ju-up   arnaq-up   niri-ja-nga   aapu
         tall-PART-ERG   woman-ERG   eat-PART-3SG.3SG   apple(ABS)
         'The tall woman is eating the apple.'

Given that there does not appear to be any semantic constraints on which verb-like adjectives can act as modifiers, this would seem, at first, to call into question the proposed ban on direct intersective modification.

However, one difference between the verb-like adjectives in such constructions and modification by strictly-attributive adjectives is that such verb-like adjectives bear case when acting as modifiers and they can also stand alone as nominals, as in shown in (35), suggesting that when acting as modifiers they are in fact nominalizations in apposition with the nouns they modify (i.e., they are DP adjuncts in apposition with the head noun).

(35)   *Takijuup nirijanga aapu.*
        taki-ju-up   niri-ja-nga   aapu
        tall-PART-ERG   eat-PART-3SG.3SG   apple(ABS)
        'The tall one is eating the apple.'

Similar observations about such modification being appositional in nature have been made in the literature by Fortescue (1984: 49), Sadock (1985: 394), Creider (1978: 98), and Johns (1987: 159). The analysis of such constructions as being the apposition of two nouns is further evidenced by the fact that that same structure and repeated case-marking is found in noun-noun apposition in the language, as illustrated in the example in (36) where both nouns bear ergative case.

(36)   *Asivaqtiup ilisaijiup nirijanga aapu.*
        asivaqti-up   ilisaiji-up   niri-ja-nga   aapu
        hunter-ERG   teacher-ERG   eat-PART-3SG.3SG   apple(ABS)
        'The hunter, the teacher, is eating an apple.'

If this is indeed the case, it may be that they do not compose via Predicate Modification and instead assign their meanings via the same method as appositives (see, e.g., Potts 2005 for such a proposal) or that they are co-indexed and pick out the same individuals.

In sum, the observed semantic constraint on attributive modification can be explained if Predicate Modification is not an available mode of composition in the language.

3.2. Type *e* nouns

Another possibility is that the observed constraint is not the product of compositional rules (or their absence), but rather is due to the semantic

types of the elements themselves. Following Wilhelm's (2014) analysis of Dënesųłıné (Athabaskan) nouns in which she proposes that the nouns in that language are type <e>, it could instead be that Inuit nouns are also of type *e*, as proposed in Compton (2004). In other words, instead of nouns denoting one-place predicates, they might denote entities in Inuit. In a language like English, nouns like *dog* are typically analysed as being one-place predicates, only receiving the interpretation of an entity when a determiner is added. Such an analysis therefore includes a step in which the noun is still a predicate and subject to intersective modification before becoming an entity.

If nouns in Inuit start off as type *e* entities instead of predicates, this could account for the lack of direct intersective modification since a one-place adjectival predicate could only predicate of such a noun, not modify it intersectively, since intersective modification requires both the adjective and noun to be of the same semantic type.

Wilhelm's (2014) discussion of the data in Dënesųłıné highlights a number of the same phenomena found in the Inuit data. For instances she notes that in that language adjectives also pattern with verbs and just as in Inuit undergo nominalization when modifying nouns. Furthermore, she points out that among the adjectives that modify verbs directly (i.e., are not verbal) intersective meanings are similarly absent.

As observed in Compton (2004), several phenomena in Inuit lend themselves to an analysis in which nouns are of types <e>. For instance, bare nouns are interpreted as referential and can even receive definite interpretations in the absence of determiners. While such nouns could be analysed as being accompanied by a covert determiner, as observed by Sadock (1980), incorporated nouns in Inuit, though stripped of number and possessive marking (suggesting the absence of the extended nominal functional projections such as D) are nevertheless able to introduce discourse referents, which can be referred back to in later discourse. This phenomena is illustrated in the following example from Johns (2007: 539, glosses modified) from North Baffin where the object agreement in the second clause picks out the referent introduced by the incorporated noun in the first clause.

(37)   *Johnny uviniruliulaurmat.*
        Johnny   uviniruq*ᵢ*-liu-laur-mat
        Johnny   shirt-make-DIST.PAST-BEC.3SG
        'Johnny made a shirt*ᵢ*.'

        Nulianga angirrarami takulluniuk.
        nulia-nga   angirra-rami   taku-llu-niuk*ᵢ*
        wife-3SG.POSS   home-BEC.4SG   see-CONT-4SG.3SG
        'And his wife came home and she saw it*ᵢ*.'

This ability of bare incorporated nouns, which are arguably N heads or NPs (as argued by Compton and Pittman 2010), to yield such an indefinite referential meaning supports an analysis in which nouns in the language are interpreted by default as entities.

However, while an analysis of nouns as type <e> offers an explanation for the lack of direct intersective modification, the possibility of modification by subsective, non-subsective, and privative adjectives suggests that these modifiers, which arguably possess more complex semantic types, can nevertheless compose with these type <e> nouns. But this poses the following problem; if these adjectives, with their more complex types, can compose with type <e> nouns, what prevents the language from assigning such types (e.g., <e,e>) to adjectives with prototypically intersective denotations? In other words, what would prevent an intersective adjective from composing with a type <e> using the semantic mode of composition available to non-intersective adjectives? In this regard the analysis outlined in the preceding section proposing the absence of a rule of Predicate Modification in the language appears to offer a superior account of the data. However, such phenomena as the lack of determiners and the referential status of incorporated nouns as well as a number of parallels between the Inuit data and those of Dënesųłıné make an analysis encompassing the properties of nouns in the language very attractive.

4. Conclusion

In this paper I have presented evidence for two classes of adjectives in Inuit, one strictly-attributive and another verb-like. While these adjectives have traditionally been analysed as derivational morphemes and intransitive verbs, respectively, I have presented data from a variety of dialects that suggests that they are actually adjectives.

However, comparing these two classes of adjectives it was found that intersective denotations were confined to the verb-like class, and entirely lacking from the strictly-attributive set. While strictly-attributive adjectives instantiate other types of meaning, including subsective, non-subsective, and privative meanings, meanings that would be interpreted intersectively were conspicuously absent. In particular, it was observed that of the four areas of meaning typically present in even relatively small adjective classes according to Dixon (2004), it is colour meanings, which are intersective, that are absent from this class. Furthermore, it was shown that intersective meanings are well-represented in the class of verb-like adjectives.

Two possible accounts of this gap in the expected range and distribution of meanings were presented. The first attributed this constraint on the meanings of strictly-attributive adjectives to the compositional rules available in the language by proposing that the rule of Predicate Modification, which takes two predicates and conjoins them semantically, is absent from the language. A second alternative proposed, following work by Wilhelm (2014) on Dënesųłıné, that this constraint could be due to nouns in the language being type <e> or entities in the semantics, as opposed to predicates.

Abbreviations

1=1ˢᵗ person; 2=2ⁿᵈ person; 3=3ʳᵈ person; ABL=ablative case; ABS=absolutive case; ALL=allative case; BEC=becausative mood; COMP=comparative; COND=conditional mood; CONT=contemporative mood; COP=copula; ERG=ergative case; INDIC=indicative; LOC=locative; NOMZ=nominalizer; PART=participial mood; PL=plural; SG=singular; SUPER=superlative

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