Payajutam: A degreeless language

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Abstract: This paper explores the status of degrees in Payajutam, a critically endangered Central Salish language spoken by four communities on the Upper Sunshine Coast in British Columbia, Canada. Inspired by recent work on degreeless languages — in particular Fijian (Pearson 2009), Motu (Beck et al. 2009), Washo (Bochnak 2015), and Warlpiri (Bowler 2016) — we argue that the ontology of Payajutam lacks degree elements of the semantic type <d>. To substantiate this claim, we present eight different diagnostics that point towards the absence of degrees in this language. In particular, we examine the availability of measure phrases, various types of comparatives, superlatives, equatives, and degree questions. Since the body of work on these constructions in Salish is still sparse, the argument presented in this paper may not only be of interest for theoretical semanticists, but also for fieldworkers who are active in this language family.

Keywords: Payajutam (Mainland Comox), comparatives, degree, degreeless language, measure phrases, subcomparatives

1 Introduction

In recent years, several researchers have proposed the existence of degreeless languages, i.e., languages which lack elements of the semantic type <d>. In particular, such an argument has been made for the Austronesian languages Motu (Beck et al. 2009) and Fijian (Pearson 2009), the language isolate Washo (Bochnak 2015), and for the Pama-Nyungan language Warlpiri (Bowler 2016). This paper explores the status of degrees in Payajutam (a.k.a. Mainland Comox), a critically endangered Central Salish language traditionally spoken by four communities on the Sunshine Coast in British Columbia. Despite substantial documentation efforts in recent years, the First Nations languages in Canada remain understudied from the perspective of degree semantics. The present investigation aims to remedy this issue by providing a first-pass assessment of degrees in one of this set of languages.

Drawing heavily from both Beck et al. (2009) and Bowler (2016), we employ a set of eight different diagnostics to determine whether Payajutam has a degree ontology or not. Relying on data elicited with two language consultants, we argue that Payajutam might be another potential candidate for the class of degreeless languages.

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This paper is structured as follows. In Section 2, we briefly review the semantic theories on gradable predicates and their relation to degrees. In Section 3, crucial data concerning degrees and various comparative constructions are laid out. An account to explain the pattern emerging from the data is outlined in Section 4. Finally, Section 5 concludes the paper.

2 Theoretical background

According to the traditional degree-based analysis of gradable predicates in languages like English, gradable adjectives and adverbs contain a degree variable, which is an abstract argument of the semantic type $<$d$>$ (Heim 2000; von Stechow 1984).\(^1\) The function of this variable is to specify degrees along a scale provided by the lexicon, such as the scale of length introduced by the gradable predicate *long*. As illustrated by the lexical entry in (1), gradable predicates can consequently be understood as elements of type $<$d,$<$e,$>$,$>$, which relate degrees and individuals (Heim 1985, 2000; Kennedy and McNally 2005).

\[(1) \quad \text{[long]} = \lambda d \lambda x. x \text{ is } d\text{-long}\]

The degree argument can be overt or covert, as illustrated by the sentences in (2) and (3). In the former, the overt measure phrase *40 miles* fills the degree slot in the syntactic structure, while in example (3) no overt degree morphology is discernible.

(2) The river is 40 miles long.

\[
\begin{array}{c}
\text{<t>}
\end{array}
\begin{array}{c}
\text{<e>}
\end{array}
\begin{array}{c}
\text{the river}
\end{array}
\begin{array}{c}
\text{(is)}
\end{array}
\begin{array}{c}
\text{<e,$>$}
\end{array}
\begin{array}{c}
\text{<d,$>$}
\end{array}
\begin{array}{c}
\text{40 miles}
\end{array}
\begin{array}{c}
\text{<d,$<$e,$>$,$>$}
\end{array}
\begin{array}{c}
\text{POS
\text{}long}
\end{array}
\]

(3) The river is long.

\[
\begin{array}{c}
\text{<t>}
\end{array}
\begin{array}{c}
\text{<e>}
\end{array}
\begin{array}{c}
\text{the river}
\end{array}
\begin{array}{c}
\text{(is)}
\end{array}
\begin{array}{c}
\text{<e,$>$}
\end{array}
\begin{array}{c}
\text{<d,$<$e,$>$,$>$}
\end{array}
\begin{array}{c}
\text{POS
\text{}long}
\end{array}
\]

\(^1\)Alternative accounts for gradable predicates have been proposed by Beck et al. (2009), Kennedy (1999), and Klein (1980, 1991), among others.
To prevent the semantic calculation in (3) from crashing, Kennedy (1999) proposes the existence of a null morpheme called Positive Form (POS), which binds the degree variable and relates it to a contextually determined standard of comparison. Following Bochnak (2015) as well as Kennedy and McNally (2005), this degree morpheme is defined as in (4), where the degree \( d \) meets the standard \( s_G \) for a gradable adjective \( G \).

\[
(4) \quad \text{[POS]} = \lambda G \lambda x . \exists d[d > s_G & G(d)(x)]
\]

Over the last couple of years, however, several linguists have presented evidence for languages which lack degrees altogether, such as Motu (Beck et al. 2009), Fijian (Pearson 2009), Washo (Bochnak 2015), and Warlpiri (Bowler 2016). If these languages are indeed degreeless, then gradable predicates cannot combine with arguments of type \(<d>\). Following Beck et al. (2009), Bochnak (2015), and Klein (1980), we can solve this issue by interpreting gradable predicates relative to a context \( c \). The denotation of the gradable predicate \( \text{long} \) in languages like Warlpiri, for instance, could thus be defined as shown in (5).

\[
(5) \quad \text{[long}_{\text{Warlpiri}}]_c = \lambda x . x \text{ counts as long in } c
\]

\[
(6) \quad \text{The river is long.}
\]

In this paper, we argue that \( ?a\text{a}ja\text{u}\text{?om} \) is a degreeless language as well. Assuming that degrees are not available in the semantic ontology of this language, sentences have to appear analogous to the form presented in (6). If this assumption is correct, then certain degree constructions are predicted not to be available for speakers of this language, as noted by Beck et al. (2009) and Bowler (2016). In the following section, we will take a closer look at these constructions.

### 3 Data from \( ?a\text{a}ja\text{u}\text{?om} \)

For their cross-linguistic study of comparatives, Beck et al. (2009) compiled a long list of constructions that can be used to assess the status of degrees in a language. While a complete investigation of the entire catalogue is underway, we will limit ourselves to a subset of eight degree constructions in this paper. Primarily, we will focus on the same set of diagnostics used by Bowler (2016) in her investigation on degrees in Warlpiri. The diagnostics include measure phrases, various types of comparatives, superlatives, equatives, and degree questions.

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2For a different account relying on a covert morpheme that binds the degree variable, see Rett (2008).
3.1 Elicitation methods

As noted by Bowler (2016:14), eliciting degree constructions can be a challenging endeavor. For instance, it is not always possible to rely on conventionalized units of measurements, such as meters, feet, or kilograms, since these may not be available in every language. ?ay?ajuđom is such a language that lacks lexical items that correspond to these concepts. In the same vein, consultants may also struggle with entire constructions, such as subcomparatives. To mitigate these issues, we employed a variety of different elicitation techniques during the course of our investigation, ranging from the traditional question/answer approach to storyboards (Burton and Matthewson 2015) and other visual stimuli. Inspired by Bowler (2016), we used the web-service Pixton for Fun (https://www.pixton.com/) to create most of these visual prompts. A small panel from one of our storyboards is shown in Figure 1. We also asked one of our consultants questions in her native language to elicit natural responses and to minimize potential interferences from the contact language, English. Considering the use of all these modalities, we feel confident that the data presented in this paper are reliable and represent authentic language use.

![Figure 1: Stimuli used to elicit the degree question How long is the snake?](image)

3.2 Measure phrases

First, we assess whether gradable predicates can be combined with measure phrases, such as three feet tall or five meters wide. Generally, the best candidates to look for are phrases that measure physical dimensions (e.g. five feet tall) or temporal length (e.g. two days long). Other domains of measurement, such as temperature, appear to be less common cross-culturally (Beck et al. 2009:17).

In ?ay?ajuđom, measure phrases seem to be unavailable. As explained by our main consultant, she never learned any units of measurement, with the exception
of temporal units like days (t'uk') and years (umay, literally ‘snows’). While this shows that some units of measurement exist after all, they do not co-occur with gradable predicates. Instead, periphrastic constructions, as illustrated in (7), are utilized.\footnote{We adopt the reanalysis of third person object markers, as proposed by Mellesmoen (this volume).} \footnote{Abbreviations used in this paper are as follows: CAUS = causative; CNJ = conjunctive; CTR = control transitive; DET = determiner; EPST = epistemic; ERG = ergative; EXCL = exclusive; IND = indicative; INTF = intensifier; INTR = intransitive; IPFV = imperfective; LV = link vowel; MDL = middle; NEG = negation; NMLZ = nominalizer; OBL = oblique; OBJ = object; PL = plural; POL = polarity item; POSS = possessive; PST = past; Q = question marker; RED = reduplication; SG = singular. A hyphen (-) stands for an affix boundary, an equal sign (=) for a clitic boundary, and a tilde (~) for a reduplication boundary.}

(7) sa?a t'uk' nišx jënxw
sa?a t'uk' niš-s-x jënxw two day here-CAUS-3.OBJ fish
Prompt: ‘The fish is two days old.’
Literally: ‘(For) two days, he has had the fish.’

In addition to such periphrastic constructions, our main consultant frequently employed two fallback strategies when prompted with measure phrases: (i) deletion and (ii) code-switching. Examples for the deletion of measure phrases can be seen in (8) and (9). In these cases, the sentences consist only of the gradable predicate, while the entire measure phrase is omitted.

(8) tihmot je?je?
   tih-mut ja?ja?
   big-INTF tree
Prompt: ‘The tree is three meters tall.’
Literally: ‘The tree is really tall.’

(9) titih jënxw
   ti~tih janxw RED~big fish
Prompt: ‘The fish is one meter long.’
Literally: ‘The fish is really big.’

Occasionally, our main consultant would also code-switch to English to preserve a given measure phrase. Whether these English phrases occupy a potential degree slot in the syntactic structure or not is unclear. However, the fact that the code-switching generally extends over the whole predicate, as shown in
(10), suggests that such data might not be problematic for a degreeless account of ?ayʔajuθəm. We acknowledge that yet more research on this matter is necessary.5

(10) Tony three feet tall sčəʔet
    Tony three feet tall s=čaʔat
    Tony three feet tall NMLZ=now
    Prompt: ‘Tony is three feet tall.’
    Literally: ‘Tony, three feet tall, now.’

3.3 Comparative constructions

Our second test targets comparative constructions, such as Tony is taller than Laura. Following Sapir (1944), we distinguish between two types of constructions, namely (i) explicit and (ii) implicit comparatives. While explicit comparatives rely on dedicated morphological markers (such as English -er), implicit comparatives are unmarked and consequently context-sensitive. Kennedy (2007) defines the two constructions as follows:

(11) a. **Explicit comparison:**
    Establish an ordering between objects x and y with respect to gradable property g using a morphosyntactic form whose conventional meaning has the consequence that the degree to which x is g exceeds the degree to which y is g.

b. **Implicit comparison:**
    Establish an ordering between objects x and y with respect to gradable property g using the positive form by manipulating the context in such a way that the positive form is true of x and false of y.

Based on our data, ?ayʔajuθəm does not have any specialized comparative morphemes. Instead, it makes use of implicit comparative constructions. Thus, this Central Salish language patterns exactly like other potentially degreeless languages, such as Fijian (Pearson 2009), Motu (Beck et al. 2009), Washo (Bochnak 2015), and Warlpiri (Bowler 2016), where explicit comparatives are also unavailable.6

The implicit comparatives in ?ayʔajuθəm can further be divided into two subcategories, namely (i) conjoined comparatives and (ii) directional comparatives.7

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5Bowler (2016) speculates in her study on Warlpiri whether the use of code-switched measure phrases might be a sign of a bigger semantic change that has been triggered by the close contact to English, a language which allows degrees.

6The absence of dedicated comparison markers is not uncommon in Salish languages and has also been documented in St’át’imcets (Davis 2011), Straits Salish (Jelinek and Demers 2014), and Klallam (Montler 2015), among others.

7Depending on the context, our consultant expressed preferences for one or the other construction. How exactly these preferences arise is yet to be explored.
The former consist of two coordinated — or conjoined — independent clauses, of which one describes the object of comparison, while the other describes the standard of comparison (Stassen 2013). Generally, the predicates used in these two clauses tend to be antonymous, such as big vs. small (Bochnak 2015). The sentences in (12) and (13) illustrate the use of these conjoined comparatives in ?ay?ajuθəm.8

(12) χαχαɬ Tony titul Laura
     χαχαɬ Tony titul Laura
tall Tony small Laura
Prompt: ‘Tony is taller than Laura.’
Literally: ‘Tony is tall. Laura is small.’

(13) tih mɛmo titul ɬatən
     tih mimaw titul ɬatən
big cat small rat
Prompt: ‘The cat is bigger than the rat.’
Literally: ‘The cat is big. The rat is small.’

The second type of implicit comparatives introduces the standard of comparison via a directional expression, thus meeting the criteria of directional or locational comparatives (Hohaus 2010; Stassen 2013). Constructions belonging to this typological class construe comparisons as motion from one point to the other. In the case of ?ay?ajuθəm, the standard DP is introduced by the allomorphic expressions hu or θu (‘to’). In these “to-comparatives”, as Stassen (2013) calls them, the standard of comparison is conceptualized as the goal of the movement.9 The examples (14) through (18) below illustrate the use of this particular comparative construction in ?ay?ajuθəm.

(14) χαχαɬ Tony ho Laura
     χαχαɬ Tony hu Laura
tall Tony to Laura
Prompt: ‘Tony is taller than Laura.’
Literally: ‘Tony is tall to Laura.’

(15) tih mɛmo ho ɬatən
     tih mimaw hu ɬatən
big cat to rat
Prompt: ‘The cat is bigger than the rat.’
Literally: ‘The cat is big to the rat.’

8This conjunctive strategy has also been observed in another Central Salish language, Klallam (Montler 2015:92).
9According to Montler (2015), to-comparatives can also be found in Klallam.
While the expressions *hu* and *θu* appear frequently in comparative constructions, they are not restricted to this specific context of use. They can also be found in other, non-comparative utterances, usually acting as verbs of motion (‘to go to’) or as preposition-like verbs (‘to/into’),\(^\text{10}\) as shown in example (19) and (20), respectively.\(^\text{11}\) This is strong evidence that neither *hu* nor *θu* is a dedicated comparative marker.

(19) hoč Vancouver si'\(^\text{b}\)!ok\(^\text{w}\)
    hu=č Vancouver s=t\(^\text{b}\)!uk\(^\text{w}\)
    go=1.SG.IND Vancouver NMLZ=day
    ‘I’m going to Vancouver today.’

(20) ʰθæ-t-as *θu *?=t=qa?ya
    push-CTR-3.SG.ERG into OBL=DET=water
    ‘He pushed it into the water.’  \[\text{Kroeber (1999:46)}\]

\(^\text{10}\) Verbs which act like prepositions have also been found in other Salish languages, such as Squamish (Jacobs 2013; Kuipers 1967). Generally, the terms *relator verbs* or *preposition-like verbs* are used to refer to such items.

\(^\text{11}\) Reisinger et al. (2017) provide evidence that the use of *hu* in the comparative construction is preposition-like and not verb-like.
3.4 Differential comparative constructions

Having assessed the status of normal comparatives, we now turn to differential comparatives, such as *Henry is two days older than Betty*. In these constructions, the degree of difference between the standard and the object of comparison is explicitly specified. Just like in Warlpiri (Bowler 2016), this kind of comparison appears to be unavailable in ?ay?ajuθom. When prompted with differential comparatives, our main consultant reliably omitted the measure phrase and utilized the bare directional comparative construction. The sentences in (21), (22), and (23) illustrate this fallback strategy.

(21) χaχaŋ Peter ho Michael
χaχaŋ Peter hu Michael
tall Peter to Michael
Prompt: ‘Peter is two feet taller than Michael.’
Literally: ‘Peter is tall to Michael.’

(22) čuy Laura ho Mary
čuy Laura hu Mary
young Laura to Mary
Prompt: ‘Laura is two days younger than Mary.’
Literally: ‘Laura is young to Mary.’

(23) QAq@ Mary ho Laura
QAq@ Mary hu Laura
heavy-MDL Mary to Laura
Prompt: ‘Mary is two fish heavier than Laura.’
Literally: ‘Mary is heavy to Laura.’

When confronted with constructed differential comparatives, as in (24) and (25), our main consultant reacted rather negatively and pointed out that maybe some people might say this, but she would never use sentences like these.

(24) # saʔa iθokʷɑx̂ay Mary ho Laura
saʔa iθukʷɑx̂ay Mary hu Laura
two days RED~old-person Mary to Laura
Prompt: ‘Mary is two days older than Laura.’

(25) # saʔa jenxʷ QAq@ Mary ho Laura
saʔa jenxʷ QAq@ Mary hu Laura
two fish heavy-MDL Mary to Laura
Prompt: ‘Mary is two fish heavier than Laura.’
3.5 Comparatives with measure phrases

The elicited data suggest that ?ay?ajuθom also lacks comparatives with measure phrases, such as Laura is taller than one meter. Speakers instead use the positive, unmarked form of the predicate, as seen in (26), or code-switch to English to preserve the measure phrase, as shown in (27). In either case, the comparison is not encoded morphologically, but arises contextually.

(26) ɣayʁəmɔt Laura
ɣayʁə-mut Laura
tall-INTF Laura
Prompt: ‘Laura is taller than one meter.’
Literally: ‘Laura is very tall.’

(27) ɣayʁə Tony one meter
tall Tony one meter
Prompt: ‘Tony is taller than one meter.’
Literally: ‘Tony is tall, one meter.’

In addition, our main consultant also produced a periphrastic, bi-clausal construction when prompted for the sentence Henry has more than two dogs, as illustrated by example (28) below.

(28) saʔa čənos Henry, qʷayʔ qəjɬ qաʁ�
saʔa čənum-s Henry qʷayʔ qəjɬ qəʁ�
two dog-3.SG.POSS Henry I.think still lots
nisxʷas
ni-s-xʷ-as
be.there-CAUS-3.OBJ-3.SG.ERG
Prompt: ‘Henry has more than two dogs.’
Literally: ‘Henry has two dogs. I think he may still have lots.’

3.6 Subcomparative constructions

Next, we assess the status of subcomparatives, such as The river is wider than the tree is tall. Such constructions appear to be unavailable to speakers of ?ay?ajuθom. Our main consultant instead reliably produced utterances consisting of two coordinated clauses, as illustrated by the examples given in (29) through (32) below. It is worth noting that Bowler (2016) encountered exactly the same fallback mechanism in Warlpiri.

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While speakers prefer this particular construction to compare two dimensions of distinct DPs, as schematized in (33), a different construction is used when both dimensions refer to one and the same DP, as sketched in (34).

(33) \[ \text{[DP1 Mary]} \] is \[ \text{[DIM1 taller]} \] than \[ \text{[DP2 the snake]} \] is \[ \text{[DIM2 long]} \]

(34) \[ \text{[DP1 The table]} \] is \[ \text{[DIM1 longer]} \] than \[ \text{[DP2 it]} \] is \[ \text{[DIM2 wide]} \]

If both DPs in this bi-clausal construction refer to the same entity, speakers emphasize the contrast between its properties by negating one of the predicates. An example for this construction is given in (35) below.

(35) \[ \text{laqt } \text{θəwətən } x^{w}a? \text{'peqas} \]
\[ \text{laqt } \text{θəwətən } x^{w}a? \text{ 'piq}=as \]
\[ \text{long table } \text{NEG } \text{wide}=3.\text{SG.CNJ} \]

Prompt: ‘The table is longer than it is wide.’
Literally: ‘The table is long, but it is not wide.’
3.7 Superlative constructions

While English encodes superlatives either synthetically with the morphological marker -est or analytically with the sequence the most, ?ayʔajuʔom does not have a dedicated superlative construction, as shown in the examples (36) and (37) below. In this respect, it resembles several other Salish languages, such as St’át’imcets (Davis 2011), Straits Salish (Jelinek and Demers 2014), and Klallam (Montler 2015), all of which also lack specialized superlative markers.

(36)  
\[
\begin{align*}
\text{kʷeʔet } & \text{ qaχ } \text{ c̑e̱nos } \quad \text{Henry} \\
kʷiʔit & \text{ qaχ } \text{ c̑anu-s } \quad \text{Henry} \\
\text{INTF} & \text{ lots } \text{ dog-3.SG.POSS } \text{Henry} \\
\text{Prompt: ‘Henry has the most dogs.’} \\
\text{Literally: ‘Henry really has a lot of dogs.’}
\end{align*}
\]

(37)  
\[
\begin{align*}
\text{qaχmot } & \text{ c̑e̱nos } \quad \text{Henry} \\
\text{qaχ-mut } & \text{ c̑anu-s } \quad \text{Henry} \\
\text{lots-INTF } & \text{ dog-3.SG.POSS } \text{Henry} \\
\text{Prompt: ‘Henry has the most dogs.’} \\
\text{Literally: ‘Henry has really a lot of dogs.’}
\end{align*}
\]

Similar to Warlpiri (Bowler 2016), speakers of ?ayʔajuʔom tend to optionally use intensifiers in situations where a superlative reading is intended. In particular, our main consultant alternated between the independent intensifier kʷiʔit, which appears sentence-initially, and the intensifying suffix -mut, which usually attaches to the adjectival stem. Both of these intensifiers are not only interchangeable, but also appear to be compatible with each other. To illustrate this, examples in (38), (39), and (40) present three different realizations our main consultant provided for the same prompt.

(38)  
\[
\begin{align*}
\text{kʷeʔet } & \text{ xe̱xe } \quad \text{Patrick} \\
kʷiʔit & \text{ xi-xi } \quad \text{Patrick} \\
\text{INTF } & \text{ RED~fast } \text{Patrick} \\
\text{Prompt: ‘Patrick is the fastest (cat).’} \\
\text{Literally: ‘Patrick is really fast.’}
\end{align*}
\]

\[12\] Watanabe (2003:479 ff.) provides a thorough description of the intensifier -mut. Information on the intensifier kʷiʔit, however, is sparse.
3.8 Equatives

Analogous to superlatives, there is no standardized equative construction in \( ?ay\text{ajum} \). Prompted with constructions like Peter is as tall as his father, our consultant instead used periphrastic descriptions. These often involved some general expression of similarity or resemblance, such as \( \theta ux^w\text{on} \) ‘to be the same’ and \( n\text{am} \ ‘to be like; to resemble’, as illustrated in the examples below.

(41) \( \text{\'n}ax\text{\'a}l \) Peter \( \theta ux^w\text{on} \) mans
    \( \text{\'n}ax\text{\'a}l \) Peter \( \theta ux^w\text{on} \) man-s
tall Peter be.the.same father-3.SG.POSS
Prompt: ‘Peter is as tall as his father.’
Literally: ‘Peter is tall, his father is the same.’

(42) \( \text{\'n}aqt \text{\'u}\text{ljay} \theta ux^w\text{on} \ nux^w\text{\'a}l \)
    \( \text{\'n}aqt \text{\'u}\text{ljay} \theta ux^w\text{on} \ nux^w\text{\'a}l \)
long snake be.the.same boat
Prompt: ‘The snake is as long as the boat.’
Literally: ‘The snake is long, the boat is the same.’
(43) χαχαλ Peter namí mans
     χαχαλ Peter namí man-s
tall Peter be.like father-3.SG.POSS
Prompt: ‘Peter is as tall as his father.’
Literally: ‘Peter is tall, like his father.’

(44) ƛéƛé jìƛàs Henry namí Bruno
     ƛì-ƛì jòƛas Henry namí Bruno
RED~fast run=3.SG.CNJ Henry be.like Bruno
Prompt: ‘Henry runs as fast as Bruno.’
Literally: ‘Henry runs fast, like Bruno.’

It is worth noting that both θuxʷǝn and namí only target a general similarity between the two compared entities and not particular points on a scale.13 This also explains why these expressions can be used outside of equative contexts, as illustrated by the sentences in (45) and (46).

(45) hoč?ot namumiš t0 man
     hu=č=?ut nam-umiš t0=man
     go=1.SG.IND=EXCL be.like-appearance 1.SG.POSS=father
‘I will look just like my father.’

(46) ?ɛmaš mëmo namí teqew
     ?im-aš mimaw namí tiqiw
walk-INTR cat be.like horse
‘The cat walks like a horse.’

3.9 Degree questions

Last, our investigation revealed that ?ayʔajʔəm does not have a dedicated construction for degree questions, such as How wide is the river? Instead, when confronted with such an utterance, our consultant remodeled it either as a polar question or as an inquiry in the shape of a declarative — similar to the English construction I wonder whether α, where α represents a proposition.

13Watanabe (2003:365) notes that the root /namí may be interpreted as ‘to look like’, ‘to act like’, or ‘to be similar to’. In contrast, the semantic composition of θuxʷǝn is more elusive. Our consultants unanimously translated it as ‘to be the same’.
4 Evaluation

To sum up, our investigation provides strong evidence for the argument that PayaJuT@m is a degreeless language and consequently resembles languages like Warlpiri (Bowler 2016) or Washo (Bochnak 2015). After all, as illustrated in Table 1, none of the eight degree constructions we examined in this paper appear to be available for our consultants.

14Watanabe (2003:91) notes that the polarity item $k^w\,\text{on}$ should be followed by the question marker -a. However, in fast speech, this marker is often not discernible.
Table 1: Degree constructions in Warlpiri (Bowler 2016:8) and ?ay?ajuðom

<table>
<thead>
<tr>
<th></th>
<th>Warlpiri</th>
<th>?ay?ajuðom</th>
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</tbody>
</table>

To account for the absence of degree constructions in ?ay?ajuðom, we adopt the degree parameter hypothesis, as proposed by Beck et al. (2009). As a result of their cross-linguistic survey of comparatives, they propose three different parameters, whose setting determines the different statuses of degrees in the languages of the world. The degree semantics parameter (DSP) is strictly semantic and accounts for lexical variation, while the degree abstraction parameter (DAP) concerns the semantics/syntax interface and focuses on the mechanisms of compositionality. Last but not least, the degree phrase parameter (DegPP) is purely syntactic and accounts for variation on the structural level. Beck et al. (2009:27-28) define these binary switches as follows:

(52) a. **Degree Semantics Parameter (DSP):**
A language {does/does not} have gradable predicates (type \(<d,<e,t>\) and related), i.e., lexical items that introduce degree arguments.

b. **Degree Abstraction Parameter (DAP):**
A language {does/does not} have binding of degree variables in the syntax.

c. **Degree Phrase Parameter (DegPP):**
The degree argument position of a gradable predicate {may/may not} be overtly filled.

Beck et al. (2009) also note that there are certain dependencies between the three parameters. One such dependency is that the negative setting of [DSP] is inherited by the other two parameters — The setting of [−DSP] also results in a [−DAP] and [−DegPP] setting. The absence of a degree ontology in ?ay?ajuðom indicates that the first degree parameter is [−DSP]. Consequently, ?ay?ajuðom also lacks other degree constructions due to simultaneous negative settings of [DAP] and [DegPP], as entailed by [−DSP].

Having determined the setting of the three degree parameters in ?ay?ajuðom, we are now able to compare it with other languages. Table 2 highlights that
\( ?\text{ay}\text{?aju}\theta\text{om} \) patterns exactly like Warlpiri.

**Table 2:** Degree parameters in some selected languages (based on Beck et al. (2009:28))

<table>
<thead>
<tr>
<th></th>
<th>DSP</th>
<th>DAP</th>
<th>DegPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>German</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Spanish</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Russian</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Japanese</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chinese</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Warlpiri</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>( ?\text{ay}\text{?aju}\theta\text{om} )</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

5 Conclusion and outlook

In this paper, we presented several pieces of evidence that point towards the absence of degrees, and thus also of degree-related constructions, in \( ?\text{ay}\text{?aju}\theta\text{om} \). Our data conform to the predictions made by the degree parameter hypothesis, as proposed in Beck et al. (2009). Specifically, we argue that the complete lack of degree-related constructions, like explicit comparatives, subcomparatives, and superlatives, comes about because of the absence of degree arguments in the denotations of gradable predicates in the language. Considering that the subject of degree semantics in First Nations language research is still largely unexplored, we hope that this investigation will spark follow-up studies in other languages of the Pacific Northwest.

Our next step in the study of degree semantics in \( ?\text{ay}\text{?aju}\theta\text{om} \) is to investigate comparatives in the contexts of crisp judgment (Kennedy 2007) and to examine other implicit comparatives like *Compared to John, Mary is tall*. Both comparative types have been shown to shed further light on the syntax and semantics of comparison-related constructions (Bochnak and Bogal-Allbritten 2015; Pearson 2009). Eventually, by advancing our understanding of comparatives in \( ?\text{ay}\text{?aju}\theta\text{om} \), a more thorough typological picture of degree semantics can emerge.

**References**


Lincoln, NE.


