Subcomparatives in Vietnamese and the grammar of degrees • Tyler Lemon • University of California, Berkeley

**Background:** Beck et al. (2009) propose a crosslinguistic typology of comparison that classifies languages according to three parameters: 1. Degree Semantics Parameter (DSP): A language {does/does not} have lexical items that introduce degree arguments. 2. Degree Abstraction Parameter (DAP): A language {does/does not} have degree abstraction. 3. Degree Phrase Parameter (DegPP): The degree argument position of a gradable predicate {may/may not} be overtly filled. A language with a positive setting for all three parameters and clausal standards should allow subcomparatives (among other constructions discussed below). Against expectations, Vietnamese has a positive setting for all three parameters and allows clausal standards, but many subcomparatives are ungrammatical.

**Vietnamese degree constructions:** Vietnamese forms comparatives with *hon*, a verb meaning ‘surpass’ or ‘exceed’. Standards can be overtly phrasal (1a) or clausal (1f, 2a), with clausal standards optionally including the C-head (là) (Tran 2009). Vietnamese mostly fits the predictions for a +DSP/+DAP/+DegPP language, allowing difference comparatives (1a) and comparisons with degrees (+DSP), showing negative island effects (1b) and scope ambiguities (+DAP), and allowing degree questions and measure phrases (1c) (+DegPP), but subcomparatives are typically ungrammatical (1d). Notably, subcomparatives with more subjective predicates are often grammatical (1e-f), with some only acceptable to some speakers (marked by %). (1d) must be expressed by nominalizing the gradable predicate in the standard (1g). Examples come from consultants Nguyễn Bình Thoa, Bùi Quý Lân, and Nguyễn Trần Phần Dung.

   Tucker tall exceed (Tyler) (ten centimeter) Tyler PST buy one CLF book expensive exceed NEG who buy Tucker ‘Taller (10 cm) taller (than Tyler).’ *Tyler bought a more expensive book than nobody did.’
   c. Philip cao một thước chín muối. d. *Cään bán cái hon cáiגב cao. e. %John xâu hon Mary dep.
   Philip tall one meter ninety CLF table long exceed CLF chair tall John ugly exceed Mary beautiful
   ‘Philip is 1.90 meters tall.’ ‘The table is longer than the chair is tall.’ ‘John is uglier than Mary is beautiful.’
   f. Phoebé thich họa học hon là Tyler thich toán. g. Chiều dài của cái bán hon chiều cao của cái geb.
   Phoebé like chemistry exceed c Tyler like math length of CLF table exceed height of CLF chair
   ‘Phoebe likes chemistry more than Tyler likes math.’ ‘The length of the table exceeds the height of the chair.’

**Analysis:** The distribution of *niềù ‘much, many’ offers clues for an analysis the subcomparative dilemma. *niềù is used in quantity comparatives, and like gradable predicates like *cao*, it cannot be present in the standard (2a). Additionally, though all the predicates can be intensified with a preceding rắt ‘very’, only those that accept a following rắt niềù (2b-d) are acceptable in subcomparatives.

2. a. Thoa mua nhiều cái nhà hon Vũ mua (*niềù) cái xe ho. b. {Tôi rắt cao. / *Tôi rắt cao rắt niềù.}
   Thoa buy much CLF house exceed Vũ buy (*much) CLF car
   ‘Thoa bought more houses than Vũ bought cars.’
   c. {Mary rắt dep. / % Mary dep rắt niềù.} d. {Tôi rắt thich Phoebé. / *Tôi rắt thich Phoebé rắt niềù.}
   {Mary very beautiful / Mary beautiful very much} {1SG very like Phoebé / 1SG like Phoebé very much}
   ‘Mary is very beautiful.’ (variable subcomparative) ‘I really like Phoebé.’ (acceptable subcomparative)

I propose that one can explain these data via differences in how predicates incorporate degree arguments and the nature of degree abstraction in Vietnamese. Some gradable predicates like *cao ‘tall’ are inherently gradable (they introduce degree arguments) (3a), while others like *dep ‘beautiful’ (3b) and *thích ‘like’ (3c) must combine with additional structure (*niềù or its silent counterpart μ) to take degree arguments (an idea inspired by Grano & Kennedy 2012). This interacts with a crucial difference between Vietnamese and languages like English in terms of what must elide when degree abstraction occurs. In both languages degree abstraction in the standard involves degree operator movement to produce a <$d><t>T$ CP, leaving a degree trace. In English, the degree trace is not pronounced, but the gradable predicate can be (as in subcomparatives). In Vietnamese, DegP and everything within its c-command domain (underlined in 4a-b) must elide. Inherently gradable predicates like *cao and quantifiers like *niềù must elide, but predicates that combine with μ like *dep and *thích can remain. Sample trees and denotations broadly following Heim (2000) are given below.

3. a. $[cao] = \lambda d, x \in d – tall b. [dep] = \lambda x_\nu, x \text{ is beautiful}$
   c. $[thích] = \lambda x_\nu, \lambda_\nu, y \text{ likes x}$
   d. $[hơn] = \lambda P_{c,d,\nu} . \lambda Q_{c,d,\nu} . \text{max}(Q) > \text{max}(P)$
   e. $[\mu] / [niềù] = \lambda d, \lambda_{c,\nu} \in d, x \text{ is g to degree d}$
   f. $[rắt] = \text{high degree}$

4. a. $\text{VP}_{<d,t>} \rightarrow \text{DegP}_{<d,t>} \rightarrow \text{VP}_{<d,t>}$ $\rightarrow \text{VP}_{<d,t>}$ $\rightarrow \text{VP}_{<d,t>}$
   b. $\text{cao}$ $\text{dep}$ $\text{niềù}$ $\mu$ $\text{μ/niềù}$ $\text{μ/niềù}$