Distinct effects of scalar structure among languages: a typology of degree modification

The goal of this presentation is to discuss degree modification in Brazilian Portuguese (BP) and in Karitiana, looking for commonalities that may point out to semantic universals. Karitiana is a language of the Tupi family, Arikén branch, spoken in the Northwest of Brazil. Our main claim is that sensitivity to scale typology in degree modification is universal and that languages differ about where to respond to scale structure: (i) in the selection of GAs yet to modify (English); (ii) in the type of degree modification (regarding the scale type associated with it) but also, depending on the type of the construct (Karitiana).

We claim that in Karitiana, as well as in BP, Gradable Adjectives (GAs) show the very same scale types or standards of comparison proposed by Kennedy and McNally (2005) (hereafter, KM), suggesting that a universal typology of GAs is attainable. However, it is not that easy to spot universals in degree semantics when it comes to Degree Modifiers (DMs). English DMs are in complementary distribution: well only modifies scales which are closed in the upper end (well acquainted), much only modifies scales which are closed in the lower end (much criticized), and very only modifies open scales (very worried). Yet BP DMs are not in complementary distribution in terms of GA selection: muito (similar to ‘very’) can modify all GAs, that is, all types of scales. We claim that the sensitivity to scale typology does arise in BP, but regarding the products of GA modification. I.e., the composites DM + GA are the ones in complementary distribution in BP. Muito + GA will convey an open scale, while todo + GA will convey a scale which is closed in the upper end (todo is similar to ‘completely’).

Karitiana DMs neither select the GAs they modify by scale structure, therefore differentiating themselves from the English DMs, nor produce the same type of scale every time they modify an GA, also distancing themselves from BP DMs. Pita(t) (Karitiana) may modify any GA, like the BP DM muito does. Nevertheless, the similarities end right there. Although pita(t) give rise to open scales when modifying an open scale GA, like in sepa pita (‘a heavy basket’), whenever pita(t) modifies a closed scale GA the resulting composite will correspond to a closed scale expression (karamã akydno pita = ‘a well closed door’).

Therefore, striking differences appear between those languages in terms of scale typology, not only concerning the product of degree modification (regarding the scale type associated with it) but also concerning the licensing of degree modification (regarding the specialization or not of the DM in GAs with such or such scalar structure). Despite those general contrasts, we can hold to the idea that at least the scalar typology is universal. We may also sustain that scalar structure may play a finite set of roles in degree modification: it may decide the selection of GAs by the MDs, as in English; it may sort the product of modification by each MD according to scale type, as in BP; or, finally, the scale type given by the GA may be preserved after modification, as it is in Karitiana, giving rise compositionally to the very distinct meanings attested for the expressions modified by pita(t). In order to pursue this goal, we will compare the facts of pita(t) (Karitiana) to the facts of bem (‘well’) (BP).

First of all, we must point out that it is not so rare for an expression to have distinct meanings. In English, a degree reading for well is not always available (KM 2013): well allows only a quality reading in expressions such well-loaded hay. In European Portuguese (PE), sempre can have a temporal/aspectual interpretation (= ‘always’) or a confirmative interpretation (= after all, really, indeed). The confirmative reading only occurs with the adverb in pre-verbal position and only if the verb is in past (perfective) or present tense. (AMBAR, GONZAGA, NEGRÃO 2002). The modifier pita(t) can be translated as ‘real’, ‘very’, ‘completely’, ‘a lot’, ‘indeed’, depending on the type of the modified predicate. Despite this variety on translations, we propose a unified analysis for pita(t) based in a Scalar Semantics. Pita(t) can occur with nouns, adjectives and verbs. On the adjectival domain, pita(t) can be used with all kinds of gradable predicates. When pita(t) combines with open-scale adjectives, it means ‘very’ (1a). When it combines with closed-scale adjectives, it means ‘completely’ (1b). On the verbal domain, pita(t) can be used with both telic and atelic verbal predicates. However, there is a difference in meaning. When pita(t) occurs with atelic predicates (2), it means ‘a lot’, but when it occurs with telic predicates, it means ‘indeed’ (3). Telic predicates can be considered closed-scale predicates and atelic VPs can be taken as open-scale ones (CAUDAL & NICOLAS 2005). With nouns, pita(t) means ‘real’ and is similar to the Spanish DM verdadero (MASIÀ 2013)(4). This
distributions reveals that *pita(t)* always selects the normal degree in open scale predicates and the endpoint degree in closed scale ones. *Bem* (BP), like English *well*, has a manner reading (5) and a degree reading (6). It combines with any type of scale, open (6) or closed (7). *Bem* boosts the standard value, but not getting to the maximal degree. The GA's scale doesn’t need to be closed in order to allow for modification with *bem*. DM *bem* takes the category to which the GA argument belongs as the standard parameter and demands that the degree of the individual overlaps with the degree of the parameter (Eg. (6) may be John is as sad as a person can get sad in such a situation). Manner *bem* can be understood in many ways, as *pita(t)* with atelic verbs does. So (8) may convey that Mary eats a lot, that Mary eats exquisite food or that she eats health food. Only the first is a degree reading.

Summing up, the languages differ about where to respond to scale structure: in the selection of GAs yet to modify (English), in the type of phrase each DM produces (BP) with the already modified GA or in the final meaning of the construct (Karitiana).

**Examples:**

1. a. [ sepa pyti pita ]  
   basket heavy pita  
   'a very heavy basket'

   b. [ karamā akydno pita ]  
   door closed pita  
   'a well closed door'

2. Taso Ø-na-pytim'adn-Ø pitat.  
   man 3-DECL-work-NFUT pita-ADV  
   'The man worked a lot'

3. João i-kokot-Ø pita-t Sete de Setembro dewota kyyyn.  
   João PART-cross-ABS pita-ADV Sete de Setembro other.side to  
   'João crossed Sete de Setembro street indeed'

4. [Taso pita] i-otam-Ø. (Context: a valiant man / a hunter)  
   man pita PART-arrive-ABS  
   'The real man arrived'

5. O trabalho está bem feito (‘The job is well done.’ = done in a good manner)

6. João está bem triste. (‘John is DM sad.’ = J. experiences ‘a good amount of’ sadness)

7. A sala está bem vazia / cheia. (‘The room is so empty / full.’)

8. Maria come bem. (‘Mary eats well.’)

**References**


