Standard-topic comparatives in Northern Tujia

Introduction. Northern Tujia (`tji`; Tibeto-Burman, China) employs a morphosyntactically unusual comparative strategy. Cross-linguistically, comparees of monoclausal comparative constructions are almost universally associated with the position of verbal/copular subjects (Dixon 2008); in other words, subject-initial languages (e.g., SVO, SOV) are highly expected to exhibit the word order [COMPAREE … STANDARD] in comparatives. However, in Northern Tujia (strictly SOV, (1)), standards (ST) obligatorily precede comparees (CP) in canonical comparatives with the comparative morpheme *nie⁴⁴* (2).

(1) tɕĩ⁴⁴xʊa⁴⁴ sɪ²¹ lã²¹nã²⁴ liaʊ⁴⁴
Jinhua meat dry PERF
'Jinhua dried meat.'

(2) ĩ²¹xʊa⁴⁴$_{ST}$ tɕĩ⁴⁴xʊa⁴⁴$_{CP}$ kaʊ⁴⁴ nie⁴⁴
Yinhua Jinhua tall from
'Jinhua$_{CP}$ is taller than Yinhua$_{ST}$.'

This paper seeks to clarify how comparative meanings are derived compositionally in Northern Tujia, given the unusual morphosyntax. I argue that Northern Tujia comparatives ① involve **topicalization** of the standard to the left periphery, thus creating the [STANDARD … COMPAREE] word order; ② employ **gradable predicates** that introduce degree arguments; and ③ exemplify an **indirect strategy** of degree comparison, where the value of the standard is determined contextually and composed indirectly via variable assignment, rather than taken directly as an argument of the comparative operator.

Standard-topic comparatives. The clause-initiality of standard phrases in Northern Tujia is derived via obligatory topicalization; the standard can optionally co-occur with a topic marker *mɨe²¹* and be followed by a prosodic break. In other words, (3) is roughly the equivalent of *Compared to today, yesterday is hotter* in English. The comparative construction in Northern Tujia thus instantiates 'standard-topic comparatives,' an uncommon subtype of topic-prominent comparatives found in East Asian languages (Zhou 2024). Additionally, Northern Tujia falls under the 'separative' type in Stassen (1985), where the standard is encoded by an adpositional element indicating source (cf. Lu et al. 2024). The adpositional use of the comparative morpheme *nie⁴⁴* is shown in (4).

(3) pʰʊ²¹ni²⁴-(mɨe²¹) (#) lai⁴⁴ kɤ²¹ nie²⁴
yesterday-TOP today hot from
'Today is hotter than yesterday.'

(4) ŋa²⁴ lõ²¹sã⁴⁴ nie⁴⁴ ɣe=i²⁴
1SG Longshan from go=PROSP
'I am leaving from Longshan.'

Degreeful predicates. Despite their surface similarity to the English implicit comparatives, I argue that Northern Tujia comparatives should receive a degreeful analysis, where degree comparison involves the manipulation of degree arguments introduced by gradable predicates. First, Northern Tujia comparatives are not implicit (Kennedy 2007). They support crisp judgments and are not norm-related; for example, (2) can be felicitously uttered when Jinhua is 151cm and Yinhua is 150cm (roughly 4'11)—the height difference is very small, and both are considered shorter than the norm. Second, evidence for the existence of degree arguments comes from the availability of degree constructions that explicitly reference degree arguments or feature overt occurrences of degree arguments. Northern Tujia has differential comparatives (5) and comparison with a degree (6), both of which suggest that gradable predicates take degree arguments. Northern Tujia also allows abstraction over degrees: gradable predicates can combine with direct measure phrases (7) and be used to form degree questions (8).

(5) ŋa²⁴ tɕĩ⁴⁴xʊa⁴⁴ la⁴⁴ tɕʰia²¹ kaʊ⁴⁴ nie⁴⁴
1SG Jinhua one fingerspan tall from
'Jinhua is one fingerspan taller than me.'

(6) ei⁴⁴ ĩ²¹xʊa⁴⁴ tʊ⁴⁴ nie²⁴
DEM.DIST Yinhua heavy from
'Yinhua is heavier than that.'

(7) kai²⁴ a²¹pa⁴⁴ xɤ²⁴ tɕʰi⁴⁴ tʊ⁴⁴
DEM.PROX stone ten catty heavy
'This stone is ten catty heavy.'

(8) tɕĩ⁴⁴xʊa⁴⁴ kei⁴⁴ zɤ⁴⁴
Jinhua WH.DEGREE beautiful
'How pretty is Jinhua?'

Northern Tujia therefore has positive settings for all three parameters in (Beck et al. 2009)—namely, the Degree Semantics Parameter, the Degree Abstraction Parameter, and the Degree Phrase Parameter.

Indirect strategy. Having established that Northern Tujia comparatives involve a topic-comment structure and gradable predicates that have type d arguments, I now discuss how comparative meanings are derived. Following the analyses of similar comparative constructions in English, German, and Sāmoan in Hohaus 2015, I analyze the standard topics as 'frame-setters' (Maienborn 2001). In this vein, standard topics are not directly combined with gradable predicates (as they do in explicit comparatives), but rather indirectly related to a free variable of type d that is taken as an argument of the gradable predicate. The upshot of this indirect analysis is that standard topics are in fact contextual restrictions that narrow the denotation domain to minimal situations where the standard is compared to some entity along some dimension. The specifics of the analysis, which are largely adopted from Hohaus 2015, are as follows.

Couched in the situation semantics framework (Kratzer 1989), I take gradable predicates to be of type $\langle s\langle d\langle e,t\rangle\rangle\rangle$, which relates an individual and a situation to said individual's maximal degree along some dimension in that situation. The comparative morpheme *nie*^{44} combines first with a free degree variable, whose value will be subject to restrictions imposed by the standard topic frame, and then with the gradable predicate and the comparee. As for the standard topic, it combines with the topic marker *mɨe*^{21}, which can be phonologically null, to derive the characteristic function of a set of situations where the standard is compared to some entity along some dimension. The FRAME operator further restricts the set of situations to only minimal situations that verify the given frame. This domain restriction, afforded by the semantics of FRAME, in turn delimits the value assignment of the free degree variable and prevents it from going awry—the only value assignments of the free degree variable that are compatible with the presupposition contributed by the frame are the height degrees of the standard. All relevant lexical entries are provided in (9).

(9) Lexical entries (adapted from Hohaus 2015)

a. $[\![nie^{44}]\!] = \lambda c_d.\lambda \mathrm{R}_{\langle d\langle e,t\rangle\rangle}.\lambda x_e.\ \textsc{max}(\lambda d_d.\mathrm{R}(d)(x) = 1) > c$ = 'from'

b. $[\![mɨe^{21}]\!] = \lambda y_e.\lambda s_s.\exists x_e, \exists \mu_{\langle s\langle e,d\rangle\rangle}[\mu(s)(x) \geq \mu(s)(y)]$ = TOP

c. $[\![\textsc{frame}]\!] = \lambda p_{\langle s,t\rangle}.\lambda q_{\langle s,t\rangle}.\lambda s_s{:}\textsc{min}(p)(s).q(s)$

For concreteness, the LF and interpretation of (2) are presented in (10a-b). The comparative denotes a function that maps the minimal situations where Yinhua exceeds or equals some individual along some dimension to true if and only if the maximal height degree of Jinhua exceeds that of Yinhua, the contextually-provided degree according to those minimal situations.

(10) a. LF of (2):
$[_{\langle s,t\rangle}\ [_{\langle\langle s,t\rangle,\langle s,t\rangle\rangle}\ \textsc{frame}\ [_{\langle s,t\rangle}\ \text{Yinhua}\ \textsc{top}\ ]\ ]\ [_{\langle s,t\rangle}\ \lambda s_1\ \text{Jinhua}\ [_{\langle e,t\rangle}\ [_{\langle d\langle e,t\rangle\rangle}\ \text{tall}\ t_1\ ]\ [_{\langle\langle d\langle e,t\rangle\rangle,\langle e,t\rangle\rangle}\ \text{from}\ c\ ]\ ]\ ]\ ]$

b. $[\![(2)]\!] =$
$\lambda s_s{:}s \in \textsc{min}(\lambda s'_s.\exists x_e, \exists \mu_{\langle s\langle e,d\rangle\rangle}[\mu(s')(x) \geq \mu(s')(\mathrm{Y}inhua)]).\ \textsc{max}(\lambda d_d.\textsc{height}(d)(Jinhua) = 1) > c$

Conclusion. While Northern Tujia on the surface has a contextually-sensitive comparative construction that resembles implicit comparatives in English, I have shown that the language employs dedicated morphosyntactic means to express ordering relations between entities and references degree arguments in the semantics of their gradable predicates. Based on the degreeful analysis, I have sketched out an analysis of standard-topic comparatives in Northern Tujia, modeled after Hohaus 2015, *et seq.* Northern Tujia therefore constitutes another example of languages that exclusively make use of indirect strategies to express degree comparison. This work also paves the way for analyzing similar topic-prominent comparatives reported across East Asian languages (Zhou 2024).

Select references. ► Beck, S. et al. 2009. Crosslinguistic variation in comparison constructions. ► Dixon, R. M. 2008. Comparative constructions: a crosslinguistic typology. ► Hohaus, V. 2015. *Context and composition: how presuppositions restrict the interpretation of free variables*. Universität Tübingen dissertation. ► Kennedy, C. 2007. Modes of comparison. ► Kratzer, A. 1989. An investigation of the lumps of thought. ► Lu, M. et al. 2024. Waning and waxing: the case of comparative marking in Tujia. ► Maienborn, C. 2001. On the position and interpretation of locative modifiers. ► Stassen, L. 1985. *Comparison and Universal Grammar*. ► Zhou, C. 2024. Towards a new typology of comparative constructions in East Asian languages.