

A New Kind of Perspective Sensitivity Cross-linguistically: Primary Predication with *-gaa*

Rahul Balusu

1 Introduction

Bylinina (2016) finds three kinds of judge-dependence encoding among gradable adjectives across languages, based on ability to take ‘judge’ PPs and subjectivity in comparatives: *Tasty*-class: subjective both in positive and comparative form, taking judge PPs; *Smart*-class: subjective both in positive and comparative form, with no judge PPs; *Tall*-class: subjective in positive but not in comparative form, with no judge PPs. This paper presents evidence for a fourth kind of judge-dependence encoding from Telugu adjectival data (with cross-linguistic parallels in Spanish *ser/estar*, Finnish Essive case, and, Russian Instrumental case): *gaa*-class: **subjective & transient** both in positive and comparative form, taking judge PPs. The general theoretical import comes down to the difference between an experiencer argument in an event mediated predication vs. a non-event-mediated predication.

Uniquely, this kind of predicate gives rise to a transient reading. With various experiencer and tense combinations, it gives rise to subjective, dispositional and evaluative interpretations, similar to PPTs. We analyse the transient reading as **event mediated predication**, with a first-person based generic quantification over the experiencer variable and judge index. The subjectivity is due to the **experiencer variable introduced by the eventive predication**. When the experiencer is overt or *pro*, the interpretation is subjective. When there is a generic quantification over the event variable (interaction of tense), the meaning is evaluative or dispositional. With a first-person based generic quantification over the experiencer variable and judge index, the transient reading is prominent.

2 Transient and Subjective Readings with *-gaa*

2.1 Transient Reading

One interpretation of an adjectival construction with *-gaa* is stage-level, temporary or transient. This is seen clearly with Psych PCs (Property Concepts), which are s-level with *-gaa*, and i-level without it, as shown in (1). This is similar to other Psych PCs, such as, *bayam* ‘fear’, *santoosham* ‘happiness’, *siggu* ‘shame’, etc.

- | | | | | |
|-----|----|--|----|---|
| (1) | a. | naaku koopam-gaa undi I-DAT anger-gaa EX ‘I am angry (now).’ | b. | naaku koopam undi I-DAT anger EX ‘I’m an angry person.’ |
|-----|----|--|----|---|

Certain contexts also bring out the transient reading associated with *-gaa* clearly. For example, at a traffic signal, in a conversation, the navigator can say to the driver the sentence with *-gaa*, but not the sentences without *-gaa*, in (2).

- | | | | | |
|-----|----|--|----|---|
| (2) | a. | light erra-gaa undi, aagu! light <i>red</i> -gaa EX, stop! ‘The light is red, stop!’ | b. | # light eru-pu, aagu! light <i>red</i> -NOML, stop! ‘The light is red, stop!’ |
|-----|----|--|----|---|

With Predicates of Personal Taste (PPTs) as well, the transient reading with *gaa* comes out clearly, as shown in (3).

- (3) a. paaDaTam sarada-gaa undi
singing fun-gaa EX
'Singing is fun (now).'
- b. paaDaTam saradaa
singing fun
'Singing is fun.'

2.2 Subjective Reading

Another interpretation of the adjectival construction with *-gaa* is subjective, matter of opinion, perspectival, or a relative truth. This is in contrast to the adjectival structure without it, which has a permanent or objective meaning, as shown in (4), with a dimensional predicate. This is similar to other Dimensional adjectives like *ettu* 'tall', *baruvu* 'heavy', *sanna* 'thin', *laavu* 'fat', etc.

- (4) a. soofaa veDalpu-gaa undi
sofa width-gaa EX
'The sofa feels/looks wide.'
- b. soofaa veDalpu undi
sofa width EX
'The sofa is wide.'

However, the transient meaning also exists in such sentences, and can be highlighted depending on the context, as shown in (5).

- (5) *After just adding an extra section to the sofa:*
ii soofaa ippuDu veDalpu-gaa undi
this sofa now width-gaa EX
'This sofa is wide now.'

With Evaluative predicates, a subjective reading also arises with *-gaa*, as shown in (6). The transient meaning also exists, as in (7). This is true of other Evaluative adjectives as well, such as, *telivi* 'intelligent', *dhairyam* 'brave', *cetta* 'useless', etc.

- (6) a. adi andam-gaa undi
that beauty-gaa EX
'That appears beautiful.'
- b. adi andam-aina-di
that beauty-EQ-3FSG
'That is beautiful.'
- (7) nuvvu ii light-loo andam-gaa unnaavu
you this light-in beauty-gaa EX-2SG
'You are beautiful in this light.'

With Extreme predicates, a subjective readings comes about with *-gaa*, as shown in (8). This is also true for other extreme adjectives like *bhalee* 'excellent', *vikrutam* 'hideous', *atipedda* 'gigantic', etc.

- (8) a. adi adbhutam-gaa undi
that fantastic-gaa EX
'That seems fantastic.'
- b. adi adbhutam
that fantastic-ness
'That is fantastic.'

2.3 Is *-gaa* Really Subjective?

Considering that Dimensional adjectives, PPTs, and Evaluative adjectives are all subjective in the positive form and have standards which can vary and can be explicitly contextualized by mentioning the entity whose standard is used to judge, how can we attribute subjectivity to *-gaa*?

One way to ascertain this is to test with predicates that have a more objective standard of evaluation, like *new*. As shown in (9), *-gaa* indeed brings in a subjective interpretation to the objective predicate, and both can even be contrasted, as in (10).

- (22) a. *more tall-ish, *tall-ish-er, *very tall-ish, *too tallish Sugawara (2012)
 b. pustakam ekkuva / caalaa / marii muriki-gaa undi
 book more / very / too dirt-gaa EX
 ‘The book seems more/very/too dirty.’

To get the approximate *-ish* like reading with *-gaa*, two kinds of intensifiers are used, one with the open scale adjectives, and another with the closed scale adjectives, as shown in (23).

- (23) a. koncam nalla-gaa / baruvu-gaa / kotta-gaa unn-a pustakam
 little $\sqrt{\text{black}}$ -gaa / weight-gaa / $\sqrt{\text{new}}$ -gaa EX-REL book
 ‘The slightly black / heavy / new appearing book’
 b. deggira deggira ninDu-gaa unn-a looTa
 near near $\sqrt{\text{full}}$ -gaa EX-REL mug
 ‘The nearly full mug’

However, in one context, where there is an implicit comparison class, it is possible to use *-gaa* by itself, to get an approximate reading which involves a lowering of the contextual standard, as shown in (24). This lowering of the contextual standard we claim comes about by the mechanism of comparison (Alrenga et al 2012).

- (24) (viiTil-loo) ettu-gaa unna ceTTu
 these-among height-gaa EX-REL tree
 ‘The tall tree among these’

We attribute the contextual lowering of the standard to the comparison, because when there is no comparison class, there is no *-ish* like meaning, as in (25).

- (25) *Asking for an object to be painted a certain color, you say:*
 daan-ni erra-gaa paint ceysi vs. koncam erra-gaa paint ceysi
 that-ACC red-gaa paint do little red-gaa paint do
 ‘Paint that red!’ vs. ‘Paint that reddish!’

After surveying the data, it can thus be concluded that there are two nuances that *-gaa* imparts in primary predication: subjectivity and transience. It does not participate in a shifting of the contextual standard –up or down.

4 Encoding Transience

We propose that *-gaa* is an eventive Pred^0 as shown in (26) and that PC nouns/roots in Telugu denote properties (Chierchia & Turner 1988). The role of PredP is to turn the property expression, π , in its complement position into a propositional function with an unsaturated argument (Bowers 1993).

- (26)
-
- ```

graph TD
 TP --> DPi
 TP --> T_prime[T']
 DPi --> adi[adi]
 DPi --> that[that]
 T_prime --> T0
 T_prime --> AspP
 AspP --> Asp0
 AspP --> vP
 vP --> v0
 v0 --> unn[unn]
 v0 --> be['be']
 vP --> PredP
 PredP --> ti
 PredP --> Pred_prime[Pred']
 Pred_prime --> Pred0_gaa[Pred0]
 Pred0_gaa --> gaa[-gaa]
 Pred0_gaa --> e[e]
 Pred_prime --> NP
 NP --> kaSTam[kaSTam]
 NP --> difficulty[difficulty]

```

Since *-gaa* is an eventive  $\text{Pred}^0$ , it does this via mediation by an eventuality variable, by expressing that the property  $\text{HOLDS}$  of some eventuality and that this eventuality has a  $\text{HOLDER}$  (Markman 2008). The  $\text{PRED}^0$  that *-gaa* instantiates has the partial lexical entry given in (27), and composes with the rest of the structure, as shown in (28). Thus, the predicate does not hold of the individual *per se*, but only of the individual with respect to an eventuality (long lasting or short lived). This event mediated predication is what gives rise to the s-level/transient interpretation.

$$(27) \llbracket_{\text{Pred}^0} \text{gaa} \rrbracket \rightarrow \lambda \pi \lambda x \lambda e [\text{holds}(\pi, e) \wedge \text{Holder}(e, x)] \quad (\text{partial lexical entry})$$

$$(28) \text{ Interpretation of } \textit{adi kaSTam-gaa undi} \text{ ‘that is difficult (now)’:}$$

$$\text{TP} \rightarrow \exists t \exists e [\text{holds}(\text{DIFFICULTY}, e) \wedge \text{Holder}(e, \textit{that}) \& \tau(e) \circ t \& t \circ n]$$

$$\text{AspP} \rightarrow \lambda t \exists e [\text{holds}(\text{DIFFICULTY}, e) \wedge \text{Holder}(e, \textit{that}) \& \tau(e) \circ t]$$

$$\text{Asp} \rightarrow \lambda Q \lambda t \exists e [Q(e) \& \tau(e) \circ t]$$

$$\text{PredP} \rightarrow \lambda e [\text{holds}(\text{DIFFICULTY}, e) \wedge \text{Holder}(e, \textit{that})]$$

$$\text{DP}(\textit{adi}) \rightarrow \textit{that}$$

$$\text{Pred}' \rightarrow \lambda x \lambda e [\text{holds}(\text{DIFFICULTY}, e) \wedge \text{Holder}(e, x)]$$

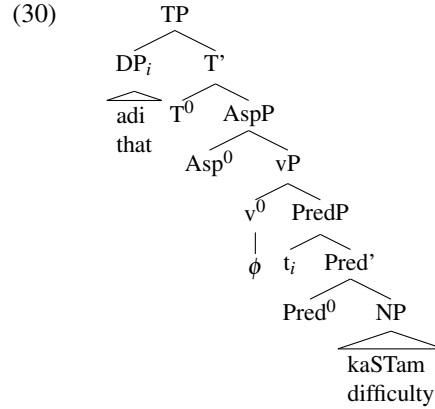
$$\text{Pred}^0(-\textit{gaa}) \rightarrow \lambda \pi \lambda x \lambda e [\text{holds}(\pi, e) \wedge \text{Holder}(e, x)]$$

$$\text{NP}(\textit{kaSTam}) \rightarrow \lambda x [\text{DIFFICULTY}(x)]$$

Without *-gaa*, the non-verbal predicate, as in (29), is [-eventive] and gets the interpretation as in (31). This  $\text{PredP}$  does not introduce an event argument, as shown in (30). *Asp* and *T* locate this nominal predicate on a time-line.

$$(29) \textit{adi kaSTam}$$

that difficulty  
‘That is difficult.’



$$(31) \text{PredP} \rightarrow \text{DIFFICULTY}(\textit{that})$$

$$\text{DP}(\textit{adi}) \rightarrow \textit{that}$$

$$\text{Pred}' \rightarrow \lambda x [\text{DIFFICULTY}(x)]$$

$$\text{Pred}^0 \rightarrow \lambda P.P$$

$$\text{NP}(\textit{kaSTam}) \rightarrow \lambda x [\text{DIFFICULTY}(x)]$$

## 5 Encoding Subjectivity

We propose that *gaa*-predicates have an  $\text{EXPERIENCER}$  argument (the perceiver of the eventive predicate), encoded in *-gaa*'s denotation, and combine this with a judge index (Lasersohn 2005), that *-gaa* appeals to in its lexical semantics, making the predicate judge-dependent, as given in (32). The full and final lexical entry of *-gaa* that we propose thus also encodes a direct  $\text{EXPERIENCER/PERCEIVER}$  argument.

$$(32) \text{ a. } \llbracket -\textit{gaa} \rrbracket^{c;g;w;t,j} = \lambda z \lambda \pi \lambda x \lambda e [\text{Holds}(\pi, e) \& \text{Holder}(e, x) \& \text{Experiencer}(e, z) \& \max(\lambda d. \pi(d)(e)) \succ d_{st} \text{ for } j \text{ at } t \text{ in } w]$$

$$\text{ b. } \llbracket \textit{kaSTam-gaa} \rrbracket^{c;g;w;t,j} = \lambda z \lambda x \lambda e [\text{Holds}(\text{DIFFICULTY}, e) \& \text{Holder}(e, x) \& \text{Experiencer}(e, z) \& \max(\lambda d. \text{DIFFICULTY}(d)(e)) \succ d_{st} \text{ for } j \text{ at } t \text{ in } w]$$

In overt PP contexts, the judge index is set to the speaker, in un-embedded contexts, sans evidential. The experiencer is the overt PP, when there is one, as in (33) & (34).

$$(33) \text{ a. ii } \textit{lekka naa-ku kaSTam-gaa undi}$$

this sum I-DAT difficulty-gaa EX.PRES-3FSG  
‘This sum is difficult for me (now).’

- b.  $\llbracket \text{This sum is difficult for me} \rrbracket^{c;g;w,t,Sp} = \exists e[\text{Holds}(\text{DIFFICULTY}, e) \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, Sp) \wedge \max(\lambda d. \text{DIFFICULTY}(d)(e)) \succ d_{st} \text{ for } Sp \text{ at } t \text{ in } w]$
- (34) a. ii lekka ravi-ki kaSTam-gaa undi  
this sum ravi-DAT difficulty-gaa EX.PRES-3FSG  
'This sum is difficult for Ravi.'
- b.  $\llbracket \text{This sum is difficult for Ravi} \rrbracket^{c;g;w,t,Sp} = \exists e[\text{Holds}(\text{DIFFICULTY}, e) \wedge \text{Holder}(e, \text{thissum}) \wedge \text{Experiencer}(e, \text{Ravi}) \wedge \max(\lambda d. \text{DIFFICULTY}(d)(e)) \succ d_{st} \text{ for } Sp \text{ at } t \text{ in } w]$

With an evidential, the judge index gets shifted to the experiencer, as in (35).

- (35) a. lekka ravi-ki kaSTam-gaa undi anTa  
sum ravi-DAT difficulty-gaa EX.PRES-3FSG EVID  
'The sum is apparently difficult for Ravi.'
- b.  $\llbracket \text{EVID This sum is difficult for Ravi} \rrbracket^{c;g;w,t,Sp} = \llbracket \text{This sum is difficult for Ravi} \rrbracket^{c;g;w,t,Ravi} = \exists e[\text{Holds}(\text{DIFFICULTY}, e) \& \text{Holder}(e, \text{this sum}) \& \text{Experiencer}(e, \text{Ravi}) \& \max(\lambda d. \text{DIFFICULTY}(d)(e)) \succ d_{st} \text{ for } Ravi \text{ at } t \text{ in } w]$

The experiencer could be the judge, but this is not necessary. So in Telugu, the *experiencer=judge* requirement of Bylinina (2016) does not hold. In this sense *gaa*-predicates are similar to Japanese experiencer predicates like *okotteiru* 'angry' and *haradashii* 'irritating' which do not require evidential markers, and the experiencer and judge can be different.

In a bare *gaa*-predicate, there is a covert experiencer. One possibility is *pro*, as shown in (36).

- (36) a. lekka kaSTam-gaa undi  
sum difficulty-gaa EX.PRES-3FSG  
'The sum is difficult'
- b.  $\llbracket \text{This sum is difficult } pro \rrbracket^{c;g;w,t,Sp} = \exists e[\text{Holds}(\text{DIFFICULTY}, e) \& \text{Holder}(e, \text{this sum}) \& \text{Experiencer}(e, Sp) \& \max(\lambda d. \text{DIFFICULTY}(d)(e)) \succ d_{st} \text{ for } Sp \text{ at } t \text{ in } w]$

The other possibility is *PRO<sub>arb</sub>*, as shown in (37). Such a sentence expresses a generalisation based on the speaker's own experience, a first-person-based generic interpretation. There is a generic quantification, and the experiencers that the *gaa*-predicate ranges over are individuals as entities the relevant agent identifies with (Moltmann 2010). There is a judge-shifting sentence-abstract-forming operator that binds the judge index in the meta-language in these sentences *Op<sub>n</sub>* (Laserson 2008). It quantifies over the individual index and shifts the judge in tandem with the variable introduced by *PRO<sub>arb</sub>*.

- (37) a.  $\llbracket \text{This sum is difficult } PRO_{arb} \rrbracket^{c;g;w,t,Sp} = \exists e[\text{Holds}(\text{DIFFICULTY}, e) \& \text{Holder}(e, \text{this sum}) \& \text{Experiencer}(e, PRO_{arb}) \& \max(\lambda d. \text{DIFFICULTY}(d)(e)) \succ d_{st} \text{ for } Sp \text{ at } t \text{ in } w]$
- b.  $\llbracket Op_n \text{ This sum is difficult } PRO_{arb} \rrbracket^{c;g;w,t,Sp} = \llbracket \text{This sum is difficult } PRO_{arb} \rrbracket^{c;g;w,t,g[x/n]^1}$
- c.  $PRO_{arb} = \lambda x \lambda z [\text{Gn } x. \text{qua}(x, \lambda y [\text{I } y \text{ } z])]$

When the experiencer is *PRO<sub>arb</sub>*, the transient component of the meaning is prominent (like in the traffic-light situation earlier). When it is another experiencer, the subjective meaning predominates, though the transient component can also be highlighted, according to the context. Here the event variable is existentially closed, or else it will give rise to a generic/habitual reading.

In the habitual tense, the interpretation is not episodic, but either dispositional, or evaluative, as shown in (38) & (39).

<sup>1</sup>(Here *x* is the *n<sup>th</sup>* element that co-varies with the value of *PRO<sub>arb</sub>*)

- (38) ii lekka ravi-ki kaSTam-gaa unDeedi DISPOSITIONAL  
 this sum Ravi-DAT difficulty-gaa EX.HAB-3FSG  
 ‘This sum was difficult for Ravi.’
- (39) ii lekka kaSTam-gaa unDeedi EVALUATIVE  
 this sum difficulty-gaa EX.HAB-3FSG  
 ‘This sum was difficult (non-episodic).’

We analyse these readings as arising out of a generic operator binding the event variable (Anthony 2016). When the experiencer is overt or *pro*, it gives rise to a dispositional reading. When the experiencer is filled by  $PRO_{arb}$ , an evaluative reading comes about.

## 6 Conclusion

Thus, we explain the various readings with *gaa*-predicates through an interaction of: (a) Tense –event variable generically or existentially bound; (b) The experiencer argument – $PRO_{arb}$  or otherwise; and (c) The judge index –shifted by evidential marker /  $PRO_{arb}$  / attitude-verb or not.

When there is no overt experiencer argument, there is a covert one, and a salient possibility is the first-person-oriented generic *one* – $PRO_{arb}$ . Interestingly enough, Telugu shows a gap in lacking the overt counterpart of this covert generic *one*.

## References

- Alrenga, Peter, Christopher Kennedy, and Jason Merchant. 2012. A new standard of comparison. In *Proceedings of the 30th West Coast Conference on Formal Linguistics 30*, ed. N. Arnett and R. Bennett, 32–42.
- Anthony, Alex. 2016. Experience, evaluation and faultless disagreement. *Inquiry* 59:686–722.
- Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24:591–656.
- Bylinina, Lisa. 2016. Judge-dependence in degree constructions. *Journal of Semantics* 34:291–331.
- Chierchia, Gennaro, and Raymond Turner. 1988. Semantics and property theory. *Linguistics and Philosophy* 11:261–302.
- Clements, Clancy. 2006. Ser-estar in the predicate adjective construction. In *Functional Approaches to Spanish Syntax: Lexical Semantics, Discourse and Transitivity*, ed. J.C. Clements and J. Yoon, 161–202. London: Palgrave Macmillan UK.
- Deo, Ashwini, Sara Sanchez-Alonso, and Maria Pinango. 2016. Alternative circumstances of evaluation and the *ser/estar* distinction in Spanish. Ms., Yale University. URL <https://ling.auf.net/lingbuzz/003543>.
- Kennedy, Christopher. 2007. Vagueness and grammar: The semantics of relative and absolute gradable adjectives. *Linguistics and Philosophy* 30:1–45.
- Kolbel, Max. 2003. Faultless disagreement. *Proceedings of the Aristotelian Society* 104:53–73.
- Lasnik, Peter. 2005. Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy* 28:643–686.
- Lasnik, Peter. 2008. Quantification and perspective in relativist semantics. *Philosophical Perspectives* 22:305–337.
- Maienborn, Claudia. 2005. A discourse-based account of Spanish *ser/estar*. *Linguistics* 43:155–180.
- Markman, Vita G. 2008. The case of predicates (revisited): Predicate instrumental in Russian and its restrictions. *Journal of Slavic Linguistics* 1:187–246.
- Moltmann, Friederike. 2010. Relative truth and the first person. *Philosophical Studies* 150:187–220.
- Morris, Lori. 2009. A toughish problem: The meaning of *-ish*. *LACUS Forum* 24:207–215.
- Sugawara, Ayaka. 2012. Semantics of English suffix *-ish*. Paper presented at Chicago Linguistic Society 48, University of Chicago.

Department of Computational Linguistics  
 The English and Foreign Languages University  
 Hyderabad, India  
[kodiguddu@gmail.com](mailto:kodiguddu@gmail.com)