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

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Abstract
We argue for a new type of judge-dependence encoding based on Telugu adjectival data (with cross-linguistic parallels in Spanish ser/estar, Finnish Essive case, and, Russian Instrumental case). Uniquely, this kind of predicate gives rise to a transient reading in certain contexts without an overt PP. With other experiencer and tense combinations, it gives rise to subjective, dispositional and evaluative interpretations, similar to PPTs. The general theoretical import comes down to the difference between an experiencer argument in an event mediated predication vs. a non-event-mediated predication. We analyse the transient reading as event mediated predication, brought about by the eventive predicator -gaa, with a first-person based generic quantification over the experiencer variable (introduced by -gaa) and judge index. When the experiencer is overt or pro, the interpretation is subjective, and when there is generic quantification over the event variable (interaction of tense) the meaning is evaluative or dispositional. In non-event-mediated predication, without -gaa, the transient reading is absent, and subjectivity is based on the kind of gradable adjective–dimensional, and evaluative adjectives; PPTs.
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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 red-gaa EX, stop!
   ‘The light is red, stop!’

b. # light eru-pu, aagu!
   light red-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).
2.2 Subjective Reading

Another interpretation of the adjectival construction with -gaa is subjective, matter of opinion, per-
spectival, 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 eval-
uation, 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).
Another case that clearly demonstrates -gaa’s subjectivity is when -gaa combines with an s-level predicate and delivers an s-level predicate with a subjective interpretation, as shown in (11).

(11) a. naaku jwaram undi
   I-DAT fever EX
   ‘I have fever.’

b. naaku jwaram-gaa undi
   I-DAT fever-gaa EX
   ‘I am feverish.’

2.4 Faultless Disagreement

Another feature of predicates with -gaa is that they exhibit faultless disagreement (Kolbel 2003). This is true with Dimensional Adjectives, as shown in (12). Person A utters (12a) after lifting an object, and Person B utters (12b), and neither of them is at fault even though they are disagreeing.

(12) a. A: adi baruvu-gaa undi
   that weight-gaa EX
   ‘A: That is heavy.’

b. B: adi baruvu-gaa leedu
   that weight-gaa EX.NEG
   ‘B: That is not heavy.’

This is also the case with PPTs, as shown in (13).

(13) a. A: adi saradaa-gaa undi
   that fun-gaa EX
   ‘A: That is fun.’

b. B: adi sarada-gaa leedu
   that fun-gaa EX.NEG
   ‘B: That is not fun.’

The same is the case with Evaluative adjectives, as shown in (14).

(14) a. A: adi andam-gaa undi
   that beauty-gaa EX
   ‘A: That is beautiful.’

b. B: adi andam-gaa leedu
   that beauty-gaa EX.NEG
   ‘B: That is not beautiful.’

Finally, this also holds true of Extreme adjectives, as shown in (15).

(15) a. A: adi adbhutam-gaa undi
   that fantastic-gaa EX
   ‘A: That is fantastic.’

b. B: adbhutam-gaa leedu
   fantastic-gaa EX.NEG
   ‘B: That is not fantastic.’

2.5 Subjectivity in Comparatives

The adjectivals with -gaa are also subjective in the comparative construction, as illustrated with a Dimensional adjective in (16).

(16) Ravi is shorter than me. But in a photo, due to some foreshortening effect, he appears taller than me. I say:

   ravi naak-anTee ettu-gaa unnaaDu
   ravi me-than height-gaa EX
   ‘Ravi appears taller than me.’
3 No ish-iness to -gaa

3.1 Spanish ser and estar

Spanish estar (Deo et al 2016) is like -gaa in that the copula estar is subjective, whereas the copula ser is objective, as shown in (17). Similarly, like -gaa, estar is transient, composing with s-level predicates or delivering an s-level meaning, whereas ser composes with i-level predicates or delivers an i-level interpretation, as shown in (18) and (19).

(17) a. Juan es gordo
   Juan SER.PRES.3SG fat
   ‘Juan is fat.’

b. Juan esta gordo
   Juan ESTAR.PRES.3SG fat
   ‘Juan looks fat.’

(18) a. Maria es/esta rubia
   Maria SER/ESTAR blond
   ‘Maria is blond.’

b. Maria esta/esa es sola
   Maria ESTAR/ser alone
   ‘Maria is alone.’

(19) a. Estas manzanas son agrias
   These apples SER.PRES.3PL sour
   ‘These apples are sour.’ (This variety)

b. Estas manzanas estan agrias
   These apples ESTAR.PRES.3PL sour
   ‘These apples are sour.’ (because they are not ripe yet)

3.2 estar can Change the Standard. Can gaa?

Spanish estar that has just been shown to share some striking parallels with -gaa is noted to deliver an approximate meaning by lowering the contextual standard — Maienborn (2005), Clements (2006), and Deo et al (2016), as shown in (20).

(20) Juan, from Madrid, with really tall buildings, while in Segovia, where they are not as tall, for one building reluctantly concedes:
    Vale, ese edificio esta alto
    OK, this building estar.PRES.3SG tall
    ‘OK, this building is tall.’

This raises the question, does adjectival -gaa also impart an approximate meaning, like estar and like English -ish (Morris 2009, Sugawara 2012)?

3.3 -gaa is Not Like -ish

Adjectival -ish, as in redd-ish, squar-ish, old-ish, short-ish, light-ish, cheap-ish, does not compose with lower-bounded adjectives (Sugawara 2012), whereas a lower-bounded adjective with -gaa is fine, as shown in (21).

(21) a. *dirty-ish, *bent-ish
    Sugawara (2012)

b. pustakam muriki-gaa undi
    book dirt-gaa EX
    ‘The book seems dirty.’

Another property of adjectival -ish, is that it is not gradable (Morris 2009, Sugawara 2012), it does not compose with intensifiers or form comparatives, but adjectivals with -gaa have no trouble being gradable, as shown in (22).
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 unna-a pustakam
     little √black-gaa / weight-gaa / √new-gaa EX-REL book
     ‘The slightly black / heavy / new appearing book’

     b. deggira deggira ninDu-gaa unna-a looTa
     near near √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) (viTil-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 ceyyi vs. koncam erra-gaa paint ceyyi
    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 Pred0 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)
Since -gaa is an eventive Pred⁰, it does this via mediation by an eventuality variable, by expressing that the property holds of some eventuality and that this eventuality has a Holder (Markman 2008). The Pred⁰ 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 interpretation is what gives rise to the s-level/transient interpretation.

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

(28) Interpretation of adi kaStam-gaa undi ‘that is difficult (now)’:

- TP → \(\exists t \exists e[\text{holds}(\text{DIFFICULTY}, e) \land \text{Holder}(e, \text{that}) & \tau(e) \circ t \circ \tau]\)
- AspP → \(\lambda t \exists e[\text{holds}(\text{DIFFICULTY}, e) \land \text{Holder}(e, \text{that}) & \tau(e) \circ t]\)
- PredP → \(\lambda e[\text{holds}(\text{DIFFICULTY}, e) \land \text{Holder}(e, \text{that})]\)
- \(\text{DP}(\text{adi}) \rightarrow \text{that}\)
- \(\text{Pred}' \rightarrow \lambda x[\text{DIFFICULTY}(x)]\)
- \(\text{Pred}^0(-\text{gaa}) \rightarrow \lambda \pi \lambda x \lambda e[\text{holds}(\pi, e) \land \text{Holder}(e, x)]\)
- \(\text{NP}(\text{kaStam}) \rightarrow \lambda x[\text{DIFFICULTY}(x)]\)

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

(29) adi kaStam that difficulty

‘That is difficult.’

(30) TP

\[\begin{array}{c}
\text{DP}_t \\
\text{T'}
\end{array}\]

\[\begin{array}{c}
\text{AdjP} \\
\text{T}\text{'}
\end{array}\]

\[\begin{array}{c}
\text{AsnP} \\
\text{Vp}
\end{array}\]

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

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

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

\(\text{Pred}^0 \rightarrow \lambda P.P\)

\(\text{NP}(\text{kaStam}) \rightarrow \lambda x[\text{DIFFICULTY}(x)]\)

5 Encoding Subjectivity

We propose that gaa-predicates have an 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 EXPERIENCER/PERCEIVER argument.

(32) a. \([\text{-gaa}]^{c:w,i,j} = \lambda e[\text{Holds}(\pi, e) \land \text{Holder}(e, x) \land \text{Experiencer}(e, x) \land \text{max}(\lambda d \cdot \text{DIFFICULTY}(d)(e)) > d_t \text{ for } j \text{ in } w]\)

b. \([\text{kaStam-gaa}]^{c:w,i,j} = \lambda e[\text{Holds}(\text{DIFFICULTY}, e) \land \text{Holder}(e, x) \land \text{Experiencer}(e, x) \land \text{max}(\lambda d \cdot \text{DIFFICULTY}(d)(e)) > d_t \text{ for } j \text{ in } w]\)

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) a. ii lekka nāa-ku kaStam-gaa undi this sum I-DAT difficulty-gaa EX-PRES-3FSG

‘This sum is difficult for me (now).’
b. \[ \text{This sum is difficult for me} \] \( \text{Evid} \) \( \exists \text{e} [\text{Holds(DIFFICULTY, e)} \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, Sp)] \wedge \text{max}(\lambda d. \text{DIFFICULTY}(d)(e)) > d_a \) for \( Sp \) at \( t \) in \( w \) 

(34) a. ii lekka ravi-ki kaSTam-gaa undi this sum ravi-DAT difficulty-gaa \text{EX.PRES.3FSG} ‘This sum is difficult for Ravi.’

b. \[ \text{This sum is difficult for Ravi} \] \( \text{Evid} \) \( \exists \text{e} [\text{Holds(DIFFICULTY, e)} \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, Ravi)] \wedge \text{max}(\lambda d. \text{DIFFICULTY}(d)(e)) > d_a \) for \( Sp \) at \( t \) 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 \text{EX.PRES.3FSG EVID} ‘The sum is apparently difficult for Ravi.’

b. \[ \text{Evid} \text{This sum is difficult for Ravi} \] \( \text{Evid} \) \( \exists \text{e} [\text{Holds(DIFFICULTY, e)} \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, \text{Ravi})] \wedge \text{max}(\lambda d. \text{DIFFICULTY}(d)(e)) > d_a \) for \( Ravi \) at \( t \) 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 \text{okotteiru} ‘angry’ and \text{haradatashii} ‘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 \text{pro}, as shown in (36).

(36) a. lekka kaSTam-gaa undi sum difficulty-gaa \text{EX.PRES.3FSG} ‘The sum is difficult’

b. \[ \text{This sum is difficult pro} \] \( \text{Evid} \) \( \exists \text{e} [\text{Holds(DIFFICULTY, e)} \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, \text{Sp}) \wedge \text{max}(\lambda d. \text{DIFFICULTY}(d)(e)) > d_a] \) for \( Sp \) at \( t \) in \( w \) 

The other possibility is \text{PRO}_{arb}, 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 \( \text{Op}_n \) (Lasersohn 2008). It quantifies over the individual index and shifts the judge in tandem with the variable introduced by \text{PRO}_{arb}.

(37) a. \[ \text{This sum is difficult \text{PRO}_{arb}} \] \( \text{Evid} \) \( \exists \text{e} [\text{Holds(DIFFICULTY, e)} \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, \text{PRO}_{arb}) \wedge \text{max}(\lambda d. \text{DIFFICULTY}(d)(e))] > d_a \) for \( Sp \) at \( t \) in \( w \) 

b. \[ \text{Op}_n \text{This sum is difficult \text{PRO}_{arb}} \] \( \text{Evid} \) \( \exists \text{e} [\text{Holds(DIFFICULTY, e)} \wedge \text{Holder}(e, \text{this sum}) \wedge \text{Experiencer}(e, \text{PRO}_{arb}) \wedge \text{max}(\lambda d. \text{DIFFICULTY}(d)(e))] > d_a \) for \( Sp \) at \( t \) in \( w \) 

c. \( \text{PRO}_{arb} = \lambda x \lambda z [\text{Gn x} \ w \ w \ x] \) 

When the experiencer is \( \text{PRO}_{arb} \), 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).

\footnote{(Here \( x \) is the \( n^{th} \) element that co-varies with the value of \( \text{PRO}_{arb} \))}
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 $\text{PRO}_{arb}$, an evaluative reading comes about.

6 Conclusion

Thus, we explain the various readings with $\text{gaa}$-predicates through an interaction of: (a) Tense –event variable generically or existentially bound; (b) The experiencer argument –$\text{PRO}_{arb}$ or otherwise; and (c) The judge index –shifted by evidential marker / $\text{PRO}_{arb}$ / 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 –$\text{PRO}_{arb}$. Interestingly enough, Telugu shows a gap in lacking the overt counterpart of this covert generic one.

References


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