# **Benefactive Versus Experiencer Datives**

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# 1. Applied Arguments

Pylkkänen (2008) argues that applied arguments split into two groups: low applicatives, which require (at least the intent of) a possession relation between the two objects; and high applicatives, which do not. High applicatives instead relate an individual to an event. Pylkkänen's analysis of high applicatives is shown below, with an Appl(icative) head introducing the applied argument (her (6a), p.14):

(1) [VoiceP NP<sub>Subj</sub> [ Voice [ApplP NP<sub>Appl</sub> [ Appl [VP V NP<sub>Obj</sub> ] ] ] ] ]

The denotation that Pylkkänen proposes for the high Appl head is shown below. Appl and Voice both combine with their sisters by the rule of Event Identification (Kratzer, 1996), to produce the denotation in (3) for the whole VoiceP:

- (2)  $[Appl] = \lambda x.\lambda e.Appl(e,x)$ (collapsing AppL<sub>Ben</sub>, AppL<sub>Instr</sub>, AppL<sub>Loc</sub>, etc.) (P's (13), p.17)
- [3] [VoiceP] =  $\lambda$ e. V-ing(e) & Theme(e,NP<sub>Obj</sub>) & Appl(e,NP<sub>Appl</sub>) & Agt(e,NP<sub>Subj</sub>)

We show that the division between high and low applicatives is much too coarse. Various phenomena that this analysis groups together as high applicatives are really very different. We concentrate on benefactive applicatives, on the one hand, and malefactive or adversitive applicatives, which we call "experiencers," on the other, and show that they differ in ways not captured by this analysis. Experiencers, in particular, require a very different analysis from that shown above. Our arguments are the following: First, some languages have only experiencers, like Albanian, while others have only benefactives, like Micmac (Algonquian). Another language, German, has both. Second, experiencers can only be sentient, but benefactives do not have to be. Third, and most importantly, experiencers contribute not-at-issue meaning, but benefactives do not.

Finally, we turn to several other kinds of high applicatives, and show that they, too, differ in important ways that require different analyses.

#### 2. Three Differences

The first difference is the semantic interpretation. In Micmac, an applied benefactive argument is added to a verb by the addition of the morpheme /-u-/. The benefactive argument is interpreted as getting some benefit out of the verbal event (this includes a proxy reading):<sup>1</sup>

- (4) a. Samapt'm-**u**-i-p'n. *Micmac* catch.glimpse.of-Benef-3Subj/1Obj-Past 'He caught a glimpse of it for me.'
  - b. Keln'm-u-it wi'katik'n.
    hold-Benef-3Subj/1Obj book
    'He holds the book for me.' (e.g., could be layaway)

<sup>&</sup>lt;sup>1</sup>Micmac examples come from fieldwork conducted in Eskasoni, Nova Scotia by Benjamin Bruening. This fieldwork was supported by the National Science Foundation (NSF grant no. BCS-0518308). The apostrophe after a vowel indicates length; after a consonant, a schwa. The consonant "q" is a velar fricative. "3Subj/1Obj" means a third person subject with a first-person object (first object if there are two, as in this case; the second object is only registered in agreement if it is plural or obviative).

c. Malqut'm-**u**-ij-ek Pas'may-al w-iluek. eat-Benef-3Subj/1Obj-Past Pasmay-Obv 3Poss-food 'He ate Pasmay's food for me.' (e.g., I asked him to)

The experiencer construction in Albanian has a different interpretation, perhaps best paraphrased as 'the verbal event matters to NP':<sup>2</sup>

- (5) a. Agim-i i-a theu [vazon e Ben-it] **Dritan-it**. *Albanian* Agim-Nom 3S.Dat-3S.Acc broke.3S [vase.Acc AD Ben-Gen] Dritan-Dat 'Agim broke Ben's vase on Dritan.'
  - b. Dritan-i më vdiq.
     Dritan-Nom 1S.Dat die.3Sg.Pst
     'Dritan died on me.'

Typically, this construction expresses an adversative effect experienced by the individual denoted by the applicative argument. However, this does not have to be the case. For instance, (5a) may be uttered in a context in which Dritan is happy about the broken vase. Therefore, we argue that there is a vague psychological experience ('matter to') associated with this argument.

Note that (4c) and (5a) show that neither the benefactive nor the experiencer require a possession relation between the applicative argument and another NP in the sentence. Both can also be added to static verbs (e.g., 4b). This means that both of them pass Pylkkänen's tests for high applicative arguments.

German has both types of applicative arguments. Many sentences are ambiguous but some allow only one of the readings:

- (6) a. Dennis malte **seinem toten Vater** das Bild. *German*Dennis painted his.Dat dead father the picture

  'Dennis painted the picture for his dead father.' (benefactive only)
  - b. Lisa lobte ihrem Mann den Anzug.
     Lisa praised her.Dat man the suit
     'Lisa praised the suit on her husband.' (experiencer only)

So, benefactives and experiencers are both high applicatives, but must be distinguished according to the meaning they contribute. A language may have only benefactives or only experiencers, or it may have both, with slightly different distributions.

The second characteristic that distinguishes benefactives from experiencers is that only the benefactive has a prepositional variant:

- (7) a. Kistelm-**u**-it wi'katik'n. *Micmac* buy-Benef-3Subj/1Obj book
  - 'He bought me a/the book (to give to me, or on my behalf).'
  - b. Kistel-k wi'katik'n ukjit ni'n.
    buy-3Subj/InanObj book for 1S
    'He bought a/the book for me (to give to me, or on my behalf).'

The experiencer typically does not (it does not seem to in Albanian, not shown):

(8) a. Dennis malte das Bild **für** seinen toten Vater. German Benefactive
Dennis painted the picture for his dead father

'Dennis painted the picture for his dead father.'

<sup>&</sup>lt;sup>2</sup>Albanian data come from an Albanian speaker residing in the United States. "AD" is an "adjectival determiner," a morpheme that appears before various noun modifiers.

b. \* Lisa lobte gegen/ auf/ wider ihren Mann den Anzug. German Exp. Lisa praised against/ on/ against her.Acc man the suit intended: 'Lisa praised the suit on her husband.'

While we do not at present have an explanation for this, the fact that only the benefactive alternates with a preposition supports our claim that the two types of high applicatives must be distinguished.

The third difference is that experiencers must be sentient and aware, but benefactives need not be:

- (9) a. Kisi-mk'n'm-u-ap'ni'l wasuek-ji'j-kl w-utj-aq. Micmac Past-pick-Benef-3Subj/ObvObj.Past flower-Dim-InanP 3-father-Absent 'He had picked some flowers for his late father.' (father can be dead at time of picking)
  - b. I-a lexuam testament-in burr-it të vjetër. *Albanian* 3S.Dat-3S.Acc read.1P will-Def.Acc man-Def.Dat AD old 'We read the old man's will on him.' (the old man cannot be dead)

The same is true for German.

- (10) a. Dennis malte das Bild seinem toten Vater. German Benefactive
  Dennis painted the picture his.Dat dead father

  'Dennis painted the picture for his dead father.'
  - b. # Der Hund starb seinem toten Besitzer. German Experiencer
    the dog died his dead owner

    'The dog died on his dead owner.'

This shows again that the two types differ.

So far, though, it would be possible to maintain Pylkkänen's analysis, but distinguish different subtypes of Appl head according to the thematic roles they assign. However, we turn next to a difference that requires a much more complicated analysis for experiencers.

# 3. At-Issue Meaning

The most important difference between benefactives and experiencers lies in whether they contribute not-at-issue meaning to the semantics of the sentence. After a short introduction of the concept of not-at-issue meaning, we show that experiencers contribute not-at-issue meaning while benefactives do not.

#### 3.1. Background

We follow Karttunen & Peters (1979) and Potts (2005), among others, in distinguishing different tiers of meaning in the semantics: at-issue meaning and not-at-issue meaning. An example of not-at-issue meaning is provided by appositives (Potts, 2005). We use them here to provide tools to diagnose not-at-issue meaning. First, material in an appositive may not be questioned:

- (11) a. We invited Louis, the king of France.
  - b. Which country did you invite the king of?
  - c. \* Which country did you invite Louis, the king of?
  - d. \* Who invited Louis, the king of which country?

Second, the meaning contributed by an appositive cannot be negated, and projects beyond negation:

(12) We didn't invite Louis, the king of France.

In this sentence, negation cannot just target the appositive, denying that Louis is the king of France. Third, the meaning contributed by an appositive projects beyond a yes/no question:

(13) Did you invite Louis, the king of France?

If the listener knows that he or she did invite Louis, but Louis is not the king of France, he or she cannot simply answer "no" to the question; an explanation is necessary. In contrast, the answer to "Did you invite the king of France?" can simply be "no" if the listener invited someone else.

Fourth, quantifiers in appositives cannot bind pronouns elsewhere in the sentence:

- (14) a. Each girl<sub>1</sub>'s chaperone berated her<sub>1</sub>.
  - b. \* Miss Marple, each girl<sub>1</sub>'s chaperone, berated her<sub>1</sub>.

Finally, the presence of the appositive makes absolutely no difference to conditionals (here, the conditions under which I will have to pay a hundred dollars):

- (15) a. If Louis actually does visit you, I'll give you \$100.
  - b. If Louis, the very haughty king of France, actually does visit you, I'll give you \$100.

I will have to pay in both cases if Louis visits you. The appositive does not add another condition to the sentence.

#### 3.2. Experiencers Involve Not-At-Issue Meaning

Using these diagnostics, it can be shown that experiencers involve not-at-issue meaning while benefactives contribute only at-issue meaning.

First, it is not possible to negate the experience itself, rather the whole verbal event is negated. Thus, the meaning of experience projects past negation.

(16) Dritan-it nuk i vdiq Besa. *Albanian*Dritan-Dat Neg 3S.Dat died.3S Besa.Nom

'Besa didn't die on Dritan.' (only: Besa didn't die, but if she had it would have mattered to Dritan.)

There is no such projective meaning in a benefactive construction. The benefactive relation can be negated to the exclusion of the main verbal event:

(17) Sewistesk-ək-ek kutputiek pasik mu sewisteskm-u-wik-ek. *Micmac* break-3Subj/InanObj-Past chair but Neg break-Benef-3Subj/1Obj.Neg-Past 'He broke the chair but he didn't break it for me.'

The same pattern can be observed in German. The experiencer datives have a meaning that survives negation while benefactives do not:

- (18) a. Lisa lobte ihrem Mann den Anzug nicht. German Experiencer
  Lisa praised her.Dat man the suit Neg

  'Lisa didn't praise the suit on her husband.'
  - 1. Lisa didn't praise the suit but if she had, it would have mattered to her husband.
  - 2. \*Lisa praised the suit, but it didn't matter to her husband.
  - b. Dennis malte das Bild nicht seinem toten Vater. German Benefactive
     Dennis painted the picture not his.Dat dead father
     'Dennis did not paint the picture for his dead father.
    - 1. Dennis painted the picture but it was not intended for his dead father.
    - 2. \*Dennis didn't paint the picture but if he had, it would have been intended for his father.

As expected if experiencers contribute not-at-issue meaning, their meaning projects beyond a yes-no question:

(19) Lobte Lisa ihrem Mann den Anzug? German Experiencer praised Lisa her.Dat man the suit 
'Did Lisa praise the suit on her husband?' (If Lisa praised it, it would matter to her husband.)

If the listener knows that Lisa praised the suit, but it did not matter to her husband, they cannot simply answer "no." They have to explain. If the listener does answer "no," they are accepting the truth of the proposition that praising the suit would matter to the husband. This contrasts with the benefactive:

(20) Installierte Dennis seinem Freund das Programm? German Benefactive installed Dennis his.Dat friend the program 'Did Dennis install the program for his friend?'

If the listener knows that Dennis did install the program, but not for his friend (maybe not for anyone), he or she can simply answer "no."

This shows that experiencers contribute not-at-issue meaning while benefactives do not. However, as we will show in the next section, experiencers also contribute some at-issue meaning.

# 3.3. Experiencers Also Contribute At-Issue Meaning

Experiencers can also be questioned and extracted, indicating that they are part of the at-issue content, as well:

- (21) Kujt i-a kafshoi qen-i mac-en e Bes-ës? *Albanian* who.Dat 3S.Dat-3S.Acc bit.3S dog-Def.Nom cat-Def.Acc AD Besa-Gen 'On whom did the dog bite Besa's cat?'
- (22) Wem starb Martins Hund? German Experiencer who.Dat died Martin.Gen dog
  'On whom did Martin's dog die?'

Furthermore, experiencers can also be quantifiers that bind pronouns in the at-issue content as variables. As shown above, this is not expected if they were completely on the not-at-issue tier of meaning.

- (23) Ich habe jedem Jungen<sub>1</sub> seinen<sub>1</sub> Anzug gelobt. German Experiencer I have every.Dat boy his suit praised 'I praised his<sub>1</sub> suit on every boy<sub>1</sub>.'
- (24) I-a theva çdo djal-it<sub>1</sub> saksinë e tij<sub>1</sub>. *Albanian* 3S.Dat-3S.Acc broke.1S every boy-Dat vase.Acc AD his 'I broke his<sub>1</sub> vase on every boy<sub>1</sub>.'

As for benefactives, it is expected that they can be questioned and can bind into other at-issue constituents, since they contribute only at-issue meaning. This is correct:

- (25) a. Wen elukwat'm-asəp k-utepaq'n? *Micmac* who fix-Benef.2Subj/3Obj.Past 2Poss-vehicle 'Who did you fix your car for?'
  - b. Mu wen<sub>1</sub> kistel'm-u-a-q u<sub>1</sub>-tapaqan.
     Neg who buy-Benef-1Subj/3Obj-Neg 3Poss-vehicle
     'I didn't buy anyone his/her car.'
- (26) a. Wem malte Dennis das Bild? German Benefactive who.Dat painted Dennis the picture 'For whom did Dennis paint the picture?'
  - b. Dennis malte jeder Frau<sub>1</sub> ihr<sub>1</sub> Bild.
     Dennis painted every woman her picture
     'Dennis painted her<sub>1</sub> picture for every woman<sub>1</sub>.'

Unlike appositives, experiencers also make a difference for conditionals. This further shows that experiencers also contribute at-issue meaning.

(27) Nëse Dritan-i m'-a shkel këpucë-n, ai do të marrë njëqind if Dritan-Nom 1S.Dat-3S.Acc step.3S shoe-Def.Acc he Fut Subj get.3S.Subj 100 dollarë.
dollars

'If Dritan steps on my shoe and it matters to me, he'll get one hundred dollars.' Albanian

If Dritan steps on my shoe, but I don't care, he won't get the hundred dollars; the stepping on the shoe has to matter to me. The same pattern can be observed for German:

(28) Wenn Lisa ihrem Mann den Anzug lobt, dann bekommt Jan 100Euro von ihm. if Lisa her.Dat husband the suit praises, then get Jan 100Euro from him 'If Lisa praises the suit on her husband, then Jan will get 100 Euros from him.' German Exp.

In case Lisa confirms that it is a pretty suit but that does not matter to her husband, Jan will not get 100 Euros because the suit was not praised "on the husband." This means that the experiencing event is part of the at-issue meaning because a conditional with the experiencer is not truth-conditionally equivalent to the corresponding conditional without it. There is no difference between experiencers and benefactives in this respect:

(29) Wenn Dennis seinem Vater ein Bild malt, dann bekommt er 100Euro von seiner Mutter. if Dennis his. Dat father a picture paint then get he 100Euros from his mother 'If Dennis paints a picture for his father, then he'll get 100 Euros from his mother.' *German Ben.* 

The mother will only have to pay the money if Dennis paints a picture and his father benefits from it; painting alone is not good enough.

#### 3.4. Summary

Experiencers and benefactives involve different thematic roles and have different interpretations. Furthermore, benefactives are entirely at-issue, but experiencers contribute not-at-issue meaning. However, experiencers contribute some at-issue meaning as well and must therefore be represented on both tiers of meaning.

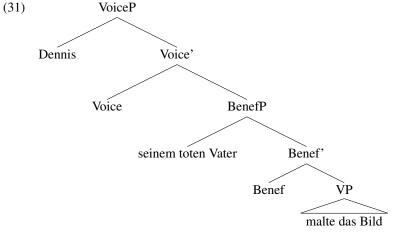
# 4. Analysis

#### 4.1. Benefactives

We analyze the benefactive exactly as Pylkkänen (2008) did for high applicatives in general. Benefactive arguments are introduced by a head that comes in between VP and Voice:

(30)  $[Benef] = \lambda e. \lambda x.Benef(e,x)$ 

Benef and Voice combine by the rule of Event Identification Kratzer (1996). We provide the structure and denotation for the German example (6a) below:

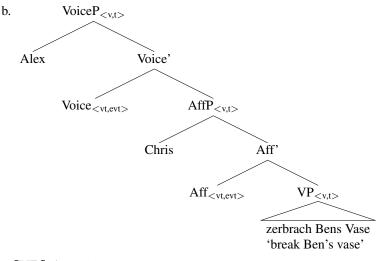


- a.  $\|\mathbf{VP}\| = \lambda e$ . paint(e) & Thm(e,the picture)
- b.  $[BenefP] = \lambda e$ . Benef(e,his dead father) & paint(e) & Thm(e,the picture)
- c.  $[VoiceP] = \lambda e$ . Agt(e,Dennis) & Benef(e,his dead father) & paint(e) & Thm(e,the picture)

#### 4.2. Experiencers

We adopt the analysis of Bosse et al. (2009) for experiencers. In this analysis, the experiencer argument is introduced by a head *Affect* that occurs between VP and Voice. Affect introduces both the experiencer argument and an experiencing event on the at-issue tier. The experiencer can therefore interact with other at-issue elements, for instance in question formation (19). Affect also introduces meaning on the not-at-issue tier (material following the colon in the denotation below). This component of the meaning says that the source of the experiencing event would be any event of the type denoted by the VP.

- (32)  $[Affect] = \lambda P_{\langle s,t \rangle} \cdot \lambda x \cdot \lambda e. P(e) \& \exists e' (experience(e') \& Exper(e',x)) : \forall e'' (P(e'') \rightarrow Source(e',e''))$
- (33) a. Alex zerbrach Chris Bens Vase.
  Alex broke Chris.Dat Ben.Gen vase.Acc
  'Alex broke Ben's vase on Chris.' (Bosse et al., 2009:examples 63, 64)



- i.  $\|\mathbf{VP}\| = \lambda e.break(e) \& Thm(e,Ben's vase)$

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= \lambdae. break(e) & Thm(e,Ben's vase) & \existse'(exper(e') & Exp(e',Chris) : \foralle"((break(e") & Thm(e",Ben's vase)) \rightarrow Source(e',e"))
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iii. [VoiceP] = [[Voice] ([AffP])]([Alex])=  $\lambda e$ . break(e) & Thm(e,Ben's vase) & Agt(e,Alex) &  $\exists e'(exper(e') \& Exp(e',Chris) : \forall e''((break(e'') \& Thm(e'',Ben's vase)) \rightarrow Source(e',e''))$ 

To paraphrase, the VoiceP denotes a set of breaking events with theme Ben's vase and agent Alex. There is also an experiencing event with experiencer Chris. Furthermore, there is a not-at-issue entailment that any breaking of Ben's vase would be the source of Chris's experience. This analysis captures the meaning of the experiencer construction and the at-issue/not-at-issue components of its meaning.

# 5. Experiencers Limited to Weak Pronouns

Some languages have experiencer applied arguments, but they are limited to being weak pronouns and may not be quantifiers or wh-phrases. Bosse et al. (2009) allow variation in the denotation of the Affect head, in how much of its semantics is at-issue. Languages where the experiencer can only be a weak or clitic pronoun have the entire content of Affect's meaning on the not-at-issue tier:

(34) 
$$[Affect_2] = \lambda P_{\langle s,t \rangle} \cdot \lambda x \cdot \lambda e. P(e) : \exists e' (experience(e') \& Exper(e',x)) \& \forall e'' (P(e'') \rightarrow Source(e',e''))$$

Two languages with this value for Affect are Hebrew and French. In Hebrew the relevant applied arguments are usually referred to as "ethical datives" (e.g. Borer & Grodzinsky, 1986), while in French they are usually called "affected datives" (e.g., Rouveret & Vergnaud 1980, Authier & Reed 1992). That the experiencer is purely not-at-issue is shown by conditionals. In the following examples, the money will have to be paid, regardless of how the referent of the dative feels about it:

- (35) a. Im hem yitxatnu **li**, Rina titen la'hem 100 dolar. *Hebrew* if they will.marry to.me Rina will.give to.them 100 dollar 'If they marry on me, Rina will give them \$100.'
  - b. Si Elmer **lui** dévalise deux banques, je te donnerai \$100. French if Elmer 3S.Dat rob two banks I you will.give \$100 'If Elmer robs two banks on him/her, I will give you \$100.'

In all other ways, though, these Hebrew and French applied arguments pattern as what we are calling experiencers.

Hence, languages can vary in how much of the semantics of Affect is at-issue and not-at-issue. In Albanian and German, the experiencer contributes to both tiers of meaning. In Hebrew and French, it only contributes to the not-at-issue tier. This seems to correlate with the experiencer being limited to a weak or clitic pronoun.

# 6. More Non-Selected Arguments and a Typology

Bosse et al. (2009) identify several other non-selected arguments that pattern as high applicatives but must be distinguished. First, there are possessors, which are entirely at-issue (e.g. Tomioka & Sim, 2005), as shown by the fact that no meaning projects beyond a yes-no question:

(36) Chelswu-ka **Sunhee-lul** son-ul cap-ass-ni? *Korean* Chelswu-Nom Sunhee-Acc hand-Acc grab-Past-Q 'Did Chelswu grab Sunhee by the hand?'

Next, there are attitude holders (sometimes called "ethical datives"); these are entirely not-at-issue and again are limited to weak pronouns (e.g. Gutzmann, 2007):

(37) Komm **mir** pünktlich nach Hause, und du bekommst 100Euro! *German* come me.Dat on.time to home and you get 100Euro 'Come home on time (and I want this to happen) and you will get 100 Euros!'

The first person pronoun in this example adds nothing to the conditions under which you will get 100 Euros.

Finally, there are subject co-referential pronouns, which are entirely not-at-issue and are again limited to weak pronouns (e.g. Horn, 2008):

- (38) a. If I sit **me** down in this here chair, will you give me some coffee?
  - b. If I sit down in this here chair, will you give me some coffee?

These two examples are identical in the conditions they impose for receiving the coffee. The pronoun adds nothing to the at-issue tier.

The following table summarizes our typology (example languages are of course not exhaustive):

Typology of Non-Selected Arguments					
	Subject Co-	Possessors	Attitude Holders	Benefactives	Experiencers
	Referential				
Semantics	leisure	possession	attitude toward p	benefit	psychological
Possession required	no	yes	no	no	no
NP must be sentient	yes	no	yes	no	yes
At-Issue Meaning	no	yes	no	yes	yes/no (parameter)
Not-At-Issue Meaning	yes	no	yes	no	yes
Example	Hebrew, English	Korean, Hebrew	German, French	Micmac, German	Albanian, Hebrew,
					German
Selected References	Halevy (2007),	Tomioka & Sim	Gutzmann (2007), Jouit-	Bosse et al. (2009)	Bosse et al. (2009)
	Horn (2008)	(2005)	teau & Rezac (2008)		

# 7. Conclusion

In conclusion, Universal Grammar makes available a range of non-selected arguments ("high applicatives") with different properties. We analyze all of them as being introduced by different functional heads. One of the most important distinguishing characteristics involves the at-issue/not-at-issue distinction. Future work must pay attention to this distinction and develop useful tests for identifying it, like those used here.

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