

# Expletive and Thematic Applicatives

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## 1. Introduction

Applicative morphemes have traditionally been understood to add an argument to the array selected by the verb. In more recent literature, applicatives are associated with a more refined set of functions and positions: in addition to adding an argument, applicative morphology may contribute to syntactic licensing (for example, through preposition incorporation in Baker's 1988 account). In semantic terms, applicative arguments have been distinguished by position (Marantz 1993). Some, such as recipient goals, are participants in the event denoted by the core VP, and have thus been argued to be composed within that VP. Others, such as benefactives, have been held to be composed externally to the VP. We might label these two distinct functions and two distinct positions as in (1):

(1)	<b>Applicative functions</b>	<b>Applicative argument positions</b>
	a. Introducer	c. VP-internal
	b. Licenser	d. VP-external

The focus of this paper is the possible combinations of functions and positions in (1). We exploit an analogy with the projection(s) that introduce subjects. The latter serves as a syntactic licensor, but also may or may not introduce an external argument. We argue that a similar distinction exists between **thematic** and **expletive** applicatives. The former introduce an additional argument (2), while the latter function as an expletive head, introducing no additional argument but serving as licensor for a DP in the verb phrase (3). Both occupy the same position, above VP.

(2) **Thematic applicative structure:** Applicative argument is introduced in APPLP.

[APPLP DP<sub>BENEFACTIVE</sub> [APPL' APPL [VP V DP]]]

(3) **Expletive applicative structure:** APPL licenses an argument in VP.

[APPLP DP<sub>RECIPIENT</sub> [APPL' APPL [VP t<sub>RECIPIENT</sub> [V' V DP<sub>THEME</sub>]]]]

In section 2 we briefly discuss previous literature. In section 3 we discuss what overt morphology tells us about the position of applicative heads. In section 4 we analyze the case of an overt non-affixal applicative head in Mandarin. In section 5 we return to the issue of (1c), VP-internal applicative arguments.

## 2. Background: VP-external (high) and VP-internal (low) applicatives

Building on Marantz's distinction, Pylkkänen (2002, in press) develops an explicit theory of high (VP-external) and low (VP-internal) applicatives:

(4) **Two positions for applicatives** (Pylkkänen 2002; annotated here to indicate thematic roles)

a. **High applicative**

[VoiceP DP<sub>AGENT</sub> [Voice' Voice [AppIP DP<sub>BENEFACTIVE/LOCATION/INSTRUMENT</sub> [AppI' Appl [VP V DP<sub>THEME</sub>]]]]]

b. **Low applicative**

[VoiceP DP<sub>AGENT</sub> [Voice' Voice [VP V [AppIP DP<sub>GOAL</sub> [AppI' Appl DP<sub>THEME</sub>]]]]]

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Pylkkänen's high applicative (4a) combines with the VP by Event Identification (Kratzer 1996) and adds an argument (interpreted as benefactive/malefactive, instrumental, or locative) to the event denoted by the VP (5). The semantics for low applicatives are a bit more complex. They treat APPL as the main function, taking the lexical verb, the IO, and the DO as arguments and specifying the relationship between the latter two (6). However APPLP is actually introduced lower in the structure (as the syntactic complement of the lexical verb); the device of interpreting the complement as the main function is modeled on the treatment of quantifier phrases in generalized quantifier theory (6).

- (5) **Semantics for high applicatives** (Pylkkänen 2002: 21)  
 $\lambda x.\lambda e. \text{APPL}(e,x)$  (APPL collapses  $\text{APPL}_{\text{BENEFACTIVE}}$ ,  $\text{APPL}_{\text{INSTRUMENT}}$ ,  $\text{APPL}_{\text{LOCATIVE}}$ , etc.)
- (6) **Semantics for low applicatives** (Pylkkänen 2002: 22)  
**Low-APPL-TO** (Recipient applicative):  
 $\lambda x.\lambda y.\lambda f\langle e\langle s,t\rangle\rangle.\lambda e. f(e,x)$  & theme (e,x) & to-the-possession(x,y)

This treatment makes several predictions. First, Pylkkänen gives two diagnostics:

- (7) a. **Diagnostic 1:** Only high applicative heads can combine with unergatives.  
 b. **Diagnostic 2:** Only high applicative heads can combine with static predicates.

Diagnostic 1 holds because the semantics for low applicatives stipulate the presence of a theme (direct object). Diagnostic 2 holds because the type of event denoted by a static predicate (e.g., *holding a bag*) is inconsistent with the bag undergoing a change of possession.

From a syntactic standpoint, the structure in (4b) predicts that if a language attests overt low applicative heads, they should appear lower than the verb, within VP, unless they are subject to some kind of dislocation, such as incorporation or cliticization. Absent such dislocation, it predicts a syntax-semantics mismatch: the overt applicative head should show evidence of scoping over VP, just as a quantifier in an object DP scopes over the VP in which it occurs. Finally, the semantics in (6) predicts that the possessor relation between DO and IO in double object constructions (DOCs) is an entailment.

### 3. Morphological exponence and applicative head positions

The high (VP-external) and low (VP-internal) applicative positions predict very different realizations in a language where these heads are overtly pronounced. As Baker (1996) points out, there are two widely attested positions for affixal applicatives: suffixal, between the verb root and aspect suffixes if any (8), and prefixal, to the left of the verb and any incorporated material (9).

- (8) **Kinyarwanda benefactive applicative** (Kimenyi 1980: 32)  
 Umukoóbwa a-ra-som-er-a umuhuúngu igitabo.  
 girl she-PRES-read-BEN-ASP boy book  
 'The girl is reading a book for the boy.'
- (9) **Ainu instrumental applicative** (Shibatani 1990: 69)  
 Tam-kurpoki a-ko-tam-etaye.  
 sword-underneath I-APPL-sword-draw  
 'I drew the sword underneath the sword.'

Baker proposes that the suffixal pattern in (8) is derived by raising and adjoining the verb to the higher applicative head (in (8), benefactive *-er-*), while (9) is derived by adposition incorporation. The first of these analyses requires, and the second is consistent with, an applicative head position above the verb. In general, the differences between prefixal and suffixal applicatives are consistent with these two distinct sources. First, prefixal applicatives may show near or complete homophony with freestanding prepositions, as in the case of Abaza locative applicatives discussed by O'Herin (2001).

- (10) **Abaza locative applicative** (O’Herin 2001: 481)  
 d-/a-[ðə-**dzqa**]-yə-r-gəl-t’.  
 A3SG.H-DIR[P1-beside]-C3SG.M-CSE-stand-DYN  
 ‘He caused him/her to stand next to us.’
- (11) **Abaza locative postposition ‘beside’** (O’Herin 2001: 486)  
 [pp a-ʒ’əra **dzqa**]  
 the-smithy 3SG.N-beside  
 ‘beside the smithy’

Abaza incorporated Ps show the same agreement as freestanding postpositions, a fact difficult to account for on any but an incorporation account. Second, Abaza prefixal applicatives may be multiple.

- (12) **Abaza multiple prefixal applicative** (O’Herin 2001: 484)  
 S-phā ay/aza<sup>w</sup> a-stol də-y-z-a-k<sup>w</sup>-s-c’a-y-t’.  
 1SG-daughter doctor the-table A3SG.H-P3PL-BEN-P3SG.N-INST-go-DYN  
 ‘I put my daughter on the table for the doctor.’

McGinnis (2005) points out that since high applicatives look for a VP-like (event-denoting) argument, they should be able to combine with other high applicatives, and provides empirical support for this prediction. Note that Abaza multiple applicatives are all of the high type (benefactive, instrumental, locative). The derivation of (12) would proceed as in (9) with the adposition in the specifier of each higher applicative projection incorporating into the verb in the head of the projection above it.

Summing up so far, overt high-type applicative heads may be verbal suffixes (selecting VP in underlying structure). Affixal marking of high applicatives may also take the form of prefixes; in this case the marker is not a reflex of the applicative head, but rather an incorporated adposition.

What would an overt low applicative look like? We might expect an overt low applicative head to look like the kinds of items that can head syntactic complements of V, such as adpositions or the second verb in ditransitive serial verb constructions. In many languages, the recipient goal (IO) in DOCs appears with a dative case marker:

- (13) **Japanese DOCs** (Miyagawa and Tsujioka 2004: 5)  
 Taroo ga Hanako ni nimotu o okutta.  
 Taroo NOM Hanako DAT package ACC sent  
 ‘Taroo sent Hanako a package.’ / ‘Taroo sent a package to Hanako.’

However, the dative case marker in (13) is not plausibly analyzed as the head of a lower applicative projection. Miyagawa and Tsujioka argue that it is a structural case marker, and this seems to be the most consistent marking pattern for recipient goals in DOCs across languages.

Two additional candidates come to mind for low applicative heads in situ: the second, typically donatory verb in ditransitive serial constructions (14), and adpositions in dative possessor constructions (15).

- (14) Mí mandá biífi **dá** hen. (Haitian: Lefebvre 1998: 291)  
 1SG send letter give her  
 ‘I have sent letters to her.’
- (15) Ha-yalda kilkela **le**-Dan et ha-radio. (Hebrew: Pylkkänen 2002: 43)  
 the-girl spoiled to-Dan ACC the-radio  
 ‘The girl broke Dan’s radio on him.’

However, neither of these constructions shows the behaviour expected of a low-type applicative. In (14), the c-command relations between the DO *biífi* ‘letter’ and the IO *hen* ‘her’ are reversed from the low applicative structure in (4b), and all researchers agree that the DO is (at least in part) the argument of the first verb, *manda* ‘send’. (15) is analyzed by Pylkkänen as a low applicative construction (contrast Landau 1999), but Pylkkänen does not analyze the preposition *le* ‘to’ as the head of the

construction; such an analysis would require raising *le* out of APPLP to a landing site in VP below the verb.

There seem, then, to be no clear candidates for an overt low applicative head in situ. McGinnis (2001) argues on the basis of Pylkkänen's diagnostics in (7) that the locative clitic in Kinyarwanda (16) and the Chi-Mwi:ni: locative suffix (17) are both low applicatives.

(16) **Kinyarwanda locative applicative** (Kimenyi 1980: 92)

Umuhuũngu á-r-íig-ír-á-**ho** ishuũri \*(imibáre).  
 boy SP-PR-study-ASP-LOC school mathematics  
 'The boy is studying mathematics at school.'

(17) **Chi-Mwi:ni: suffixal applicative** (Kisseberth and Abasheikh 1974: 123)

Ni-mw-andik-**il**-il-e Nu:ru xati.  
 SP-OP-write-APPL-ASP-FV Nuru letter  
 'I wrote Nuru a letter.'

McGinnis' point is that the distinction between high and low applicative heads has no clear morphological correlate across languages. But the larger question is how the morpheme positions in (16) and (17) could be derived at all from a lower APPL head position like (4b). As is well known, the Kinyarwanda locative clitics are phonologically reduced forms of the corresponding prepositions (Kimenyi 1980, Baker 1988, Zeller and Ngoboka 2006).

(18) **Kinyarwanda locative PP** (Kimenyi 1980: 92)

Umuhuũngu á-r-íig-ír-á imibáre **kw'** ishuũri.  
 boy SP-PR-study-ASP-LOC mathematics at school  
 'The boy is studying mathematics at school.'

This has motivated the preposition incorporation analysis of Kinyarwanda applicatives in Baker (1988) and Zeller and Ngoboka (2006). On a more restrictive account of head movement, where incorporation is uniformly head adjunction to the left (Kayne 1994, Baker 1996), the locative clitics can be analyzed as the products of a postsyntactic operation of morphological merger under adjacency (16). If we analyze the locative clitic as a low APPL head, however, we face two problems: the phonological relationship between the head/clitic and unreduced prepositions becomes accidental, and incorporation must involve right head adjunction to the head of AspectP.

In the Chi-Mwi:ni: example (17), the applicative suffix *-il-* occupies exactly the position of Baker's (1996) higher applicative head. This is McGinnis's point: there seems to be no correlation between the syntactic and semantic distinction between high and low applicatives and the morphological position of bound applicative morphemes. But in concrete terms, how is *-il-* in (17) to be derived from the lower applicative head position in (4b)? A head movement derivation would require the low APPL head to raise over the verb and the head of AspectP and then allow the verb to raise over it. Postsyntactic morphological merger is blocked by the fact that APPL is sandwiched between the verb and Aspect. The inescapable conclusion is that if we take seriously the idea of a derivation for the Chi-Mwi:ni: applicative affix that relates it to a functional head position, this position must be the same as that of the Kinyarwanda benefactive applicative in (8). But if we do that, we must find a way to allow a high applicative configuration to license low applicative syntax. In the next section we show how this might be done based on evidence from Chinese.

#### 4. Mandarin 'verb + *gěi*' and the overt syntax of high 'low' applicatives

It is difficult to identify clear cases of an overt head showing the syntax and semantics of low applicatives. In this section we propose a candidate that shows the syntax and semantics, but not the position predicted by Pylkkänen. In Mandarin, the main verb *gěi* has the meaning *give* but it also appears in the three positions in (19) in combination with a lexical verb:

- (19) a. **DOC:** V-*gěi* IO DO  
 Wǒ mài-gěi-le Mǎli yī-ge shǒubiǎo.  
 1SG sell-GEI-ASP Mali 1-CL watch  
 ‘I sold Mali a watch.’
- b. **Dative:** V DO [<sub>PP</sub> *gěi* IO]  
 Wǒ mǎi-le yīdiǎn jiǔ [<sub>PP</sub> gěi Mǎli].  
 1SG buy-ASP a.little wine for Mali  
 ‘I bought a little wine for Mali.’
- c. **Benefactive:** [<sub>PP</sub> *gěi* DP] V DO  
 Tā [<sub>PP</sub> gěi wǒ] dāng fǎnyì.  
 3SG for 1SG act interpreter  
 ‘He serves as an interpreter for me.’

Dative and benefactive [*gěi* DP] in (19b-c) is analyzable as a PP, as it can be fronted. The DOC pattern in (19a), in contrast, passes Pylkkänen’s tests for a low applicative. It is unacceptable with intransitives of any kind (20) and with static predicates (21).

- (20) \*Nǐ xiǎoxīn-gěi wǒ  
 2SG be:careful-GEI 1SG  
 ‘Do me the favor of being a bit more careful!’
- (21) \*Wǒ ná-gěi-zhe Mǎli Lìsì de bāo.  
 1SG hold-GEI-ASP Mali Lisi ’s bag  
 ‘I held Lisi’s bag for Mali.’

The pattern in (19a) is also associated with the implication of successful transfer of possession typical of DOCs, in contrast to the prepositional dative construction in (19b).

- (22) a. Zhāngsān qiā-gěi-le Lìsì yīdiǎn cōng, (??kěshì Lìsì méiyǒu jīezhù). (Zhu 1979: 82)  
 Zhangsan nip-GEI-ASP Lisi a.little scallion but Lisi not get  
 ‘Zhangsan nipped off Lisi a bit of scallion, but Lisi didn’t get it.’
- b. Zhāngsān qiā yīdiǎn cōng gěi Lìsì, (kěshì Lìsì méiyǒu jīezhù).  
 Zhangsan nip a.little scallion for Lisi but Lisi not get  
 ‘Zhangsan nipped off a bit of scallion for Lisi, but Lisi didn’t get it.’

In other words, the DOC pattern in (19a) passes every test for a low applicative construction. Consider, however, the surface configuration of this pattern: [V-*gěi*-Aspect IO DO]. This is straightforwardly derivable by head movement of V to APPL to Aspect (cf. Lin 2001 for V-to-Aspect raising), if APPL selects V; i.e., from an underlying high applicative configuration as in (23).

- (23) Wǒ [<sub>ASPP</sub> mài-gěi-le [<sub>APPLP</sub> Mǎli [<sub>AppI</sub> t<sub>mài</sub> gěi [<sub>VP</sub> t<sub>Mǎli</sub> [<sub>V</sub> t<sub>mài</sub> yī-ge shǒubiǎo]]]]].  
 1SG sell-GEI-ASP Mali [<sub>AppI</sub> t<sub>mài</sub> gěi [<sub>VP</sub> t<sub>Mǎli</sub> [<sub>V</sub> t<sub>mài</sub> yī-ge shǒubiǎo]]]]].  
 1SG ASP sell Mali GEI 1-CL watch  
 ‘I sold Mali a watch.’

If, however, *gěi* heads a low APPLP in the underlying structure (24), it is simply not clear how it assumes its surface position. The problem is exactly parallel to the difficulty with the Chi-Mwi:ni: example (17).

- (24) Wǒ [<sub>ASPP</sub> le [<sub>VP</sub> mài [<sub>APPLP</sub> Mǎli gěi yī-ge shǒubiǎo]]].  
 1SG ASP sell Mali GEI 1-CL watch

This brings us back to the observations that opened this paper: in addition to the role of introducing additional arguments, applicatives fulfill the function of syntactically licensing arguments other than the direct object. This is precisely our proposal for Mandarin *gěi* and the Chi-Mwi:ni: applicative suffix *-il-*: these functional heads reside directly above VP, but they do not introduce additional arguments (the function of Pylkkänen’s high applicative); instead they syntactically license

an argument in VP. In other words, Mandarin *gěi* and Chi-Mwi:ni: *-il-* are instances of expletive applicatives in the configuration of (3).

In the remainder of this section, let us be a bit more concrete about how *gěi* serves as syntactic licenser. We adopt the basic syntactic licensing mechanism in (25).

(25) **Agree**

(Chomsky 2000: 122)

- The probe P agrees with the closest matching goal in D.  
 a. Matching is feature identity.  
 b. D is the sister of P [D = c-command domain of P].  
 c. Locality reduces to closest c-command.

We add two further assumptions. First, the expletive applicative head always has an EPP/OCC feature, triggering raising of the highest nominal argument in VP to [Spec, APPLP] (cf. section 5). The second assumption addresses the increasingly standard position that EPP/OCC-triggered movement is to be uncoupled from phi-feature checking (Collins 1997, *inter alia*). This position raises the issue of the relative order of the two operations. We propose that EPP/OCC-triggered movement at least may precede Agree, perhaps depending on the lexical specification of the relevant head. Licensing of IO and DO in the [V *gěi* IO DO] pattern proceeds as follows.

(26) **Licensing with expletive applicative**

[<sub>VP</sub> wǒ [<sub>v</sub> v [<sub>APPLP</sub> Mǎli [<sub>APPL</sub> gěi [<sub>VP</sub> t<sub>Mǎli</sub> [<sub>v</sub> mài shǒubiǎo]]]]]]

In (26), *gěi* first triggers movement of the IO *Mǎli* to [Spec, APPLP]. At this point *gěi* no longer c-commands the IO.<sup>1</sup> Agree thus takes place between *gěi* and the closest matching goal in VP, the DO *shǒubiǎo* ‘watch.’ After *v* is introduced into the structure, it looks for the closest eligible goal in its c-command domain; this is the IO in [Spec, APPLP].

This approach derives applicative structures where the applicative head syntactically licenses the direct object, while *v* licenses the applied argument, on any version of the Thematic Hierarchy where themes are introduced closest to the verb. This is the desired result in the case of asymmetric applicatives, where only the applied argument shows structural object properties. Chi-Mwi:ni: (17) is such a case (Kisseberth and Abasheik 1977), as is Standard American English.

(27) [<sub>APPLP</sub> Mary [<sub>APPL</sub> APPL [<sub>VP</sub> t<sub>Mary</sub> [<sub>v</sub> sell a watch]]]]

In (27), the DO *watch* is licensed by APPL, the IO *Mary* by *v*. Thus, for example, in a passive clause where *v* lacks a Case feature, it is the IO that raises to T. This treatment accounts for the licensing of the DO without positing a mechanism like an empty preposition (Pesetsky 1995), and also for the fact that only the IO passivizes.

Thematic applicatives are exactly equivalent to Pylkkänen’s high applicative structure in (4a). The applied argument is introduced above VP. Licensing is straightforward: the applied argument is licensed under Agree by *v*, the DO by APPL. This predicts, all else being equal, that thematic applicatives are also asymmetric. This is the case in Chichewa (Baker 1988, Alsina and Mchombo 1988), where only the applied argument *mwana* ‘child’ in (28) may be passivized.

(28) **Chichewa benefactive applicative**

(Baker 1988)

[<sub>VP</sub> Amayi [<sub>v</sub> v [<sub>APPLP</sub> mwana [<sub>APPL</sub> -ir- BENEFACTIVE [<sub>VP</sub> umb mtsuko]]]]]]  
 woman SP-PRES-mold BEN child waterpot  
 ‘The woman is molding the waterpot for the child.’

It is well known that across languages, facts are more complex; languages such as Kinyarwanda attest symmetric applicatives, where object properties are displayed by the DO and one or more applied arguments. A full treatment of symmetric applicatives is beyond the scope of this paper, but we endorse as a first approximation the proposal of McGinnis (2001) that symmetric applicatives

<sup>1</sup> A number of interesting issues arise here. *Gěi* c-commands all but the last member of the chain headed by *Mǎli* in [Spec, APPLP]. We assume that this does not satisfy the notion of c-command relevant in (25).

result from a thematic (high) applicative bearing an EPP/OCC feature; in such a context the next available argument in VP is attracted to the specifier of APPL and thence becomes available to further checking relationships (see however McGinnis and Gerdtz 2004 and McGinnis 2005).

In this section we examined the case of an overt applicative head that satisfies all the criteria for a low-type applicative but is positioned above VP, Mandarin *gěi*. *Gěi* as an expletive applicative functions as a licenser for an extra argument in VP. We presented an account of applicative licensing that captures the traditional insight that the applied argument inherits the properties associated with structural objects. Our proposal accounts for the possibility of two types of applicative (expletive and thematic) while positing a single structural position for applicative heads. In the next section we re-examine the semantic differences between the two applicative types.

## 5. The constructional meaning of DOCs

A crucial part of our analysis of expletive (low-type) applicatives was the claim that the applied argument, the IO in a DOC-type applicative construction, always raises out of VP. We now provide empirical evidence for this claim. Consider the contrasts below in Mandarin, Greek, and English:

- (29) a. Wǒ mài-gěi-le tāmen jǐ cì shǒubiǎo. (Mandarin)  
 1SG sell-GEI-ASP them several times watch  
 ‘I have sold them many times a watch.’  
 b. \*Wǒ mài-le shǒubiǎo jǐ cì [PP gěi tāmen].  
 1SG sell-ASP watch several times for them  
 ‘I have sold a watch many times to them.’
- (30) Estelnes tis Lenas sihna lefta otan itan fititria? (Greek)  
 sent.2SG the.GEN Lena.GEN often money.ACC when was.3SG student.NOM  
 ‘Did you often send Lena money, when she was a student?’
- (31) a. I gave/threw the boys each/both a towel.  
 b. ??I gave/threw the towels each/both to a boy.

In the Mandarin examples (29), the time adverb *ji ci* ‘several times’ can intervene between the IO and the DO in the DOC (29a); it cannot intervene in the corresponding dative pattern (29b). Greek and English also allow adverbs (Greek) and stranded quantifiers (English) to intervene between the IO and the DO in their respective DOC patterns. The contrast with the dative pattern is trickier to establish in Greek and English, due to the existence of A-movement in Greek (Anagnostopoulou 2003) and Heavy NP Shift in English. However, in English, quantifier stranding is substantially better in the DOC pattern.

These facts are readily explained if the intervening adverb or quantifier is adjoined to the left edge of VP and the IO is moved over it to [Spec, APPLP], as proposed in the previous section. They are more difficult to explain using Pyllkänen’s low applicative structure in (4b). On the latter analysis too, movement out of APPLP and/or VP would have to be posited to explain the facts, but the landing site for movement is unclear.

Two important questions remain for our analysis as well: the exact nature of EPP/OCC-triggered movement to the expletive APPLP, and the larger question of the semantics of the DOC. We believe these questions are related.

As we saw in section 2, Pyllkänen’s low applicative analysis in (4b) makes a precise claim about the semantics of the construction (we focus here on DOC-type low applicatives): her semantics require that low-type applicatives entail a coming-into-possession-of relation between the DO and the IO. As is widely pointed out, however, the implication of transfer of possession in DOCs is more in the nature of an implicature rather than an entailment, as it can be cancelled.

- (32) I sent Mary the book, but she never got it.

This fact is not captured by the semantics in (6). How, then, are we to capture the interpretation of low-type applicatives, including DOCs? One approach would be to simply adopt a representation that

accounts for the interpretation of IO and DO in the DOC in standard theta-theoretic terms, and argue that expletive applicatives syntactically license the arguments theta-licensed in that representation. An example would be Pesetsky's (1995) null affixal preposition analysis, which, as shown earlier, our treatment of the expletive applicative renders unnecessary. We pursue a different approach here.

Work over the past decade expanding the domain of A-movement to contexts previously treated as cases of control has raised the possibility that chains may bear multiple thematic roles (e.g., Hornstein 2001). This basic idea recapitulates work done over two decades ago by Justin Grunau (1985), who was interested in patterns that might be analyzed as covert reflexives or, in a Relational Grammar framework, multi-attachment contexts such as (33a):

- (33) a. John put his arms by his sides and rolled down the hill.  
b. The boulder rolled down the hill.

Grunau's idea was that the chain headed by *John* in (33a) bears two roles, the theme role assigned in the VP to *boulder* in (33b) and the agent role assigned to the external argument position to which *John* moves. We propose that the expletive applicative head assigns a role to its specifier, and that the IOs in (29-31) compose this role with the goal role they are assigned in VP. Note that this entails no abandonment of the basic idea that expletive applicatives are expletive: they still contribute no argument, but they do contribute a theta role.

This proposal has much in common with approaches that posit a distinct 'affectee' role (e.g., Cheng and Ritter 1987). On this kind of approach, the 'possessor goal' or 'recipient goal' status of the IO in DOCs is a byproduct of their affectee status. Such approaches have been criticized, for example by Landau (1999) in his account of possessor dative constructions. Their chief defects are that (i) it is hard to pin down what the properties of an affected argument are, and (ii) affectee appears not to be an independent role by itself, but a kind of secondary role associated with other, primary roles, such as theme or goal.

A simple solution to this problem would be to look for another, independently motivated role that might provide the requisite properties of affectee arguments. The obvious candidate is experiencer: experiencers, like recipient goals in DOCs, are obligatorily sentient. The treatment of recipient goals in DOCs as experiencer goals also helps in dealing with well-known data like (34), where a literal possessor interpretation is not possible.

- (34) a. I drew Kelly a bunny rabbit in the snow.  
b. Mary told John a story.

The affectee=experiencer goal account of IO in DOC also helps explain the macabre flavor of (35a).

- (35) a. I baked my dead mother some brownies.  
b. I baked some brownies for my dead mother.  
c. These are my dead mother's brownies.

To sum up, we have proposed that raising of the IO to the specifier of the expletive APPLP results in the assignment of a thematic role, experiencer, to this argument. Note that this proposal applies only to the expletive APPL pattern in (3); when APPL selects an argument (2), we assume that it may be assigned any of the VP-external roles identified by Marantz.

## 6. Conclusion

This paper has argued for a distinction between **thematic** and **expletive** applicatives. The former introduces an additional argument above the root VP, while the latter functions as an expletive head, introducing no additional argument but serving as licenser for the highest eligible DP selected by the root verb. Importantly, in both cases, there is a single structural position for APPL, i.e. above the VP.

Evidence for expletive applicatives are provided by Mandarin *gěi* and affixal applicatives (e.g., Chi-Mwi:ni: *-il-*). In our approach, these functional heads reside directly above VP, but do not introduce additional arguments (the function of Pykkänen's high applicative); instead the applicative head licenses the direct object, while *v* licenses the applied argument originating in VP (like the

argument of Pylkkänen's low applicative). This captures the traditional insight that the applied argument inherits the properties associated with structural objects.

Last, but not least, we have argued that the obligatory raising of the IO to the specifier of the expletive applicative projection results in the assignment of a thematic role, viz. experiencer, to this argument. Expletive applicatives remain 'expletive' insofar as they contribute no argument, but they do contribute the characteristic role associated with the IO in DOCs.

## References

- Alsina, Alex and Sam Mchombo. 1988. Lexical mapping in the Chichewa applicative construction. *19th Annual African Linguistics Conference*, Boston University, April 1988.
- Anagnostopoulou, Elena. 2003. *The Syntax of Ditransitives: Evidence from Clitics*. Berlin/New York: Mouton de Gruyter.
- Baker, Mark. 1988. *Incorporation: A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.
- Baker, Mark. 1996. *The Polysynthesis Parameter*. Chicago: University of Chicago Press.
- Cheng, Lisa Lai-Shen and Elisabeth Ritter. 1987. A small clause analysis of inalienable possession in Mandarin and French. In *Proceedings of NELS 18*, ed. by Juliette Blevins and Juli Carter, 65-78. University of Massachusetts, Amherst.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels & Juan Uriagereka, 89-155. Cambridge, Mass.: MIT Press.
- Collins, Christopher. 1997. *Local Economy*. Cambridge, Mass.: MIT Press.
- Grunau, Justin J.M. 1985. Towards a systematic theory of the semantic role inventory. *Papers from the 21<sup>st</sup> Regional Meeting of the Chicago Linguistic Society*, 144-159.
- Hornstein, Norbert. 2001. *Move! A Minimalist Theory of Construal*. Oxford: Blackwell.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Kimenyi, Alexandre. 1980. *A Relational Grammar of Kinyarwanda*. Berkeley: University of California Press.
- Kisseberth, Charles and Mohammad I. Abasheikh. 1974. A case of systematic avoidance of homonyms. *Studies in the Linguistic Sciences* 4:107-124.
- Kisseberth, Charles and Mohammad I. Abasheikh. 1977. The object relationship in Chi-Mwini: a Bantu language. In *Syntax and Semantics, Vol. 8: Grammatical Relations*, ed. by Peter Cole & Jerrold Sadock, 179-218. New York: Academic Press.
- Kratzer, Angelika. 1996. Severing the external argument from the verb. In *Phrase Structure and the Lexicon*, ed. by Johan Rooryck and Laurie Ann Zaring, 109-137. Dordrecht: Kluwer.
- Landau, Idan. 1999. Possessor raising and the structure of VP. *Lingua* 107:1-37.
- Lefebvre, Claire. 1998. *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*. Cambridge: Cambridge University Press.
- Lin, Tzong-Hong Jonah. 2001. *Light Verb Syntax and the Theory of Phrase Structure*. Doctoral dissertation, University of California at Irvine.
- Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In *Theoretical Aspects of Bantu Grammar*, ed. by Sam Mchombo, 113-151. Stanford: CSLI Publications.
- McGinnis, Martha. 2001. Variation in the phase structure of applicatives. *Linguistic Variation Yearbook* 1:105-146.
- McGinnis, Martha and Donna Gerdt. 2004. A phase-theoretic analysis of Kinyarwanda multiple applicatives. In *Proceedings of the 2003 CLA Annual Conference*, ed. by Sophie Burrelle and Stanca Somesfalean, 154-165. Département de linguistique et de didactique des langues, Université du Québec à Montréal.
- McGinnis, Martha. 2005. UTAH at Merge: Evidence from multiple applicatives. In *MITWPL 49: Perspectives on Phases*, ed. by Martha McGinnis and Norvin Richards, 183-200. MIT Working Papers in Linguistics.
- Miyagawa, Shigeru and Takae Tsujioka. 2004. Argument structure and ditransitive verbs in Japanese. *Journal of East Asian Linguistics* 13:1-38.
- O'Herin, Brian. 2001. Abaza applicatives. *Language* 77:477-493.
- Pesetsky, David. 1995. *Zero Syntax: Experiencers and Cascades*. Cambridge, Mass.: MIT Press.
- Pylkkänen, Liina. 2002. *Introducing Arguments*. Doctoral dissertation, MIT.
- Pylkkänen, Liina. In press. *Introducing Arguments*. Linguistic Inquiry Monographs Series. Cambridge, Mass.: MIT Press.
- Shibatani, Masayoshi. 1990. *The Languages of Japan*. Cambridge: Cambridge University Press.
- Zeller, Jochen and Jean P. Ngoboka. 2006. Kinyarwanda locative applicatives and the Minimal Link Condition. *Southern African Linguistics and Applied Language Studies* 24:101-124.
- Zhu, Dexi. 1979. Yǔ dòngcí gei xiāngguān de jǔfā wèntí [Sentences containing the verb *gei*]. *Fangyan* 1979, n°2: 81-87.

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