

Case and Locality in L-Syntax: Evidence from Georgian*

Martha McGinnis, MIT

1 Introduction

Recent work on the morphology/syntax interface has argued that there is no separate component for lexical operations (Halle & Marantz 1993, Miyagawa 1994, Marantz 1997). Hale & Keyser (1993) argue that the operations giving rise to verb alternations are syntactic, with each argument's thematic role determined by the position in which it is merged. Harley (1995) further proposes that Hale & Keyser's lexical syntax (*l-syntax*) is not a separate component, but rather is just the domain of the clause below functional categories such as Tense and Comp. In this paper, I consider the *l-syntax* of certain unaccusative verbs in Georgian. My starting place is the assumption that *l-syntax* consists of the combination of heads and arguments, with each argument merged with a separate head. I argue that the different options for movement spring from the distinction between quirky and non-quirky inherent case, which has consequences for locality. Differences in the interpretation, case properties and binding possibilities of the merged arguments have their basis in θ -role assignment. Following Marantz (1984), I assume that in some cases an argument receives a θ -role from the head it merges with, while for others the θ -role is assigned by the verb phrase that is the complement to that head. I also propose a third kind of θ -role, which is determined not by a verb or a verb phrase, but by the configuration in which the argument occurs. Differences in θ -role assignment are also connected with the choice of verb stem.

A core assumption here is the Attract theory of locality (Chomsky 1995), in which a given target attracts the closest eligible constituent. Eligibility is determined by the features of the constituent and whether it occupies an accessible position, for example as the specifier of a head c-commanded by the

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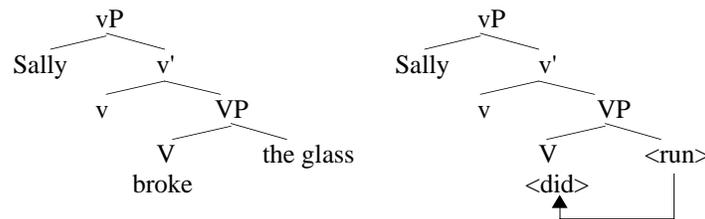
target. Which eligible constituent is closest is determined in part by the order in which arguments are merged, and in part by any syntactic movement that may have changed the merged order.

The following section reviews some facts regarding l-syntax in Georgian, identifying two light verbs that can be added to the base verb. In section 3, I distinguish between two derivations for unaccusative verbs with two arguments: those with a NOM subject, which resemble object-experiencer (ObjExp) constructions in other languages;¹ and those with a malefactive DAT subject, which undergo the same derivation as Georgian subject-experiencer (SubjExp) constructions. Section 3 also outlines a view of case that explains the different options for movement. Section 4 sketches a proposal of θ -role assignment, and how it is linked to options for case, binding and choice of verb stem.

2 L-syntax

Our main interest is in the syntax of Georgian unaccusatives, but let us first consider the structures of a few other verb types. In a transitive structure like that of *break* (1a), the base verb takes the logical object as its complement, while the logical subject is projected in the specifier of a light causative verb. Unergatives have the same structure, except that the complement to the base verb is not realized as a separate argument, but perhaps incorporates into the verb in the manner suggested by Hale & Keyser (1993).

- (1) a. Sally broke the glass.
b. Sally ran.

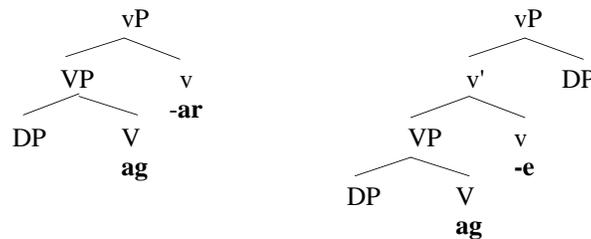


The single argument of an unaccusative construction is projected in the same position as the logical object of its transitive counterpart, namely as complement to the base verb. If no other argument is projected, no causative light verb is required. However, it has been proposed that unaccusative constructions are syntactically complex, involving a noncausative light verb that does not merge with an argument. Harley (1995) calls this verb the *event head*, since the VP dominated by its maximal projection is associated with a distinct event. For example, *kill*, with a single causative event head, involves a single event, while *cause to die* involves two events and so two event heads, one causative (for *cause*) and one noncausative (for *die*). The Japanese examples

¹ I have not been able to find an ObjExp verb in Georgian.

below (from Jacobsen 1992) provide morphological evidence for the noncausative event head. This head is spelled out in the examples on the left, while the causative event head is spelled out on the right.

- (2)
- | | | | | |
|----|---------------------|------------------|--------------------|----------------|
| a. | ag- ar -u | 'rise' | ag- e -ru | 'raise' |
| b. | hazu- re -ru | 'come off' | hasu- s -u | 'take off' |
| c. | ta- ri -ru | 'suffice' | ta- s -u | 'supplement' |
| d. | ok- i -ru | 'get up' (intr.) | ok- os -u | 'get up' (tr.) |
| e. | kir- e -ru | 'be cut' | kir- Ø -u | 'cut' |
| f. | matag- ar -u | 'sit astride' | matag- Ø -u | 'straddle' |



Let us see how the structures above apply to Georgian. The four verb classes in Georgian are morphologically defined, but in general, verbs from Class 1 are transitive; from Class 2, unaccusative and passive; and from Class 3, unergative (Harris 1981). Let us suppose that these verb types have essentially the structures described above, with a base verb and a causative or noncausative light verb. There is also a fourth class, for SubjExp verbs.² We will return to the structure of this class later; for the moment we will simply contrast its case array with the others. Georgian has three tense/aspect series, one (present/future) with a NOM/ACC pattern of case marking, one (aorist/optative) with an ergative pattern, and one (perfect/evidential) with a DAT/NOM pattern.³ The obligatory argument of an unaccusative verb is NOM in all three series. The subject of unergatives and transitives is NOM in the present/future series (with ACC object, if present), ERG in the aorist series (object NOM), and DAT in the perfect series (object NOM). In all tense/aspect series, however, the subject of a SubjExp verb

² The fact that Class 4 verbs are generally SubjExp verbs can be seen from the following list of glosses (Hewitt 1996:196-202), where X is the (DAT) subject and Y the object.

X likes Y	X needs Y	X is ashamed of Y	X is cold
X loves Y	X can Y	X hears/understands Y	X is hungry
X has Y	X hates Y	X is afraid of Y	X is thirsty
X recalls Y	X misses Y	X falls in love with Y	X is asleep
X wants Y	X pities Y	X has a pain in Y	X is awake
X lacks Y	X forgets Y		X is hot

³ Marantz argues that the perfect/evidential and Class 4 constructions have the same structure. Under the assumption that an agent appears in the specifier of the causative event head, it might be more consistent here to assume that the perfect has the features of the causative event head and R bundled into a single head, with the DAT external argument in its specifier. I will not elaborate on this proposal here.

is DAT, with or without a NOM object. The invariant DAT subject of SubjExp verbs distinguishes them from the other three classes.⁴

The familiar distinction between structural and inherent case makes it possible to identify different syntactic features underlying the same nominal morphology in Georgian. Structural case is checked without any necessary θ -relation between the checker and the checkee. As a result, the particular case the argument bears may vary depending on its structural relation to the case-checking head. For example, a direct object may bear structural ACC case if it remains within the VP, but structural NOM case if it raises to the subject position of a passive. Inherent case occurs on a particular argument in conjunction with its θ -role, so this argument always surfaces with the same case regardless of its structural position. Schütze (1997) proposes that a structurally case-marked argument enters into a relation (Accord) that allows the case-assigning head to show agreement with it. There is apparently no Accord, and therefore no agreement, with an inherently case-marked argument.⁵ In Georgian, structural ACC and inherent DAT case are morphologically identical. However, as we have seen, ACC case alternates with NOM in different tense/aspect series; it does likewise in passives. DAT case is invariant under both conditions. Moreover, an indirect (DAT) object cannot raise in a passive, unlike a direct (ACC) object.

Marantz (1989) argues that another argument can be added to the first three verb types by the addition of a separate light verb. This verb, spelled out as *u-*, adds a DAT goal, benefactive or possessive to transitives (3a-b), unergatives (3c-d), passives and unaccusatives (3e-f) (Aronson 1990:378).⁶

(3)	a.	gagzavnis	'send it'	gaugzavnis	'send it to someone'
	b.	aašinibs	'build it'	aušinibs	'build it for someone'
	c.	mğeris	'sing'	umğeris	'sing to someone'
	d.	qeps	'bark'	uqeps	'bark at someone'
	e.	ašindeba	'be built'	aušindeba	'be built for someone'
	f.	moқvdeba	'die'	mouқvdeba	'someone's ... die'

The point to note is that Class 4 (SubjExp) verbs cannot add an argument in this way. In fact, some SubjExp verbs are already marked with the *u-* prefix (e.g.

⁴ Abbreviations used are as follows:

NOM	nominative	PRES	present	PFX	aspectual prefix
ACC	accusative	AOR	aorist	PL	plural
ERG	ergative	TNS	tense	TS	thematic suffix
DAT	dative				

⁵ Nash-Haran (1992) has argued that the verbal prefixes and suffixes for person and number in Georgian are pronominal, rather than representing agreement. Genuine agreement shows up on the tense/aspect morpheme.

⁶ Note that this verb is spelled out as *i-* if the indirect object is first- or second-person (by hypothesis, this is contextual allomorphy, not agreement). I designate it as *u-* to distinguish it from the noncausative event head, which is spelled out as *i-* even when only third-person arguments are present (see below).

uqvars ‘love’, *unda* ‘want’). Marantz proposes that the DAT subject of Class 4 verbs and the DAT indirect object of Class 1, 2, or 3 verbs are added and assigned inherent case by the same light verb. I will adopt this proposal, as well as the name “R” for the light verb, after the term “relative prefix” from the Georgian literature. We will see below, however, that syntactic elements other than R are spelled out in the same morphological slot. It can be plausibly supposed that verbal categories must be merged in a particular order, with each verb selecting the verb it merges with. If so, a clause with an experiencer or agent in the specifier of R cannot also have an indirect object in this specifier.⁷

The base position of the DAT argument is higher than that of the “theme” argument, which is the complement of the base verb. Word order in Georgian is extremely free, so, for example, the direct object can be scrambled higher, to the left of the indirect object or the subject. The DAT indirect object binds the NOM direct object in (4a), but the direct object cannot bind the indirect object, even after scrambling to its left.⁸ Note that the subject in (4b) does c-command and bind the indirect object.

- (4) a. nino-m a-nax-a cven paṭara gela-s tavis-i
 N.-ERG R-show-AOR our little G.-DAT self-NOM
 ‘Nino showed our little Gela_i himself_i.’
- b. nino-m a-nax-a gela tavis tav-s.
 N.-ERG R-show-AOR G.NOM self-DAT
 ‘Nino_i showed herself_i Gela.’ / *‘Nino showed himself_i Gela.’

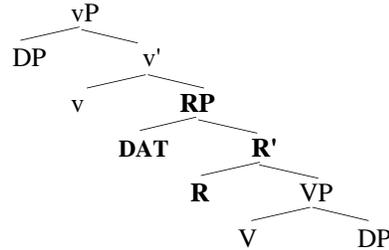
Harris (1981) points out that the DAT subject of a SubjExp verb also binds the logical object (5a), as in a regular transitive construction (5b). The object may not bind the subject, again even after scrambling over it to its left (6). These facts hold regardless of the series and case pattern. We may conclude that the light verb R and its DAT specifier are merged higher than the base verb and its complement, and lower than the logical subject in a causative transitive.

- (5) a. vano-s tavis-i u-qvar-s
 V.-DAT self-NOM R-love-PRES
 ‘Vano loves/has convinced himself.’
- b. vano tavis tav-s xaṭav-s
 V.-NOM self-DAT draw-PRES
 ‘Vano draws himself.’
- (6) a. *vano tavis tav-s u-qvar-s
 V.-NOM self-DAT R-love-PRES
 (‘Himself loves/has convinced Vano.’)

⁷ By contrast, a theory in which R can be reordered with other verbs (e.g., McGinnis 1997) raises the question of why it cannot appear more than once in a clause.

⁸ These and all other Georgian judgements were provided by Léa Nash, unless otherwise indicated.

- b. *vano-s tavisi tav-i xaṭav-s
 V.-ACC self-NOM draw-PRES
 ('Himself draws Vano.')



3 Case and Locality

We have seen evidence for as many as two light verbs, in addition to the base verb: an event head, and an R head, which a DAT argument merges with. The noncausative event head can be morphologically visible in Georgian, as in Japanese: it shows up as *i-* in certain Class 2 unaccusatives that alternate with Class 1 transitives.

- (7) a. ḱar-i i-ḡ-eb-a.
 door-NOM v-open-TS-PRES
 'The door is opening.'
- b. gogoeb-i i-mal-eb-ian.
 girls-NOM v-hide-TS-PRES
 'The girls are hiding.'
- (Hewitt 1996:135)

When both R and the event head are present in Georgian, they are combined in a single morphological slot. In the case of unaccusative verbs with *i-*, the combination of verbs is spelled out as *e-*. In the terminology of a Distributed Morphology (Halle & Marantz 1993), I assume that this combination results from morphological merger and fusion of the two heads into a single node. When vocabulary insertion takes place, *e-* competes with *i-* and *u-* for insertion into a morphosyntactic node that bears either the features of *v* or, if R is present, the fused features of R and *v*. The complementarity of these prefixes is clear from the examples below. (8a) is a regular transitive verb, with a null prefix indicating the causative event head. The transitive verb with R adding an indirect object (*u-*) is shown in (8b), and the unaccusative with the noncausative event head (*i-*) in (8c). (8d) is the combination of the noncausative event head and R. Instead of *u-i-* or *i-u-*, a different prefix is inserted, *e-*, which blocks insertion of both *i-* and *u-*. The thematic suffix (TS) (*-av/-eb*) and the

form of tense/aspect inflection (*-s/-a*) also distinguish the unaccusatives from the transitives, but this is irrelevant for our purposes.⁹

- (8) a. da-~~Ø~~-mal-av-s ‘hide something’
 b. da-**u**-mal-av-s ‘hide something from someone’
 c. da-**i**-mal-eb-a ‘hide’
 d. da-**e**-mal-eb-a ‘hide from someone’ (Aronson 1990:115,175)

(9) shows the same effect, with *e-* in (9b) blocking *i-*. The unaccusative verb in (9b) has an adversity reading, with an additional DAT argument, which is interpreted as a malefactive. Notice that both arguments retain their case in the aorist, which has an ergative pattern; such behavior is typical of unaccusatives and Class 4 SubjExp predicates, as noted above.

- (9) a. golgi da-**i**-čr-a
 G.NOM PFX-v-cut-AOR
 ‘Golgi was wounded.’
 b. nino-s golgi da-**e**-čr-a
 N.-DAT G.NOM PFX-v+R-cut-AOR
 ‘Nino had Golgi wounded on her.’

Merging the noncausative event head above R yields a structure with two vP-internal arguments. In Georgian, such structures can be roughly divided into two types. As noted in McGinnis (1997), *e-* verbs can be associated with two different agreement patterns. One is an agreement pattern typical of SubjExp verbs, which shows up on *e-* verbs with an adversity reading. If the DAT subject of a SubjExp verb is plural, it triggers the plural suffix *-t* on the verb, when a NOM third-person object is also present (10a).¹⁰ This suffix is usually triggered only with first- and second-person plural arguments. A third-person argument triggers *-t* only if it is a DAT subject; it is not triggered by a DAT third-person object, even one scrambled over a third-person NOM subject (10b).

- (10) a. deideb-s gela u-qvar-~~Ø~~-**t**.
 aunts-DAT G.NOM R-love-PRES-PL
 ‘The aunts love Gela.’
 b. deideb-s gela ečxubeba(*-**t**).
 aunts-DAT G.NOM fight.FUT(-PL)
 ‘Gela will fight with the aunts.’

⁹ Nash (1995) discusses some interactions between the TS and prefixal elements. One possibility is that the two elements constitute a circumfix. I leave this issue aside.

¹⁰ The *-t* suffix is usually taken to be agreement—a surprising conclusion, since inherently case-marked arguments generally fail to trigger verbal agreement. When the suffix appears with first- and second-person arguments, it is part of a pronominal circumfix on the verb (Nash-Haran 1992, Nash 1995). If the same is true in (10)-(11), then the DAT argument is clitic-doubled. Marantz (p.c.) notes that at any rate this is a usual pattern for DAT arguments in Romance languages.

The plural *-t* is triggered by a malefactive DAT argument added to an unaccusative verb (11). Though the English glosses below are ambiguous between passive and stative readings, in Georgian the main verb is unambiguously stative. The DAT argument appears to be in subject position in (11), just as in (10a). Movement of this argument to subject position is unsurprising, since it is the higher than the NOM argument, and so is the closest argument for attraction.

- (11) a. deideb-s nino da-e-mal-a-t.
 aunts-DAT N.NOM PFX-v+R-hide-AOR-PL
 ‘The aunts had Nino hidden on them.’
- b. dedeb-s švileb-i da-e-čr-a-t.
 mothers-DAT sons-NOM PFX-v+R-cut-AOR-PL
 ‘The mothers had the sons wounded on them.’

Some additional evidence that the DAT argument in (11) is a subject comes from facts relating to focus and word order in Georgian. Nash (1995) shows that, in general, the immediately preverbal position contains existentially asserted material. For example, the object is interpreted as unmarked new information in the SOV order. However, the subject need not be existentially focused if the order is SVO. In the order OSV, the subject has contrastive rather than existential focus. In DAT-NOM-V examples like (11), the NOM argument is interpreted as unmarked new information, like an object, rather than contrastively focused, like a subject (Léa Nash, p.c.). By this test, then, the DAT argument is the subject.

The agreement pattern shown by *e-* verbs without an adversity reading is the usual pattern for unaccusative verbs: the tense/aspect suffix on the verb shows subject agreement with the NOM argument. Thus the same agreement pattern arises for bare unaccusatives and those with a DAT argument added (12a-b). This pattern also holds if the DAT argument is plural (12c), by contrast with the adversity construction in (11b).

- (12) a. bavšveb-i i-malebi-an.
 children-NOM v-hide-PRES.PL
 ‘The children are hiding.’
- b. bavšveb-i vano-s e-malebi-an.
 children-NOM V.-DAT v+R-hide-PRES.PL
 ‘The children are hiding from Vano.’
- c. bavšveb-i deideb-s e-malebi-an.
 children-NOM aunts-DAT v+R-hide-PRES.PL
 ‘The children are hiding from the aunts.’

Although the DAT argument is projected higher than the NOM one, the NOM argument is attracted past it to subject position. Under standard assumptions about locality, what moves to any given position is the closest eligible c-commanded category. As we have already seen, the DAT argument in Georgian

is in some cases eligible for attraction, since it raises to the subject position of a SubjExp construction, as well as of certain unaccusatives. In the examples in (12), however, the target overlooks the DAT argument to attract the lower NOM one. What makes such movement possible?

Some previous attempts to explain this kind of phenomenon have suggested that one argument (here the DAT one) is licensed VP-internally, say by inherent case (Belletti & Rizzi 1988, Baker 1996). Let us consider how this proposal can be worked out. Chomsky's (1986) discussion of inherent case proposes that the genitive case assigned to a noun complement can be "realized" either in the base position (13a) or in the specifier of the noun phrase (13b). In current terms, this formulation suggests two possibilities. One is that the target optionally attracts an inherently case-marked argument. A second possibility is that there are two kinds of inherent case, one of which cannot be attracted, as in (13a), and one of which can, as in (13b).

- (13) a. the [destruction [of the city]]
 b. [the city's] destruction *t*

The second possibility is also consistent with the view that attraction is covert in (13a), or that no attracting target exists in (13a). In a raising construction, however, the target T is clearly present, since it can always attract some argument overtly. Evidence from these constructions supports the view that there are two kinds of inherent case. On one hand, there are inherently case-marked arguments that must be attracted. On the other hand, we find arguments that cannot be attracted. An example of obligatory attraction is the DAT indirect object of a raising verb in Icelandic, which must itself raise to the matrix subject position. The DAT argument cannot remain in its base position and allow the NOM subject of the embedded clause to raise to subject position instead. This shows that the DAT argument bears an attractable case, and that attraction by the target is not optional.

- (14) Mér virðist *t* Haraldur hafa gert þetta vel.
 me.DAT seems Harald.NOM to.have done that well
 'Harald seems to me to have done that well.' (Andrews, 1982)

Of course, the difference between the two options in (13) and the single option in (14) does not necessarily arise from properties of the attractee. For example, it could be that inherently case-marked arguments are always eligible for attraction, but that the target attracts optionally in (13) and obligatorily in (14). However, there are also arguments that cannot be attracted. By contrast with Icelandic, the embedded subject of an English raising construction raises past the indirect object to the matrix subject position as in (15), showing that the indirect object is ineligible for attraction. This cannot be an instance where the target fails to attract, since it does attract the lower argument. The existence of arguments that are ineligible for attraction provides strong evidence that there are two types of inherent case—case that must be attracted (14), and case that cannot be (15).

- (15) a. Sally seemed to each boy *t* to like his picture best.
 b. Sally was suggested to Hank *t* to be the best candidate for the job.

The proposal here is that the indirect object in (15) bears inherent case. This is by no means true for all prepositional objects in English. Under some conditions the object of a preposition can bear structural case, raising to subject position in a pseudopassive, as in (16). In (15), on the other hand, it is clear that the object of *to* does not bear structural case, since the target can look past this object to attract the embedded subject to the matrix subject position.

- (16) a. He was talked to *t*.
 b. The bed was slept in *t*.

It might be objected that the lower subject in (15) raises, not because the indirect object is ineligible for attraction, but because, if the indirect object were raised to subject position, it would leave an unlicensed overt subject in the infinitival clause (17).

- (17) a. *Each boy seemed to *t* [Sally to like his picture best].
 b. *Hank was suggested to *t* [Sally to be the best candidate].

Thus, the indirect object might be eligible for attraction, but the derivation in which it raises to subject would crash. This explanation for (15) would invoke a different theory of locality, for example one in which “most local” moves are evaluated only for converging derivations. Under such a theory, the option of attracting the indirect object as in (17) would not block attraction of the embedded subject as in (15); even though attraction of the embedded subject is less local, only this derivation converges. By the strictly local economy of Attract, however, the closest eligible constituent is always attracted, even if the derivation ultimately crashes. Under this approach, the embedded subject in (15) can be attracted only if it is the closest eligible argument, meaning that the indirect object in (15) is ineligible.¹¹ In fact, there is additional evidence that the indirect object in (15) is ineligible for attraction. If the embedded clause is finite, as in (18), the embedded subject is licensed without raising to the matrix subject position; as long as the indirect object remains below, the structure is fine. Here also, the indirect object cannot be attracted to subject position, although the derivation is otherwise fine (19).

- (18) a. It seemed to each boy [that Sally liked his picture best].
 b. It was suggested to Hank [that Sally was the best candidate].

- (19) a. *Each boy seemed to *t* [that Sally liked his picture best].
 b. *Hank was suggested to *t* [that Sally was the best candidate].

¹¹ Or *a* closest eligible argument, equidistant with another argument from the target, as discussed below.

The proposal, then, is that the Icelandic indirect object in (14) has inherent case that can be attracted, while the English indirect object in (15) has inherent case that cannot be attracted—let us call these *quirky* and *nonquirky* case, respectively. Suppose that the English example involves quirky case, as in Icelandic. Schütze (1997) argues that *there* expletives and locative inversion in English involves quirky subjects. If English allows quirky subjects, and the indirect object in (15) is quirky, then either (19) or (20) should converge, contrary to fact.

- (20) a. *To each boy seemed *t* [that Sally liked his picture best].
 b. *To Hank was suggested *t* [that Sally was the best candidate].

Assuming that the English indirect object has quirky case makes the wrong predictions even if English disallows quirky DP subjects. In this case, the indirect object would be eligible for attraction, but the derivations in (19) and/or (20) would crash because of the disallowed quirky subject. In this case, however, the local economy approach would also rule out (15), since Attract cannot raise the embedded subject past an eligible argument, even to allow the derivation to converge. The predicted pattern arises in French, where neither a full indirect object nor the embedded subject can raise to the matrix subject position (Philippe Schlenker, p.c.). Note that the French pattern, like (15), cannot be easily explained under a theory in which a less local move is permitted because the more local derivation crashes. In (21a), the less local move is blocked by the intervening indirect object, even though raising this object does not itself yield a convergent derivation (21b).

- (21) a. *Jean semble à Marie [*t* avoir du talent].
 J. seems to M. to have of talent
 ('Jean seems to Marie to have talent.')
- b. *À Marie semble *t* [Jean avoir du talent].
 to M. seems J. to have of talent
 ('Jean seems to Marie to have talent.')

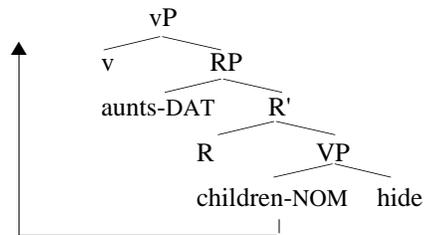
Returning to Georgian, we can now specify that the DAT argument of a SubjExp verb or a malefactive unaccusative has quirky case, which allows it to be attracted to the subject position. Otherwise, the DAT argument has non-quirky inherent case, which makes it ineligible for attraction, so that the lower NOM argument can raise past it to subject position. In a passive, only the lower argument raises (22); quirky case is unavailable for the DAT argument, as is the malefactive/experiencer interpretation.¹² Section 4 will discuss what makes quirky case available in some instances, and non-quirky in others.

¹² A puzzling fact about Georgian passives is that they generally allow only a postpositional (*-tvis*) indirect object, even when the active form allows a DAT indirect object. There are apparently exceptions to this generalization, which do take a DAT indirect object (e.g. *čveuli* 'accustom,' Harris 1981:112).

- (22) a. vašl-s miscems mašçavlebel-s.
 apple-ACC give.3FUT teacher-DAT
 'He will give an apple to the teacher.'
- b. vašl-i micemulia mašçavleblis-tvis.
 apple-NOM give.PASS.3PRES teacher-for
 'An apple is given to the teacher.' (Harris 1981:103)

To accommodate the movement of a lower argument past a higher one, a grammar with Attract-based locality can make use of various options. One is for the higher argument to bear non-quirky inherent case, making it featurally ineligible for attraction by the target, so that the lower argument skips over it. This is the possibility we have explored for Georgian unaccusatives (23).

- (23) deideb-s bavšveb-i e-malebi-an.
 aunts-DAT children-NOM v+R-hide-PRES.PL
 'The children are hiding from the aunts.'

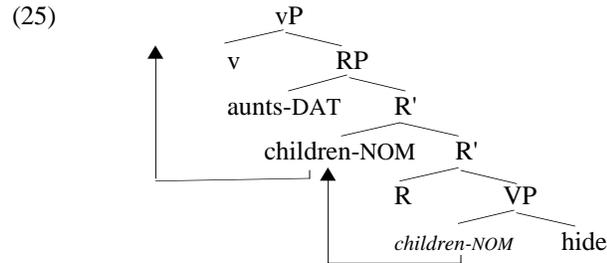


This structure is the roughly what has been proposed for unaccusative ObjExp verbs in Italian (Belletti & Rizzi 1988), Dutch (Hoekstra 1984) and English (Pesetsky 1995). Such verbs have a theme that is attracted past a higher experiencer argument to subject position.¹³

- (24) a. Questo piace a Gianni.
 this pleases to Gianni
 'This pleases Gianni.'
- b. Die fout is mij opgevalen.
 that mistake is me struck
 'I was struck by that mistake.'
- c. Smith's name escaped us for some reason.

¹³ Pesetsky (1995) contends that Belletti & Rizzi's *Theme* conflates two thematic roles, which he calls *Causer* and *Target/Subject Matter*. He argues that the unaccusative analysis applies only to the subset of ObjExp verbs with a T/SM argument (e.g. Italian *piacere*); ObjExp verbs with a Causer (e.g. Italian *preoccupare*) have a slightly different structure, which, however, also involves raising the lower object past the higher one. I will not take a stand here on whether Italian, English and Dutch ObjExp verbs involve equidistance or nonquirky case (or both).

Another option is for one of the arguments to move such that the two arguments become equidistant, making the lower argument “closest” to the target in the relevant sense.



Notice that equidistance alone is insufficient to explain the Georgian facts, since the unaccusative constructions with NOM and DAT subjects have different interpretations. We do not expect any interpretive consequences to result from the choice of which argument is raised from a position equidistant to the target; more plausibly, these two interpretations arise from different options for θ -role assignment (see section 4). Moreover, it is not clear that we expect the choice of verb stem to be tied in with the question of which equidistant argument is raised, yet SubjExp verbs allow only the DAT argument to raise. With the malefactive/experiencer interpretation, the DAT argument must raise to subject position; in the goal/benefactive interpretation, however, it cannot do so. Thus the DAT goal/benefactive must bear nonquirky inherent case, even if the lower argument moves through a position equidistant with it.

However, there is evidence that no equidistance is involved here. McGinnis (1997) argues that movement via equidistance gives rise to so-called “chain condition” effects discussed by Rizzi (1986). In brief, I proposed that an anaphor and its antecedent receive the same interpretation because they share certain features. If two arguments sharing these features are also equidistant from an attracting target, they are lethally ambiguous: neither argument can be attracted, and the derivation crashes. By contrast, when movement skips over an ineligible position (marked with nonquirky inherent case), there need be no equidistance, and so no lethal ambiguity. The Italian *preoccupare*-type ObjExp case and the Albanian passive in (26) are examples of movement through an equidistant position, which rules out binding. The case of raising past an indirect object in English is one example of movement skipping an ineligible argument; movement of the NOM object to subject position in the Georgian example is another. In both cases of (27), the higher argument can bind the one it raised over. We may conclude that the Georgian example involves nonquirky case on the DAT argument, and not equidistant DAT and NOM arguments.

- (26) a. *Gianni si preoccupa *t*.
 G. self worries
 ('Gianni worries himself.') (Belletti & Rizzi 1988)
- b. *Drita iu tregua vetes *t* prej artistit.
 Drita.NOM show.NACT self.DAT by the.artist
 ('Drita was shown to herself by the artist.') (Massey 1992)
- (27) a. Sally seemed to herself *t* to like this picture best.
- b. ?deidebi taviant tavs *t* da-e-mal-en.
 aunts.NOM selves.DAT PFX-v+R-hide-AOR.PL
 'The aunts were hidden from themselves.'¹⁴

We have seen morphological evidence that, in addition to a base verb and its complement, an unaccusative involves a noncausative event head, which does not merge with an argument. Morphological and distributional evidence indicates that an argument can be added to such a structure by means of another light verb, R. I have proposed that a DAT argument added to an unaccusative verb in Georgian can bear quirky or nonquirky inherent case. If it has quirky case, it is attracted to subject position, as in a Georgian SubjExp construction. If it has nonquirky case, the complement of the base verb raises past it to the subject position. The interpretive differences between the two alternatives suggests that their θ -properties differ. In the next section, we explore the interaction between case and interpretation.

4 Case and θ -Roles

I have proposed that the merged position of the arguments is the same for SubjExp verbs and unaccusatives with a DAT argument, regardless of which argument raises to the subject position. However, the different derivations and different verb types give rise to different interpretations. Roughly speaking, SubjExp verbs have a DAT experiencer subject, while unaccusative verbs can have a malefactive DAT subject or a goal/benefactive DAT object. It is plausible to suppose that these interpretive differences arise from the way θ -roles are assigned to the DAT argument.

¹⁴ Verbs with *e-* do not constitute a homogeneous class. The verbs on the left, below, allow binding of the DAT anaphor, while those on the right disallow binding. One possibility is that the latter allow only quirky case on the DAT argument, so that equidistance is always required for the lower argument to raise to subject position, giving rise to lethal ambiguity. Another possibility is that the verbs on the right only allow the adversity unaccusative reading. As we will see in section 4, this reading also rules out binding.

daemala	'hid from'	daekarga	'was lost to'
gaekca	'escape from'	daexaṭa	'was painted to'
ečxuba	'fought with'	mieca	'was given to'
		daexarġa	'was spent to'

Marantz (1989) argues that a DAT indirect object receives its θ -role directly from the light verb R, while the DAT argument of a Class 4 (SubjExp) verb receives a compositional θ -role from the VP complement of R. In this respect the experiencer resembles the vP-specifier (roughly, “agent”) of a transitive clause; in fact, the perfect tense/aspect series in Georgian does have a DAT agent (see fn. 3). I propose that the malefactive argument gets a θ -role neither from R nor compositionally from the VP, but rather from the structural configuration in which it appears. When no θ -role is specified by a verb, the DAT argument receives a “default” malefactive θ -role.

According to Marantz (1989), an indirect object receives its θ -role from R. This argument is interpreted as a goal, benefactive, or possessive (Aronson 1990).¹⁵ The interpretation of the DAT argument is the same in an unaccusative whose NOM argument raises to subject position (28). We may conclude that the DAT argument receives the same θ -role as the indirect object.

- | | | | |
|------|----|--------------------------------|---|
| (28) | a. | da-u-mal-av-s
da-e-mal-eb-a | ‘hide something <i>from</i> someone’
‘hide <i>from</i> someone’ |
| | b. | še-a-dar-eb-s
še-e-dar-eb-a | ‘compare someone/sth. <i>to</i> someone/sth.’
‘be compared <i>to</i> someone/sth.’ |

(Aronson 1990:176)

We have argued that the specifier of R bears nonquirky inherent case in a derivation where the lower NOM argument raises over it to subject position. This means that an argument can bear nonquirky inherent case when it receives a θ -role from R. As noted above, an indirect object also has nonquirky inherent case, which prevents it from raising to subject position in a passive (see (22)). The DAT argument of a SubjExp verb does not receive its θ -role from R; it cannot bear nonquirky inherent case and so always raises to subject position.

When it receives its θ -role from R, the DAT argument has a goal or benefactive interpretation. If it receives a compositional θ -role from VP, it is interpreted as an experiencer. The agent of a transitive construction also receives a compositional θ -role (Marantz 1984), though it is in the specifier of the causative event head, rather than in the specifier of R. As we saw in (22), the agent can be “suppressed” in a passive; the same is true in the perfect tense/aspect series, when the unsuppressed agent is DAT. SubjExp verbs can also be passivized, as shown in (29). As we might expect, unaccusative constructions in Georgian cannot be passivized.¹⁶ Thus the assignment of a compositional θ -role from VP correlates with the possibility of passivization.

¹⁵ Landau (1997) argues that possessive DAT arguments in Hebrew are raised out of a DP, in which their possessor role is established. This kind of analysis may be the correct one for possessive datives in Georgian as well.

¹⁶ Harris 1981:300, fn. 12. Harris does not discuss unaccusatives with a DAT subject, however.

- (29) a. vano-s sžuls direktor-i
 V.-DAT hate.PRES director-NOM
 ‘Vano hates the director.’
- b. direktor-i šežulebulia
 director-NOM hate.PASS.PRES
 ‘The director is hated.’
- (Harris 1981:139)

A DAT argument that receives a compositional θ -role bears quirky case, so it is attracted directly to subject position. Unlike the instance where the DAT argument receives its θ -role from R, this context does permit a SubjExp verb stem.

To summarize, a DAT argument that receives its θ -role from R has a goal/benefactive interpretation and is eligible for nonquirky inherent case, while one that receives a compositional θ -role from the verb has an experiencer interpretation, and is ineligible for nonquirky inherent case. Note that there is only a one-way implication between θ -roles and case. An indirect object with a goal/benefactive interpretation need not bear nonquirky inherent case. The Icelandic instance of raising with an indirect object in (14) shows that this argument can have quirky case, since it raises to the subject position; and it is well known that some indirect objects in English can bear structural case, since they can raise to subject position and bear NOM case in a passive. However, an argument with a θ -role from R *can* bear nonquirky inherent case, as it always does in Georgian; an argument with a compositional θ -role in general *cannot*. If the agent of a transitive clause could bear nonquirky inherent case, we would counterfactually expect to see the object raising to subject position in an active clause, just as in a passive.¹⁷ Notice that this approach will likely lead us to the conclusion that the experiencer in an ObjExp construction does not receive a compositional θ -role, unlike the experiencer in a SubjExp construction. If nonquirky inherent case is what prevents the experiencer in an ObjExp construction from moving to subject position, this experiencer does not have a compositional θ -role.

I have deferred the discussion of unaccusative verbs with a DAT subject until this point. The DAT argument in these constructions has a malefactive interpretation. Unlike an indirect object, this argument bears quirky case and raises to subject position. However, it does not receive the compositional experiencer role of the DAT SubjExp. One possibility is that it receives a different compositional role; I propose instead that it receives its θ -role, not from a verb or verb phrase, but from the configuration in which it occurs. This

¹⁷ It has been claimed that subject-object “inversion” involves the object raising over an external argument in an A-position. See McGinnis (1996), Ndayiragije (1997) for discussion and arguments against this view. It is possible, however, that the agent in a passive is syntactically expressed as a null category with inherent case, allowing the logical object to raise past it to subject position.

view is supported by binding evidence and choice of verb stem, which distinguish SubjExp verbs from unaccusatives with a DAT subject.

Oehrle & Nishio (1981) outline a universal template for adversity constructions. One salient feature of these constructions is that the malefactive argument is unrelated to the main event described by the VP. In a regular Japanese passive (30a), the NOM argument has a neutral reading, but a malefactive reading (the “adversity passive”) arises when this argument is not involved in the event (30b). Likewise, if the NOM argument is involved as a possessor, a neutral reading is available; this is what Kubo (1990) calls a “gapped passive,” with the possessor raised from within the phrase containing the possessed argument (30c). If the NOM argument is not interpreted as a possessor, only the malefactive reading is available.

- (30) a. John-ga suugaku-no sensei-ni home-rare-ta.
 J.-NOM math-GEN teacher-DAT praise-PASS-PAST
 ‘John was praised by the mathematics teacher.’
- b. Taroo-ga suugaku-no sensei-ni Jiroo-o home-rare-ta.
 T.-NOM math-GEN teacher-DAT J.-ACC praise-PASS-PAST
 ‘Taro had the math teacher praise Jiro on him.’
- c. Taroo-ga keikan-ni inu-o home-rare-ta.
 T.-NOM policeman-DAT dog-ACC praise-PASS-PAST
 ‘Taro is happy at **his** dog being praised by a policeman.’
- OR: ‘Taro had a policeman praise **a** dog on him.’ (Kubo 1990)

The only connection between the malefactive and the event described by the verb phrase is that the event has a negative effect on it. The malefactive is quite different from the agent of a transitive clause; without the causal influence of the agent, the event described by the verb phrase could not occur, or, put another way, it would be quite a different event. The fact that the malefactive argument is irrelevant to the occurrence of the event is unsurprising if it is thematically unrelated. Its interpretation is determined by the position where it is merged, in the specifier of a light verb with a VP complement; let us suppose that the “adversely affected” interpretation is available for any such argument that receives a θ -role neither from the light verb nor compositionally from the VP.

At any rate, malefactives must somehow be distinguished from experiencers, since SubjExp verbs only appear with experiencers. The distinction I have suggested between configurational and compositional θ -roles also goes partway towards explaining a difference in binding characteristics. The malefactive unaccusative in Georgian is structurally identical to the SubjExp construction, and in both instances the DAT argument bears quirky case. We would expect that their binding possibilities would be the same; however, this expectation is not fulfilled. As noted above, the DAT subject of a SubjExp verb can bind the NOM object (31a). However, the same is not true with a malefactive DAT (31b).

- (31) a. vano-s tavis tav-i u-qvar-s
 V.-DAT self-NOM R-love-PRES
 ‘Vano loves/has convinced himself.’
- b. * deideb-s tavianti tav-i da-e-mal-a-t.
 aunts-DAT selves-NOM PFX-v+R-hide-AOR-PL
 (‘The aunts had themselves hidden on them.’)

Marantz (1989) argues that only arguments receiving a compositional θ -role can bind the anaphoric argument (*tavis tav*) in Georgian. This generalization appears to be the correct one for Harris’s (1981) consultants, though it does not hold in the dialect of mine (where, for example, an indirect object may bind a direct object, as in (4a)). In any case, the notion that the malefactive argument receives a configurational θ -role may be related to the fact that it cannot bind the anaphoric argument.

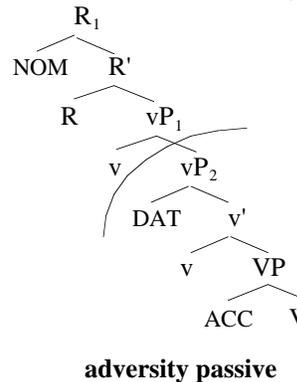
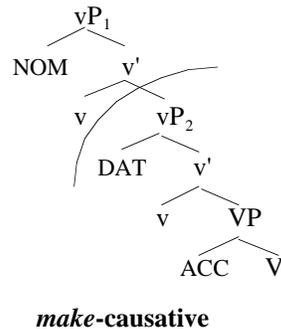
Although we have discussed malefactive arguments merged below *v*, we have seen no instances of a malefactive argument merged above *v*. There is nothing semantically incoherent about such a construction. In fact, the Japanese adversity passive discussed above can add a malefactive argument above the agent of a transitive verb, showing clearly that it is above *v*. The differences between the Japanese and Georgian adversity constructions must be attributed to a language-particular restriction on Georgian R, namely, that it occurs only within the same event phrase as its base verb.

The Japanese adversity passive has certain similarities to *let-* and *make-*causatives (32a). In causatives of both kinds, the long-distance subject-oriented reflexive *zibun* can have as its antecedent either the added argument or the argument that would otherwise be the subject (Kitagawa 1986). This has been taken as evidence that causatives are biclausal. For Harley (1995), *biclausal* means having two event heads, with the two possible antecedents as their specifiers. The same binding options hold in adversity passives (32b). We may conclude that the Japanese adversity passive contains two event heads, by contrast with the Georgian adversative we have discussed, which has only one.¹⁸

- (32) a. Calvin-wa Hobbes-ni/o zibun-no kuruma-de paatii-e ik-ase-ta
 C.-TOP H.-DAT/ACC self-GEN car-by party-to go-CAUS-PAST
 ‘Calvin_i let/made Hobbes_j go to the party in his_{ij} car.’
 (Harley 1995)

¹⁸ The malefactive in Japanese bears structural, rather than quirky, case. The different case arrays in Japanese and Georgian adversity constructions are consistent with the above analysis, since ECM-type constructions as in (32) are impossible with inherently case-marked subjects, while monoclausal structures like the Georgian adversity construction allow a quirky subject. Note also that *zibun*, unlike Georgian *tavis tav*, can be bound by an argument with a configurational θ -role.

- b. Taroo-ga Hanako-ni zibun-no heya-de uta-o utaw-are-ta
 T.-TOP H.-DAT self-GEN room-at song-ACC sing-PASS-PAST
 'Taroo_i had Hanako_j sing a song in self's_{ij} room on him.'
 (Kubo 1990)



5 Conclusions

The analysis I have proposed here is intended as an attempt to work out some of the consequences of a syntactic theory of argument merger. Given the same order of merged elements in I-syntax, the different options for raising bear on the theory of locality, leading to a crucial distinction between quirky and nonquirky inherent case. I attribute the different interpretations of the same merged structures to differences in θ -role assignment, with case and binding possibilities motivating a three-way distinction among θ -role assignment by a verb, compositional θ -role assignment by a verb phrase, and configurational θ -role assignment. These differences are also linked with the possibility for inserting SubjExp verb stems.

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Department of Linguistics and Philosophy
 E39-245 MIT
 77 Massachusetts Avenue
 Cambridge, MA 02139

marthajo@mit.edu