

# Do we need abstract Case?

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## 1. Abstract Case

Minimalist approaches often implicitly assume a version of the Case Filter (Chomsky 1981, Vergnaud 1977), whereby, even in languages without morphological case, overt DPs must be Case-licensed.<sup>1</sup> ‘Case’ thus potentially accounts for the distribution of (referential) DPs and motivates phenomena such as A-movement (passivization, raising and, for some, Control). Recent proposals, however, have argued for the parameterisation (Harford Perez 1985, Markman 2009, Diercks 2012) or rejection of abstract Case (Marantz 1991, McFadden 2004, Landau 2006). The time seems ripe, then, for a reconsideration of: (i) the diagnostics for abstract Case, (ii) their cross-linguistic validity (especially in languages without morphological case) and (iii) how they can be accounted for in an explanatory way.

In the following, we attempt to address (i)-(iii). Section 2 introduces six Case diagnostics and applies them to six languages with little/no morphological case: Mandarin, Thai, Yoruba, Jamaican Creole (JC), Luganda and Makhuwa. Section 3 provides an account of why Luganda (like some other Bantu languages) appears to lack ‘the abstract Case property’ (in a descriptive sense). Building on this, section 4 then provides a novel account of nominal licensing based on the idea that nominals must be part of a complete phase. Finally, section 5 concludes.

## 2. Diagnosing Case

### 2.1 Diagnostic 1: non-finite clauses

A fundamental component of Case theory is the proposal that nominative Case is limited to ‘finite’ clauses, where finiteness is defined in language-specific terms, based on agreement/tense/aspect. As such, if a language fails to permit referential DP subjects (as opposed to PRO) in a coherent class of non-finite clauses, this suggests that said language has the abstract Case property. Conversely, the absence of such a restriction suggests that the language lacks this property. We test three distinct non-finite environments: complements of raising and control verbs; and sentential subjects.

Non-finite verbs in Luganda/Makhuwa lack agreement, unlike their finite counterparts. Luganda nonetheless freely allows overt subjects in non-finite complement clauses of raising (1) and control predicates (2), as well as in non-finite subject clauses (3), like some related languages (Diercks 2012).

- (1)            Ki-kkiriz-ibwa            [Tenhwa        okutambul-ira        mu-mazzi]?            [Luganda]  
              7SM-allow-PASS        1.Tenhwa        INF.walk-APPL        18-6.water  
              ‘Is it allowed (for) Tenhwa to walk in the water?’

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<sup>1</sup> We follow common practice in referring to abstract Case (with uppercase) and morphological case (lowercase).

- (2) a. N-dowooza [(nti) omuleenzi a-yagala mucheere].  
 1SG.SM-think COMP 1.boy 1SM-like 3.rice  
 'I think (that) the boy likes rice.'
- b. N-dowooza [omuleenzi okwagala mucheere].  
 1SG.SM-think 1.boy INF.like 3.rice  
 'I think the boy to like rice.'
- (3) a. [Okukola eensobi] ki-bi.  
 INF.make 9.mistake 7SM-bad  
 'To make mistakes is bad.'
- b. [Joel okukola eensobi] ki-bi.  
 1.Joel INF.make 9.mistake 7SM-bad  
 '(For) Joel to make mistakes is bad.'

Makhuwa, however, fails to permit overt DP subjects in such contexts (Van der Wal 2015). It appears to lack raising-to-subject verbs, but non-finite complements to control predicates cannot contain an overt subject (4a,b), and apparent overt subjects of non-finite subjects are interpreted as vocatives (5b).

- (4) a. Ki-m-phéélá [waapeyá]. [Makhuwa]  
 1SG.SM-PRES.CJ-want INF.cook  
 'I want to cook.'
- b. \*Ki-m-phéélá [Amína waápéya nráma].  
 1SG.SM-PRES.CJ-want 1.Amina INF.cook 3.rice  
 int. 'I want Amina to cook rice.'
- (5) a. [Óca nráma] w-aánáa-réera.  
 INF.eat 3.rice SM-IMPF-be.good  
 'To eat rice would be good.'
- b. Maríá \*(,) ócá nráma w-aánáa-réera.  
 1.Maria INF.eat 3.rice SM-IMPF-be.good  
 'Maria, to eat rice would be good.'

The two Bantu languages under discussion thus pattern differently for this diagnostic: Makhuwa tests positive for the abstract Case property, but Luganda tests negative.

Care is needed to distinguish between finite and non-finite forms in the analytic languages. Yoruba has a non-finite marker *láti* which we take to be non-finite T. The language seems to lack raising, but elsewhere overt subjects of non-finite clauses require the presence of *fún* 'for' (as in English):

- (6) a. A ní irètí [láti dé ní àlàáfíà]. [Yoruba]  
 we have hope to arrive in peace  
 'We hope to arrive safely.'
- b. (?)A ní irètí [\*(fún) bàbá láti dé ní àlàáfíà].  
 we have hope for father to arrive in peace  
 'We hope for father to arrive safely.'
- c. Ó burú [láti şe àṣiṣe].  
 it bad to make mistake  
 'It is bad to make mistakes.'
- d. Ó jẹ ohun àjẹ̀jì [\*(fún) Dòtun láti şe àṣiṣe].  
 it be thing strange for Dotun to make mistake  
 'It's a strange thing for Dotun to make mistakes.'

JC also has a non-finite marker (*fí*) and (like Yoruba) lacks true raising but shows a ban on overt subjects in non-finite clauses in the absence of *fí* 'for':

- (7) a. Wi huop [\* (fi) papa fi kom sief]. [JC]  
 1PL hope for father INF come safe  
 ‘We hope for father to arrive safely.’  
 b. Wi huop [(se) papa kom sief].  
 1PL hope COMP father come safe  
 ‘We hope that father arrives safely.’  
 c. [Fi go mek mistiek] bad.  
 INF go make mistake bad  
 ‘To make mistakes is bad.’  
 b. [\* (Fi) Joel (fi) go mek mistiek] strienj.  
 for Joel INF go make mistake strange  
 ‘For Joel to make mistakes is strange.’

Thai has no non-finite marker, but non-finite clauses cannot host a finite irrealis or perfect marker. Thai does not seem to have raising or non-finite clausal subjects (even without an overt subject). Non-finite complements of control verbs, however, require the benefactive marker to host an overt subject:

- (8) a. Raw wǎŋ [wǎa phǒw cà? maa thǔŋ jàaŋ plǒt.phaj]. [Thai]  
 1PL hope COMP father IRR come arrive manner without.harm  
 ‘We hope that father arrives safely.’  
 b. Raw wǎŋ [hǎj phǒw (\*cà?) maa thǔŋ jàaŋ plǒt.phaj].  
 1PL hope BEN father IRR come arrive manner without.harm  
 ‘We hope for father to arrive safely.’

Thai, too, then, displays the abstract Case property in a limited way. The same is true of Mandarin. The clausal complements of predicates such as *sihu*, *hoaxing* ‘seem’ and *keneng* ‘likely/probably’ can host overt referential subjects, but these are finite, as diagnosed by the acceptability of modals (Huang 1989), and these morphemes do not in any case behave like verbs (J-W Lin 2010, Pan & Paul 2014). T-H Lin (2011) argues that the modal *hui* is itself a genuine raising predicate (10), the complement being non-finite as evidenced by its incompatibility with the perfect/inchoative particle *le* (11).

- (9) a. Sihū John (hui/neng/yinggai) ai Sara. [Mandarin]  
 Seem John will/can/should love Sara.  
 b. John sihu (hui/neng/yinggai) ai Sara.  
 John seem will/can/should love Sara.  
 (10) a. \*Hui [Zhangsan zhunbei wancan].  
 will Zhangsan prepare dinner  
 b. Zhangsani hui [ti zhunbei wancan].  
 Zhangsan will prepare dinner  
 ‘Zhangsan will prepare the dinner.’ (T-H Lin 2011: 50)

- (11) Zhangsan hui [qu Taipei (\*le)]. [Mandarin]  
 Zhangsan will go Taipei PERF  
 ‘Zhangsan will go to Taipei.’ (T-H Lin 2011: 53)

Likewise, Huang (1989) shows that the complement of a control verb only permits an overt DP subject if the complement is finite (permitting modals):

- (12) a. Lisi shefa [PRO (\*hui/neng) lai]. [Mandarin]  
 Lisi try will/can come  
 ‘Lisi tried to come.’ (Huang 1989: 189)  
 b. Wo qidai/xiwang [Zhangsan (hui/neng) qu Taipei].

I expect/hope Zhangsan will/can go Taipei  
 ‘I expect that Zhangsan will/can go to Taipei.’

Mandarin appears to lack non-finite subject clauses (subject clauses can always host modals/overt subjects and so appear to be finite).

In sum, the analytic languages all test positive for the abstract Case property on this diagnostic.

## 2.2 Diagnostic 2: Agreement

In Minimalist approaches, Case valuation is tied to Agree. In a language with abstract Case, all else being equal, subject agreement is expected to track (abstract) nominative Case. If so, then the presence of non-agreeing ‘subjects’ suggests the absence of Case (see also Diercks 2012). This diagnostic does not apply to the analytic languages, but serves to distinguish Makhuwa from Luganda again.

The Luganda verb can agree with a preverbal locative as in (13b) (see Marten & Van der Wal 2015 for an overview of Bantu subject inversion). Crucially, the locative also behaves like the syntactic subject with respect to raising and relativisation (i.e. it assumes the grammatical function of ‘subject’). In Makhuwa, however, the verb always agrees with the subject, so agreement tracks abstract Case:

- (13) a. Omuwala a-beera mu-nyuumba eno. [Luganda]  
           **1.girl**    **1SM-live** 18-9.house    9.DEM  
           ‘A/the girl lives in this house.’  
       b. Mu-nyúumb’ eeyó mú-béera-mú omuwála.  
           **18-9.house**    9.DEM **18SM-live-18LOC** 1.girl  
           ‘In that house lives a girl.’
- (14) a. Aléttó a-náá-phiyá wakisírwá. [Makhuwa]  
           **2.guests**    **2SM-PRES.DJ-arrive** 16.island  
           ‘The guests arrive on the island.’  
       b. Wakisírwá a-náá-phiyá alétto.  
           16.island    **2SM-PRES.DJ-arrive**    **2.guests**  
           ‘On the island arrive guests.’  
       c. \* Wakisírwá wa-náá-phiyá alétto.  
           **16.island**    **16SM-PRES.DJ-arrive**    2.guests

The implication is again that Luganda tests negative for abstract Case, whereas Makhuwa tests positive.

## 2.3 Diagnostic 3: (Hyper)activity

According to the Activity Condition (Chomsky 2000), a DP with a valued Case feature cannot be targeted for Agree or A-movement. If a language permits movement from a position in which a DP has Case to another A-position, this ‘hyperactive’ movement therefore suggest that the language lacks abstract Case (but cf. Carstens 2011). In English, for example, raising can take place only from non-finite complements, where nominative is unavailable.

Of the languages under discussion, only Luganda shows robust evidence of hyperactivity. Carstens and Diercks (2013) show that these constructions involve movement from the lower clause in Lubukusu and Lusaamia, rather than some kind of concord. These diagnostics hold also of Luganda:

- (15) a. Emyaaka gy-aa-li gi-mu-bidde akataambaala. [Luganda]  
           **4.years**    **4SM-PAST-be**    **4SM-1OM-wave.PERF**    12.handkerchief  
           ‘He is very old.’, lit. ‘the years waved a handkerchief at him.’  
       b. Abaana ba-labika ba-beera mu-nyuumba eno.  
           **2.children**    **2SM-seem**    **2SM-live**    18-9.house    9.DEM  
           ‘(The) children seem to live in this house.’  
           lit. ‘(The) children seem live in this house.’

Makhuwa at first sight appears to show multiple agreement in complex tenses as well, as shown in (16).

- (16) Vánó **ki**-háána **ki**-thel-áka. [Makhuwa]  
 PTCL 1SG.SM-have 1SG.SM-marry-DUR  
 ‘Now I have to marry.’

However, it is questionable whether the lower verb is finite, or rather a non-finite agreeing participle-like verb form. Van der Wal (2015) discusses the degree of finiteness of the lower dependent verb form (the durative *kithelaka* in (16)), concluding that the durative does not show evidence of independent sentencehood, which seems to be associated with finiteness in Makhuwa. Makhuwa is therefore not likely to have true hyperagreement, but further research is needed, making this diagnostic inconclusive.

While the analytic languages lack agreement morphology, the availability of (hyperactive) movement from a finite clause can nonetheless be tested. Yoruba and JC do not permit hyperraising but have copy raising, which we take to be something distinct (see Potsdam and Runner (2001), Asudeh & Toivonen (2012) and the references cited therein):

- (17) a. Komiin [laik se di pikni a go ron we]. [Jamaican]  
 seem like COMP the child PROG PROSP run away  
 ‘It seems like the child is going to run away.’ (Durreleman-Tame 2007:108)  
 b. Di pikni komiin [laik se \*(im) a go ron we].  
 the child seem like COMP 3SG PROG PROSP run away  
 ‘The child seems like he is going to run away.’
- (18) a. Dòtun jọ [pé ó nífẹ́ Sídí]. [Yoruba]  
 Dotun resemble that 3SG love Sidi  
 ‘Dotun seems like he loves Sidi.’  
 b. Ó jọ [pé Dòtun nífẹ́ Sídí].  
 it resemble that Dotun love Sidi  
 ‘It seems that Dotun loves Sidi.’

Thai, like Mandarin (see (9)), has something which appears superficially like hyperraising. While such Mandarin examples probably involve a sentential adverbial (Pan & Paul 2014), the Thai example seems to involve copy raising (with a null subject), as indicated by the preferred context for such examples.

- (19) a. Naruadol mǔan wâa kamlaŋ plùuk bâan. [Thai]  
 Naruadol look.like COMP PROGR build house  
 ‘Naruadol seems like he is building a house.’  
 context: you see Naruadol doing something  
 b. Mǔan Naruadol wâa kamlaŋ plùuk bâan.  
 look.like Naruadol COMP PROGR build house  
 ‘It seems like Naruadol is building a house.’  
 context: you pass by his house and see a load of building materials

We conclude that Luganda again tests negative for the abstract Case property on this diagnostic, Yoruba, JC, Thai and Mandarin test positive, and the results for Makhuwa are inconclusive.

## 2.4 Diagnostic 8: Subject anaphors

The ban on subject anaphors in (at least) English (20), Italian and Icelandic has been attributed to Case, either as a (lexical) lack of nominative anaphors like *heself* (Brame 1977, Koster 1978) or a ban on agreeing with anaphors (Rizzi 1990). In the first theory, the implication is unidirectional: languages without subject anaphors must have Case but the presence of subject anaphors does not rule out Case; in the second theory it is bidirectional. Only the weaker unidirectional account is compatible with our

data: if a language limits the distribution of anaphors to certain positions which can only be characterised in terms of abstract Case then that language has abstract Case. If the language lacks such a restriction it may or may not have abstract Case.

- (20) a. John washed himself.  
 b. John believes [himself to be intelligent/to have won].  
 c. \*John believes [that himself/heself is intelligent/has won].  
 d. John thinks [that [a picture of himself] should be attached to his CV].

Since the Bantu languages are pro-drop, (anaphoric) pronouns are not necessary, and reflexives are expressed as prefixes on the verb, this diagnostic is not applicable in either Makhuwa or Luganda.

Of the other languages, JC and Yoruba appear to limit anaphors to non-nominative positions:

- (21) a. Tóbi<sub>i</sub> fí Fijàbí<sub>j</sub> han [ara rẹ̀]<sub>i/j</sub>. [Yoruba]  
 Tobi PART Fijabi show body his  
 ‘Tobi showed Fijabi to himself/herself.’  
 b. Tóbi<sub>i</sub> sọ [itàn [ara rẹ̀]<sub>i</sub>] fún Fijàbí.  
 Tobi tell story body his for Fijabi  
 ‘Tobi told the story of himself to Fijabi.’  
 c. \*Tobi rò pé [ara rẹ̀] tònà.  
 Tobi think that body his right  
 ‘Tobi thinks that himself is right.’  
 d. Tóbi<sub>i</sub> rò pé [itàn nípa [ara rẹ̀]<sub>i</sub>] sàjèjì  
 Tobi thinks that story about body his strange  
 ‘Tobi thinks that stories about himself are strange.’
- (22) a. ?\* Harri tink se imself nais. [JC]  
 ‘Harry thinks that himself is nice.’  
 b. Harri tink se im nais.  
 ‘Harry<sub>i</sub> thinks he<sub>i/j</sub> is nice.’  
 c. Harri tink se picho a imself nais.  
 ‘Harry thinks that pictures of himself are nice.’

It is well known that Thai and Mandarin permit subject anaphors (Fisher 1988, Huang 1982). Under Rizzi’s (1990) account this is due to the lack of subject agreement, but if Case is dependent on Agree and these languages otherwise display the abstract Case property, then this analysis is problematic.

Assuming a unidirectional connection to Case, we conclude that Yoruba and JC test positive for the abstract Case property on this diagnostic, but the results are inconclusive for the other languages.

## 2.5 Diagnostic 5: By-phrases in passives

In the passive, the thematic object is promoted to grammatical subject, receiving Case from T. Where the agent surfaces it must in English be introduced by a case-assigning preposition. If the agent-DP of a passive can be realised without an alternative licensing mechanism such as a preposition, for example in ‘The last biscuit was eaten \*(by) me’, then this suggests that the language lacks abstract Case.

This diagnostic cannot be straightforwardly applied in the analytic languages, since Yoruba lacks a passive, and the constructions that are often called passives in Thai/Mandarin are properties more reminiscent of tough-constructions (see Sudmuk 2003 for Thai and Huang 1999 for Mandarin). JC has only a short passive, disallowing an overt by phrase (Winford 1993). This diagnostic is thus applicable only to Luganda and Makhuwa: once again Luganda tests negative, whereas Makhuwa tests positive.

- (23) a. Abaana ba-a-soma ekitabo. [Luganda]  
 2.children 2SM-PST-read 7.book  
 ‘The children read a book.’

- b. Ekitabo ky-aa-som-ebwa abaana.  
 7.book 7SM-PST-read-PASS 2.children  
 ‘The book was read (by) the children.’
- (24) Íi, koo-vár-íya \*(ni) khwátte! [Makhuwa]  
 ii 1SG.SM.PERF.DJ-grab-PASS by 1.fox  
 ‘Ii, I am caught by the fox!’

## 2.6 Diagnostic 6: Case-based asymmetries

If a language has subject/object asymmetries (e.g. extraction asymmetries) that cannot be accounted for by appealing to (a) information structure or (b) theta-role asymmetries, then these asymmetries suggest the presence of abstract Case. If a language lacks such asymmetries, it may or may not have abstract Case. JC has ‘that-trace effects’, sensitive to nominative Case (Pesetsky & Torrego 2001):

- (25) a. John tink dat Mari taak tu Sara. [JC]  
 ‘John thinks that Mari talks to Sara.’  
 b. A huu John tink dat Mari taak tu?  
 FOC who John think COMP Mary talk to  
 ‘Who does John think Mary talked to?’  
 c. A huu John tink (\*dat) ben taak tu Sara?  
 FOC who John think COMP PERF talk to Sara  
 ‘Who does John think talked to Sara?’ (cf. Durrleman-Tame 2008: 98)

Yoruba shows a superficially different grammatical process low tone deletion (LTD), which is sensitive to accusative Case (Carstens 1987, Déchaine 2001, Ajíbóyè et al 2011): DP complements of V trigger low tone deletion, but PP and CP complements and adjuncts do not.

- (26) a. /gbà aṣọ/ > [gba aṣọ] ‘take cloth’ [Yoruba]  
 b. /gbà iwé/ > [gba iwé] ‘take book’ (Carstens 1987: 3)  
 c. Opé wà/\*wa nilé Fúnké  
 Ope is CM+house Funke  
 ‘Ope is at Funke’s house.’ (Carstens 1987: 8)  
 d. mo sùn/\*sun [bí ọmọ kékeré]  
 I slept like child small  
 ‘I slept like a baby.’ (Carstens 1987: 7)

As Déchaine (2001: 89) shows, in gerunds, postverbal subjects fail to trigger LTD unlike complements, which follows if only the latter are accusative. JC and Yoruba thus test positive on this diagnostic.

## 2.7 Summary of results

The results from the diagnostics presented here lead to three interesting conclusions (see Sheehan & van der Wal 2015 for the full set of 10 diagnostics and further discussion). First, no language shows clearly conflicting results for the presence/absence of the abstract Case property, though there are diagnostics which work only unidirectionally, and those which fail to apply for independent reasons. Second, these diagnostics give cross-linguistic evidence for a cluster of properties traditionally ascribed to Case. Third, while five of the six languages show ‘the abstract Case property’, Luganda does not (cf. Diercks 2012). These facts are in need of an explanation.

|                         | Mandarin | Thai | Yoruba | Jamaican | Makhuwa | Luganda |
|-------------------------|----------|------|--------|----------|---------|---------|
| 1. Non-finite clauses   | +        | +    | +      | +        | +       | -       |
| 2. Agreement            | n.a.     | n.a. | n.a.   | n.a.     | +       | -       |
| 3. Activity             | +        | +    | +      | +        | ?       | -       |
| 4. Anaphors             | 0        | 0    | +      | +        | n.a.    | n.a.    |
| 5. Passive agent        | n.a.     | n.a. | n.a.   | n.a.     | +       | -       |
| 6. Case-based asymmetry | 0        | 0    | +      | +        | 0       | 0       |

Table 1: Results from Case diagnostics (+ evidence of Case, - evidence of no Case, 0 compatible with either, n.a. test cannot be applied, ? unclear)

### 3. What is parameterized?

Luganda clearly patterns differently from the other languages under study in not displaying the abstract Case property. This parameterisation can be captured in different ways: Diercks (2012) proposes that uCase features are/are not present in a given language, whereas Miyagawa (2010) and Saito (2007) suggest that Case is independent of Agree and phi features in some languages. We take a different approach here, taking properties of the nominal to be the crucial factor. To account for the behaviour of Luganda, we appeal to the idea that its nominals are (often) inherently licensed.

In Luganda (as in Zulu, Halpert 2012, 2013), nominals can occur with or without an augment (*u-muntu* vs. *muntu*). Following Halpert's (2012, 2013) account of Zulu, we propose that the augment inherently Case-licenses DPs in Luganda. DPs with augments are thus not subject to 'licensing' (as described above), whereas augmentless nominals, while also possible, have a very restricted distribution, similar to that of bare NPs in Romance: they are only licensed within the vP domain, under either negation or focus (Hyman and Katamba 1993). DPs can never be augmentless in preverbal subject position or in left- or right-dislocated position, but postverbal agents in locative inversion and passives can be augmentless (Namyalo and Van der Wal 2014), as shown in (27). These subjects are in-situ in vP (Pak 2008), as evidenced by the scope of negation (Neg >  $\forall$ ).

- (27) a. Mu-no mú-súlá-mú mu-lalû. [Luganda]  
18-DEM 18SM-sleep-18LOC 1PX-crazy  
'It's a mad person who sleeps here.'(nobody else)
- b. E-bi-tabo bi-no te-bi-som-w-a ba-izi b-onna.  
8A-8PX-books 8-DEM NEG-8SM-read-PASS-FS 2PX-students 8-all  
'These books are not read by all students.'

What sets Luganda and Zulu apart from other languages, then, is that their nominals are often equivalent to DPs marked with inherent Case (possibly KP), which also do not require licensing. Augmentless nominals, however, need to be licensed within vP for reasons we turn to now.

### 4. Rethinking Case Theory

The facts presented thus far suggest that the some nominal licensing mechanism holds of all of our six languages (though in Luganda, as in Zulu, this is only apparent when augmentless nominals are considered). This could be taken as evidence for the presence of abstract Case and phi-features in these languages (and perhaps universally), but given the virtual lack of morphological evidence for these features, such an account is highly suspect from a Minimalist perspective. Our proposal is that this requirement for nominal licensing can actually be attributed to a more general requirement in natural language for categories to be part of complete phases, along the following lines:

- (28) Extend: all categories must be part of a complete phase.

The reconceptualization of nominal licensing along these lines removes the need for abstract Case/Phi features in languages lacking morphological case/agreement. Such features can then be reserved for instances where they have a morphological instantiation. We take the set of phases to be (at least): non-



defective vPs, CPs, PP and KPs (where KPs are DPs with an inherent/lexical Case). These phrases trivially comply with (28), and so are not expected to require licensing of any kind.<sup>2</sup> In the context of Case Theory, this equates to the observation that PP and CP do not (normally) require licensing. The same is arguably true of vP and KP, with inherent Case functioning to license nominals in many languages (e.g. Russian, German, but not Icelandic).

The interesting scenarios are those where a category is nonphasal (NP/NumP/DP). In such contexts, in order to comply with (28), the DP/NumP/NP will have to form a non-local dependency via Agree with the closest c-commanding head in the next highest phase. It is these kinds of dependencies, we propose, which give rise to what looks like structural-Case licensing. Given the existence of mixed projections (see Abney 1987 and many others), we assume that the categorial features of a phase can switch from verbal to nominal and vice versa. To constrain such switches, we assume that there is a generic functional sequence underlying both CP and PP with equivalent heads occupying the same slot in both domains (see Sheehan & Hinzen 2011 on clausal-nominal parallels, and Wiltschko 2014 for a similar proposal). We further propose that while functional structure can be repeated where two phases combine, it cannot be omitted, as this is in violation of (28). As such, very small projections will need to become part of a higher phase at a low level. This provides an explanation for the fact that Luganda augmentless nominals are only licensed inside vP. If these nominals are NPs or NumPs, lacking D, and D is equivalent to Asp in the clause (Krifka 1989), then these nominals will have to become part of the verbal phase below Asp, hence inside vP. Where the truncated nominal is a DP, however, it can be licensed either in the vP or CP verbal phase.

A remaining question is why non-finite clauses fail to permit overt subjects in many instances. That is to say that when overt subjects are licensed in non-finite clauses why is it that a benefactive marker or preposition-like element (*for*) is required. Under our approach, this follows if we adopt the fairly standard assumption that non-finite CPs headed by a null C are non-phasal. For this reason, these CPs do not serve to license a DP subject. If non-finite CPs with an overt complementiser are simply complete phases, it follows that they will serve to license an overt subject. Again, this has nothing to do with phi-features. This account has an advantage over standard Case theory, as it explains why overt C apparently (unusually) serves to Case-license a DP in such contests. C, as a non-defective core functional projection, serves to complete a CP phase.

## 5. Conclusion

We have shown on a number of diagnostics that a nominal licensing requirement holds in all six languages under consideration, which crucially lack case and/or agreement morphology. Rather than positing a [uCase] feature, we propose an alternative account in terms of Extend, a principle of grammar which requires phases to be complete. This explains the range of facts covered by standard Case Theory as well as making new predictions, including an explanation of why Luganda truncated nominals are only licensed within vP. While this proposal is subject to further development, we believe that it provides a viable alternative explanation for what seems to be a robust and puzzling property of human language: the nominal licensing requirement.

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<sup>2</sup> Some CPs do seem to require licensing. We leave these complications to one side here.

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