

Resumption in Cameroon Pidgin English: Deriving Quirky Resumptive Pronoun Syncretism in Movement and Base-generation Dependencies

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Abstract

In this paper, I look into the morpho-syntax of resumption in the English-lexified pidgin spoken in Cameroon. I first provide empirical evidence that Cameroon Pidgin English (CPE) has two types of resumptive pronouns (RPs): those that appear in a base-generation dependency (in topicalization) and those that terminate a movement dependency (in exhaustive focus). I show that movement RPs do not always fully match their nominal antecedents in features. Base-generation RPs, however, follow the regular pattern of pronouns in the language, regardless of the fact that the non-human RP in this context is underspecified for certain features. Interestingly, the invariant movement RP is syncretic with the non-human base-generation RP. I demonstrate that this RP is a weak pronoun that is only specified for accusative case, and that the syncretism in both movement and base-generation RPs is case-sensitive. I argue that despite the observed similarity in form, they are derived by different mechanisms. I derive the case syncretism by partial deletion of structure, except K, for the movement RP, and ‘regular’ vocabulary-insertion rule on K after binding, for the base-generation RP.

Keywords:

Resumption, Focus, Topicalization, Cameroon Pidgin English, Feature Mismatches, Syncretism, Chain Reduction.

1 Introduction

The recent literature on resumptive pronouns has it that they can be of two types: (a) those that appear in a base-generation dependency, and (b) those that terminate a movement chain (see Adger 2011; Van Urk 2018; Scott 2021; Yip & Ahenkorah 2022; Georgi & Amaechi 2022, to cite only these few). RPs of the (b)-type (it has been shown for Dinka Bor (Van Urk, 2018), Swahili (Scott, 2021) and Igbo (Georgi & Amaechi, 2022), for example) tend to differ from those of the (a)-type in that they do not always match or fully match their antecedents in features. This has been attributed to a structure-deletion algorithm that becomes active because two members of a movement chain (the moved XP and its copy) are identical and would ‘violate’ Economy of Pronunciation (Landau, 2006). By deleting structures, the algorithm can and would delete the features they host, leading to spell out of pronouns that do

not match or fully match the head of the movement chain in features. Base-generation RPs, however, involve binding (McCloskey, 2006), hence feature sharing between the antecedent and the pronoun. Binding, unlike structure-reduction, therefore presupposes feature identity between the pronoun and its antecedent, as movement is not involved (at least for base-generation RPs).

In this paper, I present novel data from Cameroon Pidgin English (CPE) to show that base-generation RPs do not always fully realize the features of their nominal antecedents, despite the fact that they involve Binding.¹ This, on the surface, tends to contradict the idea that there has to be feature identity between such pronouns and their antecedents. I demonstrate that this is not necessarily the case, and argue that the puzzle can be attributed to underspecified pronouns in the language. What this means is that base-generation RPs that do not realize all the features of their antecedents are not created by the dependency itself, but can track the presence of underspecified pronouns in the language. In other words, this does not necessarily indicate reduction of any kind. Looking closely at the pronominal paradigm could help test this out. Non-matching and/or partially-matching movement RPs in CPE, I argue, are best analysed in terms of a deletion algorithm that is triggered by the movement dependency. The major contribution the CPE data make in this direction is that a MAXELIDE-base approach to deletion, as proposed by Scott (2021) and Georgi & Amaechi (2022) is more theoretically appealing than the phase-based approach developed in Van Urk (2018).

In CPE, object focus features the invariant resumptive pronoun *am*, as the examples in (2) and (3) show.² In (1), I provide the declarative sentences from which (2) and (3) are derived.³ (2) illustrates focus of a human object XP, and (3): focus of a non-human.⁴ As these

¹CPE is an English-lexified expanded pidgin spoken in Cameroon. It is otherwise known as Kamtok (Ayafor, 1996). It has been studied from a number of different perspectives (grammatical descriptions: Menang 2008; Ayafor 2016; Ayafor & Green 2017; Fongang 2019, orthography: Ayafor 1996; Sala 2009 and socio-pragmatics: Alobwede 1998; Ngefacs & Sala 2006; Kouega 2018, to cite only these few).

²The data that I present and analyse in this paper come from four fluent speakers of CPE, and a spoken corpus of the language (Green et al., 2016). They were cross-checked with my own intuitions about the language, given that I fluently speak it. The speakers I consulted were 28, 32, 38 and 42 years old respectively, and lived in Yaounde at the time I consulted them.

Although there are no accepted standards for the language, it has stable grammatical rules that one can refer to for judging grammatical acceptability (see, for example, Ayafor 2008; Atindogbé & Chibaka 2012; Kengasong 2016; Ayafor & Green 2017). This has been used as evidence that the language has reached the status of a creole (Ngefacs, 2016). Ngefacs (2016), amongst others, also claims that the language has gotten to a stage where some people may be said to speak it as a native language.

³See Fongang (2019) for arguments that (2) and (3) involve exhaustive focus and have a cleft-like reading. The focus examples I present and analyse in this paper are all exhaustive. New information focus does not involve any reordering operation.

⁴I do not discuss subject and indirect object XP focus because they do not have quirky resumption properties. Subject focus, for example, always leaves a gap, as the examples in (ii) show. They are derived from (i).

- (i) a. ma pikin-dem bi kam fo skul/lewa
 POSS.1SG child-PL PST come PREP school
 ‘My children came to school’
 b. ma haus-dem bi fol
 POSS.1SG house-PL PST fall
 ‘My houses collapsed’

examples show, the form of the RP is uniformly *am*, irrespective of the status of the focus

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- (ii) a. na ma pikin-dem (wey) bi kam fo skul/lewa
 FOC POSS.1SG child-PL REL PST come PREP school
 ‘It is MY CHILDREN that came to school’
 b. na ma haus-dem (wey) bi fol
 FOC POSS.1SG house-PL REL PST fall
 ‘It is MY HOUSES that collapsed’

That subjects do behave this way can be confirmed by consulting the spoken corpus of CPE (Green et al., 2016). An example from this corpus is given in (iii).

- (iii) Na yi sista tel mi sei na yu wei dey di kol sei maté maté
 FOC his sister tell.PST me that FOC you that they ASP call as maté maté
 Lit. ‘It is his sister who told me that it is you that they refer to as maté maté’

Subject topics must be resumed by regular pronouns (iv) (see Table 1 for an overview of regular pronouns in CPE).

- (iv) a. ma pikin-dem, dem bi kam fo skul/lewa
 POSS.1SG child-PL, 3PL PST come PREP school
 ‘As for my children, they came to school’
 b. ma haus-dem, dem bi fol
 POSS.1SG house-PL, 3PL PST fall
 ‘As for my houses, they collapsed’

Only context allows speakers to distinguish human from non-human subject topics.

Indirect object XP focus also leaves behind a trace if they are introduced by a preposition. Benefactives, for example, do not require a preposition in information-structure-neutral (IS-neutral) contexts. Both (v-a) and (v-b) are possible benefactive constructions in CPE. For the benefactive reading to me maintained in focus, the presence of the preposition *fo* ‘to’ is compulsory (vi).

- (v) a. Pita bi gi pikin-dem chop
 Peter PST give child-PL food
 ‘Peter gave children food’
 b. Pita bi gi chop fo pikin-dem
 Peter PST give food PREP child-PL
 ‘Peter gave food to children’
 (vi) Na for pikin-dem (wey) Pita bi gi chop
 FOC PREP child-PL REL Peter PST give food
 ‘It is TO CHILDREN that Peter gave food’

Only (v-a) would allow the benefactive to be topicalized. The benefactive in such cases is resumed by regular third person pronouns (vii).

- (vii) Ma pikin-dem, Pita bi gi dem chop
 POSS.1SG child-PL, Peter PST give 3PL food
 ‘As for my children, Peter gave them food’

Focus of non-nominal XPs tends to leave a trace. (viii) shows this for adjuncts. In (viii), an adjunct is focused, and the presence of RPs in such contexts is ungrammatical.

XP as being singular ((2-a) and (3-a)) or plural ((2-b) and (3-b)); human or non-human.⁵

- (1) a. Pita si ma pikin/pikin-dem fo lewa
Peter see POSS.1SG child/child-PL PREP school
‘Peter saw my child/children in school’
b. moto djam ma fens/fens-dem fo village
car hit.PST POSS.1SG fence/fence-PL PREP village
‘a car hit my fence/fences in the village’
- (2) a. Na ma pikin (wey) Pita si **(am)* fo lewa
FOC POSS.1SG child REL Peter see ACC.NON-HUM PREP school
‘It is MY CHILD that Peter saw in school’
b. Na ma pikin-dem (wey) Pita si **(am)* fo lewa
FOC POSS.1SG child-PL REL Peter see ACC.NON-HUM PREP school
‘It is MY CHILDREN that Peter saw in school’
- (3) a. Na ma fens (wey) moto djam **(am)* fo village
FOC POSS.1SG fence REL car hit.PST ACC.NON-HUM PREP village
‘It is MY FENCE that a car hit in the village’
b. Na ma fens-dem (wey) moto djam **(am)* fo village
FOC POSS.1SG fence-PL REL car hit.PST ACC.NON-HUM PREP village
‘It is MY FENCES that a car hit in the village’

Interestingly, *am* also shows up in object topicalization, if the topic XP is non-human (4). Whether this non-human XP is singular (4-a) or plural (4-b) does not matter, as the RP is uniformly *am*. Object topicalization of a human XP triggers resumption by two distinct RPs: *yi* for singulars (5-a), and *dem* for plurals (5-b).⁶

- (4) a. Ma fens, moto djam **(am)* fo village
POSS.1SG fence, car hit.PST ACC.NON-HUM PREP village
‘As for my fence, a car hit it in the village’

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- (viii) Na yestede wey Pita kam **(am)* fo lewa
FOC yesterday REL Peter come ACC.NON-HUM PREP school
‘It is YESTERDAY that Peter came to school’

Overall, the quirky RP *am* only resumes object XPs. Other arguments of the verb tend to have a ‘regular’ behaviour in terms of resumption. For this reason, I do not discuss them further in this paper.

The relative clause marker can be omitted in sentences similar to the ones in (2) and (3). This does not affect resumption in any ways.

⁵I gloss *am* as ‘ACC.NON-HUM’ for the time being because, as topicalization and regular pronoun use show later in this section, it is only used with objects in non-human contexts. The fact that it is the same with both singular and plural XPs provides evidence that it is underspecified for (at least) number information. I will show in Section 3.1 that it has the properties of a weak accusative pronoun that is only specified for case.

⁶I gloss *dem* without case features because it can be used in both subject and object contexts (Cf. Table 1). *yi*, however is only used with objects. For subjects, *i* is the preferred pronoun. For this reason, I think it is specified for case, hence the glossing.

- b. Ma fens-dem, moto djam ***(am)** fo village
 POSS.1SG fence-PL, car hit.PST ACC.NON-HUM PREP village
 ‘As for my fences, a car hit them in the village’
- (5) a. Ma pikin, Pita si ***(yi)** fo lewa
 POSS.1SG child, Peter see 3SG.ACC PREP school
 ‘As for my child, Peter saw him/her in school’
- b. Ma pikin-dem, Pita si ***(dem)** fo lewa
 POSS.1SG child.PL, Peter see 3PL PREP school
 ‘As for my children, Peter saw them in school’

The sentence in (5-a), for example, shows that there is a 3rd person singular human accusative pronoun in the language, namely *yi*. What is striking is that using this pronoun in (2-a), where a singular human object XP is focused, is ungrammatical (6-a). Using *am* in topicalization (5-a) is also ungrammatical (6-b).

- (6) a. Na ma pikin (wey) Pita si ***yi/✓am** fo lewa
 FOC POSS.1SG child REL Peter see 3SG.ACC/ACC.NON-HUM PREP school
 ‘It is MY CHILD that Peter saw in school’
- b. Ma pikin, Pita si **✓yi/*am** fo lewa
 POSS.1SG child, Peter see 3SG.ACC/ACC.NON-HUM PREP school
 ‘As for my child, Peter saw him/her in school’

A closer look at the distribution of pronouns in IS-neutral contexts further reveals that *am* can be used as a regular object pronoun (7), and behaves exactly as it does in topicalization, i.e., it is only grammatical with non-human antecedents. Again, the number specification of the object XP does not matter, as the pronoun is always *am* in both singular and plural contexts. Using singular *yi* and plural *dem* is ungrammatical. They would be the grammatical options if the antecedents were human entities (8).

- (7) a. Pita bai [new moto]_i. A si **✓am_i/*yi_i** fo
 Peter buy.PST new car. 1SG.NOM see.PST ACC.NON-HUM/3SG.ACC PREP
 village.
 village
 ‘Peter bought a new car. I saw it in the village’
- b. Pita bai [new moto-dem]. A si **✓am_i/*dem_i** fo
 Peter buy.PST new car-PL. 1SG.NOM see.PST ACC.NON-HUM/3PL PREP
 village.
 village
 ‘Peter bought new cars. I saw them in the village’
- (8) a. Mary bon [man-pikin]_i. A si **✓yi_i/*am_i** fo
 Mary born.PST man-child. 1SG.NOM see.PST 3SG.ACC/ACC.NON-HUM PREP
 village.
 village
 ‘Mary gave birth to a boy. I saw him in the village’

- b. Mary bon [man-pikin-dem]_i. A si ✓**dem**_i/***am**_i fo
 Mary born.PST man-child-PL. 1SG.NOM see.PST 3PL/ACC.NON-HUM PREP
 village.
 village
 ‘Mary gave birth to boys. I saw them in the village’

These facts put together show that *am*, in topicalization and regular pronoun use, is a regular pronoun in CPE, albeit underspecified for (at least) number features. Table 1 gives a summary of personal pronouns in CPE. The pronouns that are relevant for the topic under discussion are those in the 3rd person, and *am*.⁷

	1SG	2SG	3SG	1PL	2PL	3PL	NON-HUMAN
NOM	a	yu	i	wi	wuna	dem	
ACC	mi	yu	yi	wi	wuna	dem	am

Table 1: *Personal pronouns in CPE*

The data I have so far presented suggest that *am* would appear with non-human object XPs, as materialized in Table 1.⁸ This means that it is (at least) a non-human pronoun. If

⁷The observed sycetisms between nominative and accusative pronouns are not directly relevant for the topic under discussion and could easily be dealt with in a post-syntactic approach to morphology such as Distributed Morphology (Halle & Marantz, 1993).

⁸The 3rd person pronouns *yi* and *dem*, for example, can also be focused or topicalized. When this happens, only topicalization allows the regular pronouns to be inserted. In focused contexts (i), only *am* is grammatical. The referent of the focused pronoun in (i) can be a human or non-human entity. The topic sentences in (ii), however, are only grammatical if the referent is human. If it is non-human, *am* should be used in both contexts.

- (i) a. Na yi wey Pita si ***(am)** fo skul/lewa
 FOC 3SG.ACC REL Peter see ACC.NON-HUM PREP school
 ‘It is HIM/IT that Peter saw in school’
 b. Na dem wey Pita si ***(am)** fo skul/lewa
 FOC 3PL REL Peter see ACC.NON-HUM PREP school
 ‘It is THEM that Peter saw in school’
- (ii) a. yi, Pita si ***(yi)** fo skul/lewa
 3SG.ACC, Peter see 3SG.ACC PREP school
 ‘As for him, Peter saw him in school’
 b. dem, Pita si ***(dem)** fo skul/lewa
 3PL, Peter see 3PL PREP school
 ‘As for them, Peter saw them in school’

The form *am*, unlike all the pronouns in Table 1, cannot be focused (iii) or topicalized (iv), irrespective of the form of the RP or the presence of a gap.

- (iii) a. *Na **am** wey Pita si **am/yi**/___ fo skul/lewa
 FOC ACC.NON-HUM REL Peter see ACC.NON-HUM/3SG.ACC/GAP PREP school
 ‘It is HIM/IT that Peter saw in school’
 b. *Na **am** wey Pita si **am/dem**/___ fo skul/lewa
 FOC ACC.NON-HUM REL Peter see ACC.NON-HUM/3PL/GAP PREP school
 ‘It is THEM that Peter saw in school’

this is true, then the fact that it is the only grammatical RP in exhaustive focus contexts suggests that exhaustive focus of object XPs in CPE triggers the insertion of an RP that does not (always) fully match the focused XP in features. This is so because a human XP is linked to a non-human resumptive pronoun.

What is even more striking is the observation that even in topicalization and regular pronoun use, *am* does not realize all the features of the antecedent. This is evident from the observation that non-human object XPs are always resumed by *am*, whether they are plural or singular. With the recent literature on resumption in mind (e.g., Scott 2021; Yip & Ahenkorah 2022; Georgi & Amaechi 2022), this set of data gives the impression that syncretic *am* is derived the same way (i.e., via structure reduction) in both topicalization and focus. In this paper, I show that this is not the case. Strong evidence for this, as I demonstrate in Section 2, comes from the fact that object topicalization and exhaustive focus in CPE are completely different dependencies. While focus involves movement, topicalization is base-generation plus binding of a pronoun. The tricky question then is how invariant *am* ends up in the two types of A-bar dependencies. I show that this RP is only specified for case, and that the syncretism in both movement and base-generation dependencies is case-sensitive. I derive the case syncretism by partial deletion of structure (see also Landau 2006; Van Urk 2018; Scott 2021; Yip & Ahenkorah 2022; Georgi & Amaechi 2022), except K, for the movement RP, and regular vocabulary-insertion rule on K after binding for the base-generation RP. What this means is that invariant *am* in focus is created by the dependency itself. In topicalization, however, it tracks the presence of underspecified pronouns in the language. The overall conclusion is that what partial structure deletion does for non-fully-matching movement RPs, strict application of the Subset Principle can do it for those base-generation RPs that do not realize all the features of their nominal antecedents. For this analysis to go through, one has to ensure that focus in CPE involves movement and topicalization, base-generation and binding of a pronoun.

The rest of the paper is organized as follows. In §2, I apply movement-related tests to focus and topicalization data from CPE. §3 presents the derivation of the invariant RP in topicalization. In §4, I provide an analysis of the non-fully-matching RP in focus and argue that it is best accounted for in a theory that assumes a chain-reduction algorithm (Landau, 2006; Van Urk, 2018; Scott, 2021; Yip & Ahenkorah, 2022; Georgi & Amaechi, 2022). I argue that a MAXELIDE-base approach to deletion, as proposed by Scott (2021) and Georgi & Amaechi (2022) is more theoretically appealing than the phase-based approach developed in Van Urk (2018). §5 concludes the paper by stressing how theoretically relevant Pidgins and Creoles can be to formal approaches to languages.

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- (iv) a. ***am**, Pita si **yi/am**/___ fo skul/lewa
 ACC.NON-HUM, Peter see 3SG.ACC/ACC.NON-HUM/GAP PREP school
 ‘As for him/it, Peter saw him in school’
 b. ***am**, Pita si **dem/am**/___ fo skul/lewa
 ACC.NON-HUM, Peter see 3PL/ACC.NON-HUM/GAP PREP school
 ‘As for them, Peter saw them in school’

2 Topicalization and Exhaustive Object Focus in CPE: Movement vs Base-generation

In the previous section, I claimed that although invariant *am* can appear in both topicalization and focus, it should be derived differently. This section provides arguments in favour of this conclusion. I demonstrate that focus, unlike topicalization, involves movement. The empirical evidence comes from applying three movement tests (island-sensitivity, idiom reconstruction and cross-over effects) to the CPE topicalization and focus data. I address each of them in turn below.⁹

2.1 Island-sensitivity

Unlike topicalization, object focus is island-sensitive in CPE (see Ross 1967 and related studies for discussions of island types). In other words, it is ungrammatical to focus an object XP inside of an island. Object topicalization of an XP that appears in an island, however, is grammatical. The examples in (9) and (10) feature a relative clause island and an adjunct island, respectively. In these examples, there is no extraction and, as such, no island violation. The object XPs inside the islands in (9-a) and (10-a) are non-human (*da moto* ‘that car’ and *moto* ‘car’). In (9-b) and (10-b), both objects refer to human entities (*da man* ‘that man’ and *da pikin* ‘that child’).¹⁰

- (9) a. Ndifor si [pipo-dem wey (dem) bi tif da moto]_{RC}
 Ndifor see.PST people-PL REL 3PL.NOM PST steal DEM car
 ‘Ndifor saw the people who stole that car’
 b. Ndifor si [pipo-dem wey (dem) bi kol da man]_{RC}
 Ndifor see.PST people-PL REL 3PL.NOM PST call DEM man
 ‘Ndifor saw the people who called that man’
- (10) a. Ndifor glad [time-wey Sala bai moto]_{WH}
 Ndifor glad when Sala buy.PST car
 ‘Ndifor was happy when Sala bought a car’
 b. Ndifor glad [time-wey Sala finally si da pikin]_{WH}
 Ndifor glad when Sala finally see.PST DEM child
 ‘Ndifor was happy when Sala finally saw his child’

While exhaustive focus of object XPs extracted from the islands in (9) and (10) is ungrammatical ((11) and (12)), topicalization is perfectly fine ((13) and (14)).

- (11) a. *Na da moto wey Ndifor si [pipo-dem wey (dem) bi tif
 FOC DEM car REL Ndifor see.PST people-PL REL 3PL.NOM PST steal
 (*am)]_{RC}
 ACC.NON-HUM
 Lit. ‘It is THAT CAR that Ndifor saw the people who stole it’

⁹The reader can refer to (Amaechi & Georgi, 2019; Amaechi, 2020; Keupdjio, 2020; Scott, 2021; Georgi & Amaechi, 2020,0; Yip & Ahenkorah, 2022) who use similar tests to diagnose movement.

¹⁰The pronoun *dem* that resumes the subject of the relative clause in examples such as (9) is optional.

- b. *Na moto wey Ndifor glad [time-wey Sala bai *(am)]_{WH}
 FOC car REL Ndifor glad when Sala buy.PST ACC.NON-HUM
 Lit. ‘It is A CAR that Ndifor was happy when Sala bought it’
- (12) a. *Na da man wey Ndifor si [pipo-dem wey (dem) bi kol
 FOC DEM man REL 3PL.NOM Ndifor see.PST people-PL REL PST call
 (*am)]_{RC}
 ACC.NON-HUM
 Lit. ‘It is THAT MAN that Ndifor saw the people who called him’
- b. *Na da pikin wey Ndifor glad [time-wey Sala finally si *(am)]_{WH}
 FOC DEM child REL Ndifor glad when Sala finally see.PST ACC.NON-HUM
 Lit. ‘It is THAT CHILD that Ndifor was happy when Sala finally saw him’
- (13) a. da moto, Ndifor si [pipo-dem wey bi tif *(am)]_{RC}
 DEM car, Ndifor see.PST people-PL REL PST steal ACC.NON-HUM
 ‘As for that car, Ndifor saw the people who stole it’
- b. moto, Ndifor glad [time-wey Sala bai *(am)]_{WH}
 car, Ndifor glad when Sala buy.PST ACC.NON-HUM
 ‘As for the car, Ndifor was happy when Sala bought it’
- (14) a. da man, Ndifor si [pipo-dem wey bi kol *(yi)]_{RC}
 DEM man, Ndifor see.PST people-PL REL PST call 3SG.ACC
 ‘As for that man, Ndifor saw the people who called him’
- b. da pikin, Ndifor glad [time-wey Sala finally si *(yi)]_{WH}
 DEM child, Ndifor glad when Sala finally see.PST 3SG.ACC
 ‘As for that child, Ndifor was happy when Sala finally saw him’

The presense/absence of the RP in the focus examples ((11) and (12)) does not make them grammatically correct. This rules out the possibility that RPs may repair islands in CPE. In the topicalization examples, the absence of the RPs would lead to ungrammaticality. In (14-a) and (14-b), the RP *yi*, which matches the topic XPs *da man* and *da pikin* in features, cannot be replaced by *am*. In the non-human topicalization examples ((13-a) and (13-b)), the only RP that is grammatically correct is *am*. Island sensitivity therefore provides evidence that while focus in CPE involves movement, topicalization does not.

2.2 Idiom Reconstruction

The basic assumption underlying this test is that an idiom keeps its meaning if part of it is extracted, but loses it if what looks to be part of it is base-generated in a different position. Applying this test to focus and topicalization data from CPE shows that the idiomatic meaning is lost if part of the idiom is topicalized. If it is focused, the idiomatic meaning is kept unchanged, strongly suggesting that focus involves movement. Below, I show this with the idiom *trowey salute* (literally ‘throw a salute’) which, in CPE, means ‘to greet’. The expression *salute*, in (15), can undergo topicalization (16-b) or be focused (16-a).

- (15) Ndifor bi trowey salute for ol wuna
 Ndifor PST throw salute PREP all you
Lit. ‘Ndifor threw a salute to you all’
Idiom. ‘Ndifor greeted you all’
- (16) a. Na salute wey Ndifor bi trowey *(am), i no tok noting
 FOC salute REL Ndifor PST throw ACC.NON-HUM, 3SG.NOM NEG talk nothing
 serious
 serious
✓Lit. ‘It is A SALUTE that Ndifor threw, he said nothing serious’
✓Idiom. ‘Ndifor only greeted, he said nothing serious’
- b. Salute, Ndifor bi trowey *(am), i no tok noting serious
 salute, Ndifor PST throw ACC.NON-HUM, 3SG.NOM NEG talk nothing serious
✓Lit. ‘As for a salute, Ndifor threw it, he said nothing serious’
✗Idiom. ‘As for greeting, Ndifor greeted, he said nothing serious’

When this happens, only focus (16-a) allows for the idiomatic reading to be kept. The literal reading in (16-a) is available to speakers of CPE if *salute* were something (a ball, for example) one could throw at someone. If it is unacceptable in (16-a), it is not because of movement or base-generation, but for reasons one could attribute to the meaning of the individual parts of the idiom. What we are really interested in is what happens when *salute* does not appear adjacent to *trowey* in focus. As (16-a) shows, the idiomatic reading is kept, suggesting that a silent copy of *salute* is interpreted in the position after *trowey*. This is only possible under a movement analysis. (16-a) is therefore derived by movement and not base-generation. In (16-b), however, only the literal reading is available to speakers of CPE. The idiomatic reading is completely lost if *salute* is clause-initial. This provides evidence that (16-b) is derived by base-generation of *salute* in the position it occupies in the clause. In a nutshell, idiom-reconstruction provides further evidence that topicalization is base-generation, whereas focus is movement.

2.3 Strong Cross-over Effects

Binding data from CPE also suggest that topicalization, unlike focus, involves base-generation and binding of a pronoun. While topicalization in CPE does not reconstruct for Principle C, focus does. The matrix subject in (17) cannot be co-indexed to *Ndifor* or *Sala* because this would lead to a Principle C violation. If *Sala* is topicalized, co-reference with the 3sg pronoun *i* and the resumptive pronoun *yi* becomes possible (18-b). If it is focused, such co-referentiality is ungrammatical (18-a). What the topicalization example (18-b) suggests is that the XP *Sala* does not originate in the c-command domain of the matrix subject and thus provides evidence that topicalization of *Sala* involves base-generation and binding of a pronoun. The focus example in (18-a), however, suggests the reverse reading, viz., focus involves movement.

- (17) i tink se Ndifor si Sala
 3SG think COMPL Ndifor see.PST Sala
 ‘He thinks that Ndifor saw Sala’

- (18) a. Na sala wey i think se Ndifor si am
 FOC Sala REL 3SG.NOM think COMPL Ndifor see.PST 3RES
 ‘It is x that ~~x~~/✓Y thinks that Ndifor saw x’
 b. Sala, i think sey Ndifor si yi
 Sala, 3SG.NOM think COMPL Ndifor see.PST 3SG.ACC
 ‘As for x, ✓x/✓Y thinks that Ndifor saw x’

Sala, in the focus example, has moved and crossed the 3rd person pronoun *i*, and binding becomes impossible. In the topicalization example, no movement is involved and, as such, binding is perfectly fine.

To summarize, this section provides empirical evidence that focus, unlike topicalization, in CPE involves movement of the focus XP to a position where it follows the ‘focus marker’ *na*. It leaves a copy in the movement site. This copy is then spelled out as the invariant RP *am*. Topicalization, however, involves base-generation plus binding of a pronoun. The focus data, on the one hand, suggest an analysis wherein XP movement leaves a copy in place. This copy, as a reminder, is not the full XP that has undergone movement, but the invariant form *am*. This further suggests an analysis wherein the full XP copy is subject to a reduction algorithm which is driven by economy (Landau, 2006). The locus of phi-features and the amount of structure that gets deleted is responsible for the insertion of form *am*, throughout (see also Van Urk 2018; Scott 2021; Yip & Ahenkorah 2022; Georgi & Amaechi 2022).

Seeing *am* in topicalization may lead us to think that both movement and non-movement RPs undergo reduction, which would be novel. However, as I show in Section 3.2, the use of *am* can be accounted for without reduction. Thus, we will see in CPE that movement RPs undergo reduction and non-movement RPs do not – a pattern that has also been attested in Swahili and Igbo (Scott, 2021; Georgi & Amaechi, 2022).

3 Accounting for Invariant *am* in Topicalization

In this section, I derive invariant *am* in non-human object topicalization. I do this in two steps. In the first step, I provide evidence that *am*, in the base-generation dependency (topicalization), has the properties of a weak accusative pronoun. It does not only appear in topicalization, but also in regular pronoun use, when the antecedent is non-human. It cannot, however, appear in a conjunct, be focused or topicalized. In the second step, I adopt Distributed Morphology (Halle & Marantz, 1993), and derive this form by relying on regular binding in the syntax, followed by vocabulary insertion in the post-syntax.

3.1 The Form *am* as a Weak Accusative Pronoun

The form *am*, as I demonstrated in the introduction to this paper, does not only appear in topicalization, but also can be used as a regular pronoun, provided its antecedent is a non-human XP. I illustrated this in (7) and (8). These examples are repeated in (19) and (20) below (the reader can also refer to Green et al. (2016) for more examples). In (19), the object XPs that the pronouns refer to are non-human, and the pronoun is *am* in both singular (19-a) and plural (19-b) contexts. In (20), the XPs the pronouns track are human

entities. Unlike in non-human contexts, two pronouns are available with humans, namely *yi* in the singular (20-a), and *dem* in the plural (20-b)

- (19) a. Pita bai [new moto]_i. A si ✓**am_i**/***yi_i** fo
 Peter buy.PST new car. 1SG.NOM see.PST ACC.NON-HUM/3SG.ACC PREP
 village.
 village
 ‘Peter bought a new car. I saw it in the village’
- b. Pita bai [new moto-dem]_i. A si ✓**am_i**/***dem_i** fo
 Peter buy.PST new car-PL. 1SG.NOM see.PST ACC.NON-HUM/3PL PREP
 village.
 village
 ‘Peter bought new cars. I saw them in the village’
- (20) a. Mary bon [man-pikin]_i. A si ✓**yi_i**/***am_i** fo
 Mary born.PST man-child. 1SG.NOM see.PST 3SG.ACC/ACC.NON-HUM PREP
 village.
 village
 ‘Mary gave birth to a boy. I saw him in the village’
- b. Mary bon [man-pikin-dem]_i. A si ✓**dem_i**/***am_i** fo
 Mary born.PST man-child-PL. 1SG.NOM see.PST 3PL/ACC.NON-HUM PREP
 village.
 village
 ‘Mary gave birth to boys. I saw them in the village’

As (19) and (20) illustrate, regular pronoun use and topicalization behave the same way. Pronouns have a singular and plural form with human antecedents. With non-humans, *am* is used in both singular and plural contexts. In other words, plural and singular non-human XPs are uniformly resumed by *am*. At first glance, one could hypothesize that *am* is underspecified for gender and number, such that it is the spell out of person features only. But, it appears that it cannot be used as a subject pronoun (21), which means that it is probably specified for accusative case.

- (21) a. Ma has don fol. **i**/**(*am)** bi get four room-dem.
 POSS house ASP fall.PST. 3SG/ACC.NON-HUM PST have four room-PL.
 ‘My house has fallen. It had four rooms’
- b. Ma has-dem don fol. **Dem**/**(*am)** bi get four room-dem.
 POSS house-PL ASP fall.PST. 3PL/ACC.NON-HUM PST have four room-PL
 ‘My houses have fallen. They had four rooms’

am can only be used in object position, suggesting that it is marked for accusative case.¹¹

Although fragments such as the ones (19) that contain *am* are grammatical in CPE,

¹¹Recall from Footnote 4 that non-nominal XPs like adjuncts cannot be replaced by pronouns. *am* cannot replace a PP complement (i-b), which may suggest that it is indeed specified for accusative case only.

- (i) a. Pita dey insaid has
 Peter is inside house
 ‘Peter is in the house’

they become ungrammatical if the object XPs in these examples are a coordination of two pronouns. The examples in (23-a) and (23-b) illustrate this.¹² They are derived from the sentences in (22).

- (22) a. A si pikin and pusi fo village.
 1SG.NOM see.PST child and cat PREP village
 ‘I saw a child and a cat in the village’
 b. A si pikin-dem and pusi-dem fo village.
 1SG.NOM see.PST child-PL and cat-PL PREP village
 ‘I saw children and cats in the village’
- (23) a. *A si **yi** and **am** fo village.
 1SG.NOM see.PST 3SG.ACC and ACC.NON-HUM PREP village
 ‘I saw him and it in the village’
 b. *A si **dem** and **am** fo village.
 1SG.NOM see.PST 3PL and ACC.NON-HUM PREP village
 ‘I saw them and them in the village’

Coordinating two third person human pronouns (24) and a second and third person human pronoun (25) is grammatical in the language. This rules out the potential claim that Person-Case Constraint (PCC) effects might be at work in (23).

- (24) a. A si **yi** and **yi** fo village.
 1SG.NOM see.PST 3SG.ACC and 3SG.ACC PREP village
 ‘I saw him and him in the village’
 b. A si **yi** and **dem** fo village.
 1SG.NOM see.PST 3SG.ACC and 3PL PREP village
 ‘I saw him and them in the village’
- (25) a. A si **yu** and **yi** fo village.
 1SG.NOM see.PST 2SG and 3SG.ACC PREP village
 ‘I saw you and him in the village’
 b. A si **wuna** and **dem** fo village.
 1SG.NOM see.PST 2PL and 3PL PREP village
 ‘I saw you and them in the village’

The ungrammaticality of the examples in (23) would be expected, if *am* were a weak, as opposed to strong, pronoun (Cardinaletti & Starke, 1999; Manzini, 2014). This conclusion is further supported by the examples in Footnote 8 ((iii) and (iv)), repeated in (26) and (27). They show that *am* cannot be focused or topicalized; a property that is generally attributed to weak pronouns (Cardinaletti & Starke, 1999; Manzini, 2014).

-
- b. Has, Pita dey inside (***am**)
 house, Peter is inside
 Lit. ‘As for a house, Peter is inside it’

If *am* could appear in (i-b), one could have said that is also underspecified for case. That it only appears with objects suggests that it is specified for a case feature, viz., accusative.

¹²The position of *am* as the first or second member of the conjunct does not affect grammaticality.

- (26) a. *Na **am** wey Pita si **am/yi/**--- fo
 FOC ACC.NON-HUM REL Peter see ACC.NON-HUM/3SG.ACC/GAP PREP
 skul/lewa
 school
 ‘It is HIM/IT that Peter saw in school’
 b. *Na **am** wey Pita si **am/dem/**--- fo skul/lewa
 FOC ACC.NON-HUM REL Peter see ACC.NON-HUM/3PL/GAP PREP school
 ‘It is THEM that Peter saw in school’
- (27) a. ***am**, Pita si **yi/am/**--- fo skul/lewa
 ACC.NON-HUM, Peter see 3SG.ACC/ACC.NON-HUM/GAP PREP school
 ‘As for him/it, Peter saw him in school’
 b. ***am**, Pita si **dem/am/**--- fo skul/lewa
 ACC.NON-HUM, Peter see 3PL/ACC.NON-HUM/GAP PREP school
 ‘As for them, Peter saw them in school’

Since *am* is only (and clearly) restricted to the direct object position (it cannot appear in subject position, adjunct position, PP-complement position etc. It also appears in contexts where a human object XP is focused), I propose that it is only specified for case, viz., accusative case. With this in mind, the vocabulary items (VIs) for 3rd person object pronouns look like (28) below, with *am* as a regular pronoun that is only specified for case features.¹³

- (28) List of 3rd person pronouns and the features they realize.¹⁴
- a. [3, human, acc, sg] ↔ /yi/
 - b. [3, human, pl] ↔ /dem/
 - c. [acc] ↔ /am/

Having established that *am* in topicalization is a weak pronoun that is only specified for case features, Table 1 needs to be revisited to look like Table 2.

	1SG	2SG	3SG	1PL	2PL	3PL
NOM	a	yu	i	wi	wuna	dem
ACC	mi	yu	yi	wi	wuna	dem am

Table 2: *Personal pronouns in CPE*

With this background in mind, we can now turn to the derivation of resumptive pronouns in topicalization.

¹³I will refrain from formalizing pronoun strength in phonological terms, and adopt the view that *am* is weak because it is only specified for case features. Recall that it can only replace object XPs, and not subjects of PP complements. Also recall that it appears with both singular and plural XPs.

¹⁴I only use 3rd person object pronouns here because only they are relevant to the topic under discussion. Since antecedents are always 3rd person, 1st and 2nd person pronouns will be kicked out immediately by the Subset Principle. The plural pronoun *dem* is underspecified for case because it is syncretic in both the nominative and accusative.

3.2 Deriving Invariant *am* in Topicalization

The list in (28) only makes sense in a realizational theory of morphology such as Distributed Morphology (Halle & Marantz, 1993). Crucial to this approach to morphology, which I adopt in this paper, is the idea that morphological exponents spell out terminal nodes that host features from the syntax (via agreement, for example). Terminal nodes have features that need to be realized, and exponents/vocabulary items are specified for features. The choice of the exponent that is the best match for a terminal node is subject to the Subset Principle (29)

(29) *Subset Principle*

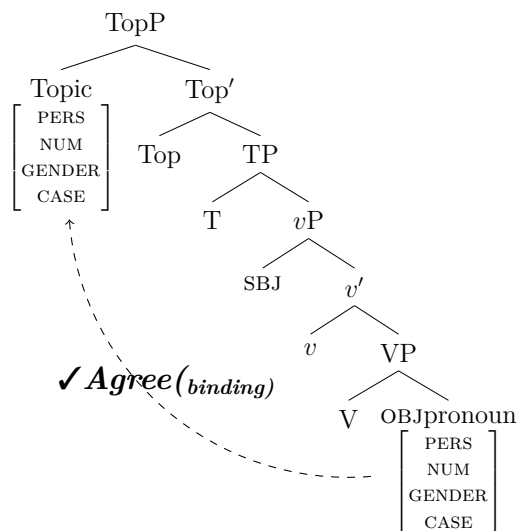
A vocabulary item *V* is inserted into a functional morpheme *M* iff (a) and (b) hold:

- a. The morpho-syntactic features of *V* are a subset of the morphosyntactic features of *M*.
- b. *V* is the most specific vocabulary item that satisfies (a).

In the CPE examples, What regular pronoun use and topicalization have in common is that they involve some sort of binding operation, albeit of different type. They differ in the sense that, only topicalization provides the appropriate syntactic context for binding to take place. The ‘binding’ relations in ((19)-(21)) cannot be syntactic, because the syntactic requirements (e.g. c-command) are not met. The relationship between the antecedent and the pronoun in this type of context is generally established in the semantic component of the grammar. Topicalization, however, would require syntactic binding, since the conditions for the operation to apply are met. Besides, the topic XP and the RP should be dependent on each other. When movement is involved, the dependency is established by means of a chain. In base-generation dependencies, the relationship between the base-generated XP and the RP is generally said to be established through regular binding (Scott, 2021; Georgi & Amaechi, 2022). Since only topicalization meets the requirements for syntactic binding, I will not discuss regular pronoun use any further, and simply assume that in such contexts, the relationship between the antecedent and the pronoun is established in the semantics. For topicalization, I propose that *am* spells out a pronoun in the post-syntax, after binding has taken place. Doing this will allow us to track how CPE ends up having *am* inserted in object position when its antecedent is non-human.

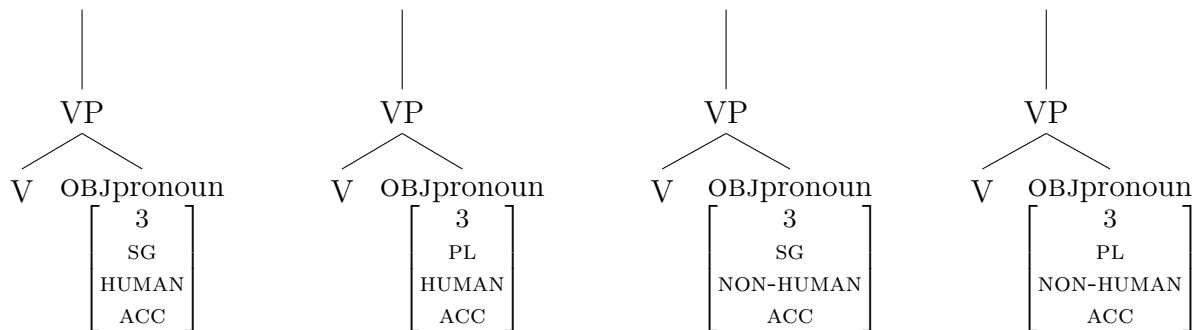
If all nouns, including non-human nouns, are specified for all possible features, how do we end up having insertion of the less-specific vocabulary item in (28-c). The answer to this is very simple. If a fully-specified non-human noun needs to bind a pronoun, the only option it has, from the list in (28), is the less-specific pronoun *am*. How this works exactly is where there might be complications. This would only be possible in an approach to Binding that is sensitive to feature matrices or an approach to binding that presupposes an agree operation. This is exactly the type of system that I assume for CPE. Binding is syntactic and, in the syntax, there is featural identity between the topic XP and the pronoun position. In the post-syntax, vocabulary insertion is subject to the Subset Principle (29). This ensures that */yi/* is inserted for human singular topics, */dem/* for human plural topics and */am/* elsewhere. The elsewhere here is the non-human context. The derivation proceeds as follows.

(30) Step 1: binding.



The binding operation applies uniformly with human and non-human XPs. (30) is transferred to the morphology. The features in SpecTopic are spelled out as the topicalized item.¹⁵ The features on the pronoun spell out a pronoun. The VIs that are available for spell out are given in (28). The relevant structures and the features are given in (31).

(31) Step 2: Spell out of the pronouns



Through Binding, the topic XP transfers its features to the pronoun position. Four combinations are possible. The first one is that of a singular human XP that is in object position. As these are always 3rd person, the person feature that would be transferred is [3]. The number feature is [sg], the gender feature is [human], and the case feature is [acc]. Vocabulary insertion is subject to the Subset Principle (see Halle 1997, amongst others), repeated in (32).

¹⁵The distinction between noun and pronoun topicalization can be modelled in terms of a categorial feature depending on the nature of what is topicalized. Object noun topics can be specified for [N], and object pronoun topics can be specified for [P], for example.

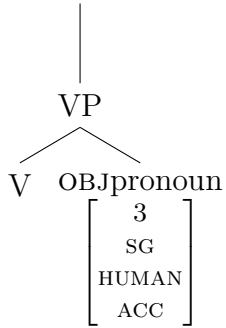
(32) *Subset Principle*

A vocabulary item V is inserted into a functional morpheme M iff (a) and (b) hold:

- a. The morpho-syntactic features of V are a subset of the morphosyntactic features of M .
- b. V is the most specific vocabulary item that satisfies (a).

The four possible scenarios are presented in turn below.

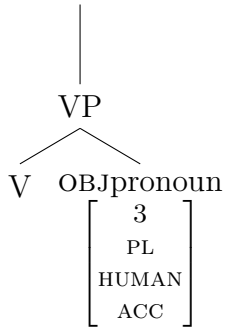
(33) Spell-out of the pronoun in singular human contexts



- a. ✓[3, sg, human, acc] ↔ /yi/
- b. ✗[3, human, acc, pl] ↔ /dem/
- c. ✗[acc] ↔ /am/

Under the Subset Principle, the only VIs that are compatible for insertion in (33) are /*yi*/ and *am*. /*dem*/ loses the competition because it is specified for a feature ([pl]) that is absent from the feature matrix on the terminal node. Specificity ensures that /*yi*/ is inserted to the detriment of /*am*/.

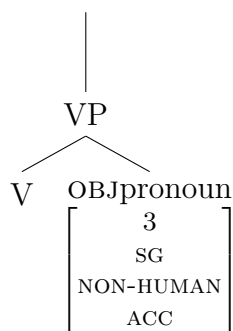
(34) Spell-out of the pronoun in plural human contexts



- a. ✗[3, sg, human, acc] ↔ /yi/
- b. ✓[3, pl, human, acc] ↔ /dem/
- c. ✗[acc] ↔ /am/

In (34), the only VIs that are compatible for insertion are /*dem*/ and /*am*/. /*dem*/ is inserted for specificity reasons.

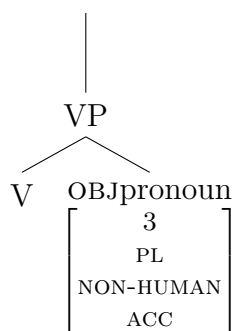
(35) Spell-out of the pronoun in singular non-human contexts



- a. $\mathbf{X}[3, \text{sg}, \text{human}, \text{acc}] \leftrightarrow /yi/$
- b. $\mathbf{X}[3, \text{pl}, \text{human}, \text{acc}] \leftrightarrow /dem/$
- c. $\mathbf{\checkmark}[\text{acc}] \leftrightarrow /am/$

The scenario in (35) is such that both */yi/* and */dem/* are incompatible for insertion. This is so because they are both specified for a feature (human) that the terminal node lacks. The only compatible VI in this context is */am/*. It is equally the most specific VI. For this reason, it is inserted in this context.

(36) Spell-out of the pronoun in plural non-human contexts



- a. $\mathbf{X}[3, \text{sg}, \text{human}, \text{acc}] \leftrightarrow /yi/$
- b. $\mathbf{X}[3, \text{pl}, \text{human}, \text{acc}] \leftrightarrow /dem/$
- c. $\mathbf{\checkmark}[\text{acc}] \leftrightarrow /am/$

The logic in (35) also applies to (36), and */am/* is inserted. This allows us to straightforwardly account for the use of invariant *am* in non-human object topicalization.

4 Deriving the Movement RP

In this section, I derive the movement RP in CPE. As a reminder, exhaustive focus of an object XP in CPE involves movement (see Section 2 for empirical evidence), and it behaves like topicalization (which is base-generation plus binding of a pronoun) in the sense that both types of constructions feature resumptive pronouns. They crucially differ in the sense that, unlike topicalization which features the invariant RP *am* only with singular and plural non-human XPs, focus requires invariant *am* throughout. In other words, the RP in object focus is always *am*, regardless of human-ness and number. Related examples are repeated in (37) and (38). As these examples show, the RP in object focus is always *am*, irrespective of the gender and number specification of the focused XP.

- (37) a. Na ma pikin (wey) Pita si ***(am)** fo lewa
 FOC POSS.1SG child REL Peter see ACC.NON-HUM PREP school
 ‘It is MY CHILD that Peter saw in school’

- b. Na ma pikin-dem (wey) Pita si ***(am)** fo lewa
 FOC POSS.1SG child-PL REL Peter see ACC.NON-HUM PREP school
 ‘It is MY CHILDREN that Peter saw in school’
- (38) a. Na ma fens (wey) moto djam ***(am)** fo village
 FOC POSS.1SG fence REL car hit.PST ACC.NON-HUM PREP village
 ‘It is MY FENCE that a car hit in the village’
- b. Na ma fens-dem (wey) moto djam ***(am)** fo village
 FOC POSS.1SG fence-PL REL car hit.PST ACC.NON-HUM PREP village
 ‘It is MY FENCES that a car hit in the village’

The regular third person singular pronoun *yi* that resumes singular human topics (39-b) is ungrammatical in focus (39-a).

- (39) a. Na ma pikin (wey) Pita si ***yi/✓am** fo lewa
 FOC POSS.1SG child REL Peter see 3SG.ACC/ACC.NON-HUM PREP school
 ‘It is MY CHILD that Peter saw in school’
- b. Ma pikin, Pita si **✓yi/*am** fo lewa
 POSS.1SG child, Peter see 3SG.ACC/ACC.NON-HUM PREP school
 ‘As for my child, Peter saw him/her in school’

The literature on non-fully-matching movement RPs is not barren, and these have recently been analysed in terms of copy movement and chain reduction that affects the copy of the moved XP (see, amongst others, Van Urk 2018, Scott 2021, Yip & Ahenkorah 2022 and Georgi & Amaechi 2022). What this literature assumes is that non-agreeing and partially-agreeing RPs are likely to be found in movement dependencies rather than base-generation dependencies. The examples in (37)-(38) suggest that CPE allows such RPs in movement dependencies (exhaustive focus). This is so because the RP *am*, which resumes only non-humans in topicalization, resumes both humans and non-humans in focus.

What is striking though is the fact that even in topicalization, *am* does not fully realize the features of its antecedent, and that the same RP is used in both base-generation (for non-humans) and movement dependencies (both humans and non-humans). This paper therefore makes an empirical contribution in this direction. It adds to the discussion the idea that even if base-generated RPs do not realize all of the features of their antecedent, this does not necessarily indicate reduction. Looking closely at the pronominal paradigm could help test this out. It is not very suprising that non-human XPs, rather than humans, show this kind of mismatches. It is perfectly expected if, crosslinguistically, third person is less specific than other person distinctions (Harley & Ritter, 2002; Nevins, 2011). It also makes more sense that non-human is even less specific than human, because humans are more likely to participate in discussions than non-humans, under the classification that uses denominations such as participant (PART) and speaker (SPKR). Data from CPE suggest that if base-generation RPs, on the surface, don’t realize all the features of their nominal antecedents, it might be attributable to underspecified pronouns in the language. One should look closely at regular pronoun use to see if they manifest the same type of asymmetry. This would allow us to test if the observed asymmetry is indeed attributable to the topicalization process.

The fact that non-agreeing and partially-agreement RPs tend to appear in movement dependencies has been attributed to movement and chain reduction which, by deleting struc-

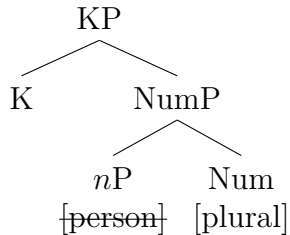
tures, also deletes the features they host. Such a structure-deletion algorithm is driven by *economy* considerations, which ensure that copies get as little phonology as possible at PF (Landau, 2006).

In Dinka Bor (Nilotic, South Sudan), for example, long-distance movement of a plural DP leaves behind the plural pronoun *ké* in all the positions the XP transits through on its way up, as (40) shows (Van Urk 2018:943).

- (40) Yè **tóony ké** **díi** [_{CP} yá [_{VP} **ké** luêeel [_{CP} è cǝi Bôl [_{VP} **kê** cuǝin
be.3SG pots many how be.2SG 3PL say.NF C PRF.OV Bol.GEN 3PL food
thàal]]]]]?
cook.NF
‘How many pots do you say that Bol has cooked food with?’

Van Urk (2018) argues that the moved XP *tóony ké díi* ‘how many pots’ in (40), leaves full copies in every intermediate movement steps. These copies are then subject to a deletion algorithm that produces the *ké* which, crucially, only matches the moved XP in number. He shows that this partial featural mismatch can easily be accounted for if whatever amount of structure is deleted to produce *ké* does not affect the locus of number and case features, namely NumP and KP (cf. (41) below).

- (41) Structure of *ké* in Dinka Bor



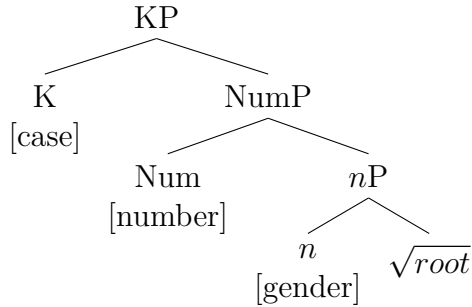
In his system, deletion targets phases, and *n* is a phase in Dinka Bor. What this means is that the deletion algorithm cannot target Num in Dinka Bor. When deletion applies in (41), the structure is spelled out as *ké* because it is a regular pronoun in the language and it has the feature specifications that are present in the tree in (41).

This approach has been extended to Swahili (Scott, 2021), Cantonese and Akan (Yip & Ahenkorah, 2022) and Igbo (Georgi & Amaechi, 2022). What these other papers contribute to the theory are (a) other phi-features (gender, for example) and how deletion interacts with them (Scott, 2021), (b) deletion domains can be dynamic, and (c) heads can bundle to escape deletion (Georgi & Amaechi, 2022). In this paper, I draw on these proposals to account for the partially-agreeing RP in CPE. What CPE has in common with Dinka Bor, Swahili, Cantonese, Akan and Igbo is that this RP also terminates a movement chain.

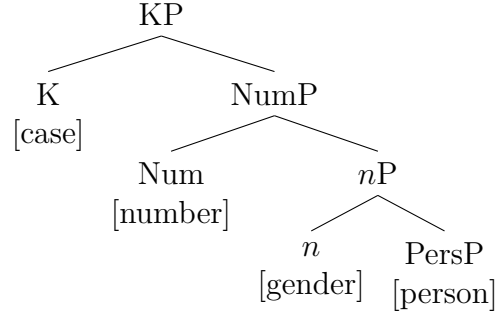
In order to account for the CPE data, I will follow Georgi & Amaechi (2022) in claiming that deletion domains are dynamic. Since the mismatch is only case-sensitive, I will argue that all the structure of the copied XP gets deleted, except K, the locus of case information. The remaining structure, I show, contains exactly the features that *am* realizes. For this reason it is spelled-out as *am*. This explains the observed syncretism in both topicalization

and focus. The relevant structures are given in (42) and (43).¹⁶

(42) Structure of lexical Ns in CPE

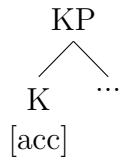


(43) Structure of regular pronouns¹⁷



The structure in (42) spells-out a lexical N specified for case, number and gender (human vs non-human in CPE). (43) spells-out a regular pronoun with all featural distinctions. An example of such is *yi*, which is marked for case (acc), number (sg), gender (human), and person (3). If RPs in movement dependencies are the result of a structure-deletion algorithm that targets the structure of lexical Ns, then parts of the structure in (42) are deleted to get the non-matching case-sensitive RP *am*. What this presupposes is that everything K c-commands in (42) would have to be deleted. After deletion, (42) would look like (44), which only contains case features *am*. The terminal node K is spelled-out and *am*. This ensures that *am* is always inserted in movement dependencies, irrespective of the gender and number specifications of the focused XP. Objects are marked for accusative case, so is K in (44).¹⁸

(44) Structure of pronouns from (42)



(45) Vocabulary insertion rule

$$[\text{acc}] \leftrightarrow /am/$$

What the deletion algorithm targets here is NumP and everything it dominates. In Van Urk (2018), what gets deleted has to be a phase, and deletion of *n* results in the spell-out of *ké*. *KP* is also a phase in Dinka, so either the higher phase *KP* is deleted (which happens in singular contexts, hence no RP), or the lower phase *n* is, which results in *ké*-insertion (see Van Urk 2018 for related details). Moreover he assumes that languages vary depending on whether *n* is a phase head or not. Based on this and the deletion algorithm I have assumed for CPE, one would therefore assume that the phase head in CPE is *Num*,

¹⁶Lexical Ns are always 3rd person. I take this to mean that they lack a person projection. The nominal root in lexical Ns is replaced by a PersP in pronouns (see also Scott 2021).

¹⁷I follow the recent literature (Scott, 2021; Van Urk, 2018; Georgi & Amaechi, 2022) on the structure of pronouns in assuming that pronouns differ from nouns in that nominal roots are absent, and replaced by a PersP. See Kramer (2015) and Fuchs & van der Wal (2021), amongst others, for assumptions about gender on *n*. KP is the layer that encodes case information (Van Urk, 2018; Georgi & Amaechi, 2022).

¹⁸The [...] sign indicates the deleted material.

such that it, and everything below it, always gets deleted to produce *am*. Under this line of analysis, one would have to propose that what is phasal in CPE is *NumP*.

Recall that non-nominal XP focus (adjuncts, for example) do not leave RPs in CPE. If *KP* is also phasal, then such XPs undergo full deletion, and nothing surfaces. They will differ from nominal XPs in the sense that what is deleted with non-nominal XPs in the higher phase *KP*, but the lower phase *NumP* with nominal XPs.¹⁹ Although this approach derives the pattern, it is not ideal because it may have deep theoretical implications. While there is some evidence from case suppletion in pronouns that nP can be a phase (Moskal 2015, cited in Van Urk 2018), I do not know of any proposal that treats NumP as a phase. Moreover, assuming different phase boundaries for different languages is not ideal from the perspective of Universal Grammar.

I hinted above that Scott (2021) and Georgi & Amaechi (2022) assume dynamic deletion domains for Swahili and Igbo and do not follow Van Urk (2018) in claiming that phasality is what determines the deletion(s) domain. They claim that instead, the deletion operation is conditioned by the constraint MAXELIDE “which deletes the largest constituent such that what remains is able to be spelled out [...]” (Georgi & Amaechi (2022): fn 33). Applying this to CPE would yield the same result. The idea is the following: MAXELIDE applies to movement dependencies in which the moved XP and its copy are identical. When it applies, ‘what remains needs to be able to be spelled out’. What this means for object focus in CPE is that everything cannot be deleted, otherwise nothing would be spelled out, this notwithstanding the existence of *am*, which is specified for accusative case, and is compatible for insertion if NumP and anything below it were deleted. To shed more light on this, consider the structure of pronouns in (43), repeated in (46), and the list of vocabulary items that can be inserted in object position. If MAXELIDE has to apply to the structure in (46), it can only target NumP and everything below it. If it only deletes [person] features, no VI would be compatible for insertion, under the Subset Principle. The same holds for [gender] and [number]. Deleting all three features ([number], [gender] and [person]) allows for the least specified VI to be inserted, in accordance with MAXELIDE. The fact that *am* can be inserted ‘blocks’ full deletion, which would lead to the presence of a gap.

- (46) Structure of regular pronouns
- | | |
|--|--|
| <pre> KP / \ K NumP [case] / \ Num nP [number] / \ n PersP [gender] [person] </pre> | <p>a. [3, sg, human, acc] ↔ /yi/</p> <p>b. [3, pl, human, acc] ↔ /dem/</p> <p>c. [acc] ↔ /am/</p> |
|--|--|

¹⁹One can also follow Hein & Georgi (2020) in assuming that nominal XPs are DP, and non-nominal XPs are NPs. Deletion targets NPs in both cases. Everything is deleted if the structure of the focus XP is NP. D survives deletion if it is DP, under the assumption that D takes an NP-complement. Korsah & Murphy (2020) would predict that adjuncts are marked for the categorial feature [-N] and cannot be resumed. Nominal foci are marked for the categorial feature [+N] and need to be resumed. The same logic I sketched above would determine what amount of structure gets deleted.

In the absence of a compatible and least-specified VI, full deletion would apply. This is what I assume happens with subjects, PPs and adjuncts. In Footnote 4, I showed that subjects and benefactives (which need to be PPs in focus) cannot be resumed. This is expected, under the approach to deletion that I adopt in this paper. If MAXELIDE has to apply to subjects and benefactives because of identity between the moved XP and its copy, then a gap would be preferred because, unlike objects, subjects do not have a compatible pronoun that is as least specified in features as *am* (see Table 2, repeated here as Table 3).

	1SG	2SG	3SG	1PL	2PL	3PL	
NOM	a	yu	i	wi	wuna	dem	
ACC	mi	yu	yi	wi	wuna	dem	am

Table 3: *Personal pronouns in CPE*

The compatible pronouns for subjects are nominative, and are specified for all possible features. If any one of the features in (46) is deleted, as MAXELIDE requires, no VI would be compatible for insertion under the Subset Principle. Since MAXELIDE has to apply, everything is deleted, yielding the gap. Note that *am* is not compatible with subject because it is specified for accusative case.²⁰

PPs do not have corresponding pronouns in CPE, hence everything would be deleted, yielding a gap. Recall that benefactives in CPE (see Footnote 4) can be PPs.

Both the phase-base approach (Van Urk, 2018) and the MAXELIDE-approach (Scott, 2021; Georgi & Amaechi, 2022) therefore predict that *am* would be the correct RP in object XP focus. I will adopt the latter here because it is less theoretically compelling than the former. The phase-base approach requires that phase heads be parametric between CPE and Dinka Bor. The phase head would be Num in CPE, but *n* in Dinka Bor.

5 Conclusion

In this paper I have shown that while resumptive pronouns in CPE do not fully realize the features of the antecedent, the derivations of movement and non-movement resumptive pronouns are distinct. In CPE, movement RPs, found in focus contexts, undergo syntactic reduction due to being part of a movement chain. On the other hand, non-movement RPs, found in topicalization contexts, are subject to the language’s pronoun insertion rules.

Non-movement RPs that do not realize all the features of their antecedents, crucially, can only be derived if (a) Binding in base-generation dependencies involves an agree operation through which features of the base-generated XP are transferred to the pronoun position, (b) syntax provides the context for morphological operations to take place and (c) the Subset Principle constraints vocabulary insertion. This presupposes an architecture of the grammar in which syntax feeds morphology, and syntactic operations precede morphological operations. The overall conclusion is that what partial structure deletion does for non-fully-matching movement RPs, strict application of the Subset Principle can do it for those base-generation RPs that do not realize all the features of their nominal antecedents.

²⁰The result would be the same, if only one feature were deleted, or if Num and everything below it were deleted. There will be no compatible VI, under the Subset Principle, hence the gap.

The paper also shows that Pidgins and Creoles can contribute interesting insights into our understanding of Generative Grammar in general and the architecture of the grammar of natural language in particular (see also Adger 2011, with data from São Tomense Creole).

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