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### 1 Introduction

Since Chomsky (2000, 2001), syntactic movement is assumed to be driven by feature matching between the moved element (the Goal) and the head that triggers the movement (the Probe).<sup>1</sup> These features are often claimed to have an effect on the output, manifesting themselves, for example, as co-varying subject agreement on the predicate or case marking on nominals (e.g. Pesetsky & Torrego 2001). A more contentious question is whether A-features such as FOCUS, TOPIC and WH may impact spellout in a similar fashion. It is well-known that A-movement may influence the morphosyntax of functional morphology in the verbal extended domain (Watanabe 1996; Chung 1998; McCloskey 2001; O'Herin 2002; Baier 2018; Martinović 2023, inter alia). In many such cases, however, it is not easy to determine whether the morphology reflects the A-features involved in the corresponding movement or is the indirect result of the movement itself (see e.g. O'Herin 2002; Baier 2018 on the former view and Watanabe 1996; Chung 1998; Martinović 2023 on the latter). The most compelling evidence for *wh*-features interacting with the spellout of  $\phi$ features comes from Northwest Caucasian languages, in which wh-moved elements trigger a special form of agreement on the corresponding predicate which straightforwardly falls into the paradigm of regular  $\phi$ -agreement (see O'Herin 2002; Baier 2018 on Abaza and Caponigro & Polinsky 2011; Ershova 2021 on West Circassian).<sup>2</sup>

Previously discussed cases of  $\bar{A}$ -features interacting with the spellout of  $\phi$ -features are concerned with the morphology exponing an agreement probe.<sup>3</sup> However, if  $\bar{A}$ -features may affect the spellout of  $\phi$ -features, we might expect to observe a similar effect outside the domain of  $\phi$ -agreement – with personal pronouns. In particular, if a pronoun bears an  $\bar{A}$ -feature in addition to its standard set of  $\phi$ features, we may expect the pronoun to surface in a form that is distinct from the standard spellout of the corresponding  $\phi$ -features. This paper confirms this prediction based on resumptive pronouns in Samoan (Polynesian): pronouns which are

<sup>&</sup>lt;sup>1</sup>This is a preliminary study based on data collected through work with one speaker. The author thanks Rev. Tala Faaleava for sharing his language, as well as the reviewers and audience at CLS59 for helpful discussion. This work was funded by the Andrew W. Mellon Fellowship of Scholars in the Humanities at Stanford University. All mistakes and shortcomings are my own.

<sup>&</sup>lt;sup>2</sup>See also Arkadiev (2020) for a detailed discussion of the morphosyntax of Abaza question formation and Lander (2009, 2012); Lander & Daniel (2019) for an interpretation of the morphology associated with relativization as a relative or resumptive pronoun.

<sup>&</sup>lt;sup>3</sup>The exception is Baier (2018); Baier & Yuan (2018) on *wh*-marked bound pronouns in Abaza. Ershova (2021) argues that the analogous construction in West Circassian is a parasitic gap dependency rather than the result of pronominal binding; this analysis is compatible with the Abaza data.

topicalized from oblique, genitive, and ergative case-marked positions are resumed by a third person singular pronoun regardless of  $\phi$ -features. I argue that these mismatched resumptive pronouns result from  $\phi$ -feature impoverishment in the presence of a FOCUS  $\bar{A}$ -feature, combined with marked case (oblique, genitive, or ergative). These mismatched pronouns are contrasted with fully  $\phi$ -copying resumptives in absolutive positions, thus confirming that a topicalized constituent is resumed by a regular,  $\phi$ -feature valued pronoun, and the mismatched pronouns are indeed the result of impoverishment rather than partial copy deletion (cf. van Urk 2015, 2018; Scott 2021; Georgi & Amaechi 2022; Martinović to appear). Samoan thus confirms that  $\bar{A}$ -features may affect the spellout of  $\phi$ -features not just on agreement probes, but also on pronominal elements.

The remainder of the paper is structured as follows. Section 2 discusses the empirical motivations for treating  $\overline{A}$ -features as a type of  $\phi$ -feature based on *wh*-agreement patterns in Northwest Caucasian languages; section 3 provides the necessary background on Samoan morphosyntax; section 4 presents the  $\phi$ -mismatched resumptive pronouns; section 5 details the analysis of these resumptives, and section 6 concludes.

### 2 Ā-features as φ-features

This section provides the necessary background on *wh*-agreement, whereby  $\bar{A}$ -features influence the spellout of  $\phi$ -features, with a particular focus on Northwest Caucasian languages, where this interaction is most apparent.

Broadly construed, *wh*-agreement is the morphological reflex of  $\bar{A}$ -movement. For example, in Chamorro, the predicate takes a different form depending on the grammatical role of the *wh*-fronted constituent (Chung 1982, 1994, 1998, a.o.).

- (1) a. Ha-bendi si Maria i kareta. AGR-sell Maria the car 'Maria sold the car'
  - b. Hayi bumendi i kareta?who WH.NOM.sell the car'Who sold the car?'
  - c. Hafa bininde-nña si Maria? what WH.OBJ.sell-AGR Maria
    'What did Maria sell?' (Chamorro; Reintges *et al.* 2006:167-168)

This type of  $\bar{A}$ -conditioned morphology is typically analyzed as the result of agreement between the head which triggers *wh*-movement (or another head in the verbal extended projection) and the *wh*-fronted constituent. For example, Chung (1994, 1998) treats the different verb forms in (1) as the result of agreement between an inflectional head and the  $\bar{A}$ -bound trace in CASE.

(Baier 2018) observes that cross-linguistically, *wh*-agreement frequently correlates with the neutralization of standard  $\phi$ -agreement. For example, subject *wh*agreement in Chamorro replaces the standard  $\phi$ -agreement prefix which appears in the absence of *wh*-movement (compare 1a and 1b). He proposes that this is due to wh-features participating in regular  $\phi$ -agreement and triggering feature impoverishment on the  $\phi$ -probe. A particularly illuminating example of this relationship between  $\phi$ -agreement and wh-features can be observed in the polysynthetic Northwest Caucasian languages, where wh-agreement behaves in a straightforwardly paradigmatic fashion with respect to standard  $\phi$ -agreement. The examples below are from West Circassian, but the Abaza patterns discussed by O'Herin (2002); Baier (2018) are broadly analogous.

West Circassian is polysynthetic, with multiple participants cross-referenced with  $\phi$ -agreement on the predicate. For example, the ditransitive verb *jet* $\partial n$  'give' in (2a) expones agreement with three arguments: the leftmost prefix agrees with the absolutive theme, followed by the third person plural dative prefix for the recipient. The prefix exponing agreement with the ergative agent appears closest to the verbal root. *Wh*-agreement surfaces in relative clauses (the only type of  $\bar{A}$ -movement in the language; Caponigro & Polinsky 2011): the relativized participant is replaced with a gap and the corresponding  $\phi$ -agreement on the predicate is replaced with the prefix  $z\partial$ -/ze-.<sup>4</sup> Thus, in (2b) the ergative agent is relativized and the corresponding *wh*agreement surfaces in place of the regular ergative  $\phi$ -agreement. Similarly, in (2c) the dative recipient is relativized and the *wh*-agreement correspondingly replaces the dative agreement prefix on the predicate.<sup>56</sup>

(2)	a.				-		•	əpχ <sup>w</sup> ə-me ] <sub>ια</sub> .POSS-sister	
		Ø-	a-	r-	jə-	tэ-ве-х			
		3ABS- 3PL.IO- DAT- 3SG.ERG- give-PST-PL							
		'This child gave the flowers to his sisters.'							
	b.	[е	RG	ə-š <sub>io</sub>			kon	fjet <sub>ABS</sub>	
		3SG.POSS-brother candy							
		Ø-	Ø-	je-	ZƏ-	tэ-ве ]		pŝaŝe-m	
		3abs-	· 3sg.io	- DAT-	WH.ERG	- give-PST		girl-OBL	
		sə-Ø-š'ə-tҲ <sup>w</sup> ə-в							
		1SG.ABS-3SG.IO-LOC-praise-PST							
		ʻI prai	sed the	girl wl	no gave he	er brother o	cand	y.'	
	c.	marə	ŝ <sup>w</sup> əz-ew	7	[ [ mə	pŝaŝe-m ] <sub>I</sub>	ERG	derare <sup>ABS</sup>	10
		here	woman-	ADV	this	girl-OBL		flower	
		Ø-	ze-	r-	jə-	tэ-ве ]	-r		

3ABS- WH.IO- DAT- 3SG.ERG- give-PST -ABS

'Here is the woman to whom this girl gave flowers.'

Similar specialized morphology surfaces in place of  $\phi$ -agreement with rela-

<sup>&</sup>lt;sup>4</sup>The vowel quality is phonologically conditioned.

<sup>&</sup>lt;sup>5</sup>The nominal head may follow (2b) or precede (2c) the relative clause; this does not effect the internal syntax of the relative clause. See Lander (2009, 2012); Caponigro & Polinsky (2011); Ershova (2021, to appear) on the morphosyntax of West Circassian relative clauses.

<sup>&</sup>lt;sup>6</sup>The glosses are in accordance with the Leipzig glossing conventions, with the following additions: ALT – alternative marker; GENR – generic tense.

tivized possessors and complements of postpositions, further confirming that *wh*-agreement results from the interaction between an  $\bar{A}$ -feature and the  $\phi$ -features of the  $\bar{A}$ -moved element (see Lander 2012; Ershova 2021, to appear for details).

Ershova (2021), building on Baier's (2018) analysis of Abaza, proposes that  $\overline{A}$ -features may be copied alongside  $\phi$ -features from the goal to the  $\phi$ -probe. The  $\overline{A}$ -feature then triggers feature impoverishment on the probe, resulting in the neutralization of  $\phi$ -features and a specialized *wh*-agreement marker (3).

(3) Impoverishment rule:  $[\phi] \rightarrow \emptyset / [\_, WH, AGR]$  (Ershova 2021:7)

An implicit prediction of this analysis is that  $\bar{A}$ -features may trigger  $\phi$ -feature impoverishment not only on the probe, but on the goal as well. In West Circassian, however, this prediction cannot be tested, since relativization involves a null operator and a covert movement trace. In the following sections I argue that Samoan resumptive pronouns fill this gap and confirm the prediction:  $\bar{A}$ -features may trigger  $\phi$ -feature impoverishment not only as a result of agreement, but on the  $\bar{A}$ -moved element itself.

### 3 Background on Samoan

This section provides some brief background on the clause structure of Samoan. Samoan is verb initial, with particles associated with clause typing, tense, aspect and mood appearing clause-initially, followed by the predicate (Chung 1978; Mosel & Hovdhaugen 1992; Collins 2017, a.o.). Clausal arguments follow the verb, with the basic word order being VSO, although other orders are possible and may correlate with information structural differences (4).

(4)	a.	Е	tausi e	le	tinā	0	Nati	a ia.	(VSO)
		GENR	care ERG	the	mother	GEN	Nati	a s/he	
	b.	Е	tausi ia	e	le tir	nā	0	Natia.	(VOS)
		GENR	care s/he	ERG	the m	other	GEN	Natia	
	'Natia's mother takes care of her.'								

The language displays ergative-absolutive alignment in case marking, which is expressed with prepositional particles. Subjects of transitive verbs are introduced with the particle e, while direct objects of transitive verbs and subjects of intransitive verbs are not accompanied with an overt particle and are instead marked with a high edge tone (see Yu 2021; I do not mark tone in this paper). An example of an ergative-absolutive transitive verb is in (5) and an intransitive verb is in (6). There is also a large class of so-called middle verbs which take an absolutive subject and an internal argument introduced with the oblique case marker i (7). The same oblique case appears on indirect objects of ditransitive verbs (8).<sup>7</sup>

<sup>&</sup>lt;sup>7</sup>Tollan (2018); Tollan & Massam (2022) analyze *i* on internal arguments of middle verbs as accusative case; the analysis is supported by parallel behaviors between these internal arguments and absolutive case marked direct objects of transitive verbs (see also Chung 1978; Mosel 1991). Since resumptive pronouns, which are the primary focus of this paper, behave identically with respect to *i*-marked themes of middle verbs and indirect objects of ditransitives, I uniformly label it as oblique. The proposed analysis is compatible with the treatment of of *i* as two distinct case markers, with the simple addition of accusative case to the set of *marked* case values.

- (5) Na tanu [e le maile]<sub>ERG</sub> [le pogāīvi]<sub>ABS</sub> i le oneone. PST bury **ERG** the dog the bone in the sand 'The dog buried the bone in the sand.'
- (6) E moe [l-a-'u maile]<sub>ABS</sub> i 'ī. GENR sleep the-GEN-1SG dog in here 'My dog sleeps in here.'
- (7) Na va'ai ia<sub>ABS</sub> [i le tama]<sub>OBL</sub>.
  PST see s/he OBL the boy
  'S/he saw the boy.'
- (8) Na 'ave  $[e \quad Lulu]_{ERG}$   $[le \quad tusi]_{ABS}$   $[i \quad l-o-na \quad tinā]_{OBL}$ . PST give ERG Lulu the book **OBL** the-GEN-3SG mother 'Lulu gave the book to her mother.'

Finally, subjects of transitive, middle and intransitive verbs may surface as a preverbal clitic without any overt case marking.

- (9) Na **'ou** va'ai i le tagata. PST **I** see OBL the person 'I saw a person.'
- (10) Sā 'ou fafāgā l-a-'u maile. PST I feed+3SG.ERG the-GEN-1SG dog 'I fed my dog.'<sup>8</sup>

In this paper I treat all arguments that are not marked with a case particle (i.e. transitive direct objects, subjects of intransitive verbs and preverbal clitics) as absolutive case marked. The analysis is compatible with a uniform source of absolutive case (Tollan 2018; Tollan & Massam 2022) or with treating unmarked case as syncretism between accusative on direct objects and nominative on subjects (Collins 2014; see also Yu 2021 on tonal marking of absolutive case and the difficulty of determining case marking on preverbal pronouns).

In the nominal domain, possessors appear postnominally and are marked with a case particle: a for alienable possession and o for inalienable possession (Mosel & Hovdhaugen 1992:282-290) – both markers are glossed as genitive case in this paper. Pronominal possessors appear prenominally and are fused into one phonological word with the determiner and case particle as in e.g. (10).

(11)	le maile a	le tama	(12)	le uso	0	le	teine
	the dog GEN	the boy		the siste	r GEN	the	girl
	'the boy's dog	,		'the girl's siter'			

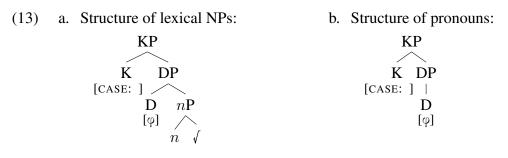
<sup>&</sup>lt;sup>8</sup>The word  $faf\bar{a}g\bar{a}$  is formed through combining the verb fafaga 'feed' and the suffix -*a/-ina*, accompanied by the lengthening of the penultimate vowel of the stem. I follow Hopperdietzel (2020); Hopperdietzel & Alexiadou (to appear) in analyzing this suffix as an ergative resumptive pronoun; in this case resumption is triggered by the cliticization of the ergative argument to preverbal subject position. See section 4 for discussion of this suffix.

In lexical NPs, case is exponed solely on the preceding particle, but pronouns display a number of distinct forms depending on the case marking and, in some combinations, also influence the surface form of the case particle. I do not provide the full paradigm here, but Table 1 presents an example of the different surface forms for 1SG and 3SG (the data in the table is partially from my own elicitations and partially taken from Mosel & Hovdhaugen 1992:121-124).

	1SG	3sg
Preverbal clitic	'ou, o'u	ia, na
Absolutive	a'u	ia
Ergative	e a'u	e ia
Genitive	a/o='u	a/o=na
Oblique	iā te a'u	Animate: iā te ia
		<i>Inanimate:</i> i ai

Table 1: Case forms for 1SG and 3SG

Building on Travis & Lamontagne (1992); Löbel (1994); Bittner & Hale (1996); Bayer *et al.* (2001); Rezac (2003), *inter alia*, nominals involve a KP structure where K<sup>0</sup> hosts the case value and selects for a DP. D<sup>0</sup> hosts  $\phi$ -features associated with the (pro)nominal,<sup>9</sup> and pronominals differ from lexical nouns in the absence of a lexical *n*P complement to D<sup>0</sup> (13; Postal 1966; Elbourne 2001, a.o.). In accordance with a realizational Distributed Morphology approach to spellout (Halle & Marantz 1993 *et seq.*), the feature bundles in the nodes are post-syntactically mapped to phonological form. The surface form of the pronoun may be conditioned by the case value of the adjacent K<sup>0</sup> head, and the form of K<sup>0</sup> may correspondingly be conditioned by the  $\varphi$ -feature values on D<sup>0</sup>. The interaction between features on D<sup>0</sup> and K<sup>0</sup> are discussed in more detail in section 5, alongside the analysis of feature impoverishment.



<sup>&</sup>lt;sup>9</sup>Since the present account does not attribute  $\phi$ -feature deficiency to the deletion of syntactic structure, it is sufficient to place all  $\phi$ -features on D<sup>0</sup>. The analysis is compatible with a decomposed understanding of  $\phi$ -features as being introduced by a hierarchy of functional projections below D<sup>0</sup> (e.g. van Koppen 2012; Moskal 2015; van Urk 2018; Smith *et al.* 2019; Martinović to appear), as long as those heads are not deleted as a result of chain resolution; see section 5 for details.

# 4 Matching and mismatched resumptives in Samoan

This section presents the data on resumptive pronouns in Samoan. Resumptive pronouns surface in contexts involving an  $\overline{A}$ -dependency, including wh-questions (14), relativization (15) and focus/topic fronting (16).

- (14) 'O ai na (**na**) 'aumai-a l-a-u tusi? ALT who PST **s/he** bring-3SG the-GEN-2SG book 'Who brought your book?'
- (15) Sā 'ou va'ai i le tamaititi [sā e fafaga i ai].
  PST I see OBL the boy PST you feed OBL it(OBL)
  'I saw the kid whom you fed.'
- (16) 'O a'u e moe l-a-na maile i 'ī.
  ALT I GENR sleep the-GEN-3SG dog in here 'It is me whose dog sleeps here.'

The remainder of the paper will focus on resumption in focus fronting as in (16), since this is the only construction where the fronted constituent may be specified for participant  $\phi$ -features, thus allowing for observable mismatches in  $\phi$ -features between the resumptive pronoun and the fronted constituent.

Focus fronting involves the focused constituent occupying the sentence-initial preverbal position, preceded by the particle 'o, which semantically introduces alternatives and is correspondingly glossed as ALT following Hohaus & Howell (2015). Genitive, oblique and ergative case-marked DPs are obligatorily resumed by a third person singular pronoun, which for the ergative participant is expressed as the suffix *-inal-a* on the predicate (to be discussed below). Thus, if the first person possessor in (17a) is fronted, it is resumed with a third person possessive pronoun (17b).

- (17) a. E moe l-a-'u maile i 'ī. GENR sleep the-GEN-1SG dog OBL here 'My dog sleeps here.'
  - b. 'O a'u e moe l-a-na maile i 'ī. ALT I GENR sleep the-GEN-3SG dog OBL here 'It is me whose dog sleeps here.'

Similarly, a first person plural pronoun, when fronted from the oblique case-marked position in (18a), is resumed by the oblique inanimate third person pronoun i ai (18b).

- (18) a. Na talanoa mai le tama **iā i matou**. PST talk hither the boy **OBL we** 'The boy talked to us.'
  - b. 'O matou na talanoa mai le tama **i ai**. ALT we PST talk hither the boy **OBL it** 'It was us the boy talked to.'

Finally, if an ergative subject, e.g. the first person agent of '*ave* 'give' in (19a), is fronted, it triggers the appearance of the suffix -*a*/-*ina* on the verb (19b).

- (19) a. Na 'ave e a'u le tusi i l-o-'u uso. PST give ERG I the book OBL the-GEN-1SG sister 'I gave the book to my sister.'
  - b. 'O a'u na 'ave-a le tusi i l-o-'u uso. ALT I PST give-**3**SG.ERG the book OBL the-GEN-1SG sister 'It was me who gave the book to my sister.'

The suffix  $-a/-ina^{10}$  (sometimes labeled as -Cia) is used in a broad range of contexts which have been notoriously difficult to formalize (Chung 1978:71-94; Cook 1978, 1991, 1996; Mosel & Hovdhaugen 1992:741-763, a.o.). One of its core uses is to mark displacement of the ergative argument: either promotion to the preverbal subject position, or  $\bar{A}$ -movement like focus fronting, *wh*-movement, and relativization. Hopperdietzel (2020), building on the intuition in Cook (1994:65) that *-ina* serves an anaphoric function<sup>11</sup>, tentatively proposes that the suffix is the realization of an ergative resumptive pronoun. As Hopperdietzel (2020:158) notes, the phonological similarity between the third person pronoun *ia/na* further suggests that this analysis may be on the right track.

Resumptive pronouns in focus fronting constructions are derived through  $\bar{A}$ -movement, which can be seen from their island-sensitivity (see also Hohaus & Howell 2015:80). Thus, a fronted constituent cannot be resumed by a pronoun inside a temporal adjunct clause (20) or a relative clause (21).

(20) \* 'O a'u na sau le teine [ ina 'ua e vala'au atu i ALT I PST come the girl when PERF you call thither OBL ai ].
it(OBL)

Intended: 'It was me who the girl came when you called for \_\_.'

(21) \* 'O Talia 'ou te lē iloa le tusi [le lā e faitau-a]. ALT Talia I GENR NEG know the book that GENR read-**3SG.ERG** Intended: 'It is Talia, I don't know the book that \_\_ is reading.'

The movement-derived status of resumptive pronouns is further confirmed by their ability to license parasitic gaps (Ershova 2023). Given that Samoan allows for productive pro-drop of discourse-salient participants (Chung 1978:30-31), parasitic gaps can be diagnosed only in cases where they are realized as  $\phi$ -mismatched resumptive pronouns, i.e. in oblique, genitive and ergative case-marked positions. For example, the fronted first person singular pronoun in (22) may license a  $\phi$ -mismatched parasitic resumptive pronoun within the temporal adjunct.

<sup>&</sup>lt;sup>10</sup>The allomorphs -a and -ina are freely interchangeable, their distribution conditioned by social register – my consultant has commented that the longer form with -ina tends to be used in more formal language settings.

<sup>&</sup>lt;sup>11</sup>Cook (1994) also cites Milner (1966:xxxiii) and Chung (1978:83-88) for similar characterizations of *-a/-ina* as an anaphoric element.

(22) O a'u na e fafāgā \_ [a'o e tausi i ai].
ALT I PST you feed+3SG.ERG while you care OBL it(OBL)
'It is me that you fed \_ [ while caring for \_ ].'

Similar to the  $\bar{A}$ -trace in (22), a  $\phi$ -mismatched resumptive may also license a parasitic instance of a resumptive pronoun in an adjunct clause (23).

(23) 'O a'u e tausi le fafine lea i ai ['ona e alofa ALT I GENR care the woman this OBL it(OBL) because GENR love i ai].
OBL it(OBL)
'It is me the woman cares for [ due to loving ].'

Thus, based on island sensitivity and the ability to license parasitic gaps,  $\phi$ -mismatched resumptive pronouns spell out the lower copy of an  $\bar{A}$ -movement chain.

In addition to the  $\phi$ -mismatched resumptives observed in oblique, genitive and ergative case-marked positions, Samoan also has  $\phi$ -agreeing resumptive pronouns, which alternate with a gap and appear in unmarked case positions such as the preverbal subject position in (24) and the absolutive theme position in (25) (Chapin 1977:370; Mosel & Hovdhaugen 1992:468).

- (24) 'O mātou sā (**mātou**) nonofo i le taulaga lea. ALT we PST **we** live.PL OBL the town this 'It was us who lived in this town.'
- (25) 'O a'u e fafaga e l-o-na tinā (a'u).
  ALT I PRS feed ERG the-GEN-3SG mother I
  'It is me whom his/her mother feeds.'

According to my consultant, these optional resumptive pronouns carry a subtle information structural effect and are used to mark emphasis of the corresponding participant; an account for this optionality is left for future research.

 $\Phi$ -agreeing resumptive pronouns may be base-generated, which can be seen by their ability to ameliorate islandhood violations. For example, the absolutive subject of the temporal adjunct clause cannot be focus fronted with a gap, but the same focus construction is grammatical with an overt  $\phi$ -agreeing pronoun in the preverbal subject position (26).

(26)0 vala'au oe na sau le teine [ ina 'ua e / \* ALT you PST come the girl when PERF you call iā te a'u]. atu thither OBL I Lit: 'It was you who the girl came when you / \* called for me.'

Importantly for this paper, however,  $\phi$ -agreeing resumptives may also be movementderived. This can be seen from their ability to license parasitic gaps, analogous to  $\phi$ -mismatched resumptives. Thus, for example, the second person resumptive pronoun in preverbal subject position may license a parasitic gap in a temporal adjunct (27).<sup>12</sup> The parasitic gap is indeed licensed by the focus fronting rather than, for example, the appearance of the absolutive subject in preverbal position – the analogous construction without focus fronting is ungrammatical (28).

- (27) 'O a'u na ('ou) sau [ ina 'ua e vala'au atu i ai ]. ALT I PST I come when PERF you call thither OBL it lit. 'It was me who \_ came when you called for \_.'
- (28) \* Na **'ou** sau [ ina 'ua e vala'au atu **i ai** ]. PST **I** come when PERF you call thither OBL it Intended: 'I came when you called for me.'

Similarly, a  $\phi$ -agreeing pronoun in the absolutive theme position may license a genitive case-marked parasitic resumptive inside the ergative DP (29). An alternative parse of this example, wherein the possessor is directly focused rather than licensed by the  $\bar{A}$ -moved absolutive theme ( $\approx$  '*It was me whose mother fed me*'), is unavailable: the analogous construction where the first person resumptive is necessarily base-generated due to being part of a coordinate structure may not have an interpretation where the possessor of the ergative DP is directly bound by the focused first person pronoun (30). This confirms that the resumptive pronoun in (29) is parasitic – it must be licensed by the focus fronting of the absolutive theme.

- (29) O a'u sā fafaga (a'u) e l-o-na tinā (a'u).
  ALT I PST feed I ERG the-GEN-3SG mother I
  'It was me who [ the mother of \_] fed \_.'
- (30) O a'u sa fafaga [ **a'u** ma Talia ] e l-**o-na** tinā. ALT I PST feed I and Talia ERG the-GEN-3SG mother
  - a. 'It was  $me_i$ , his/her<sub>i/\*i</sub> mother fed me and Talia.
  - b. \* 'It was me who [ the mother of \_ ] fed me and Talia.

To summarize this section, Samoan displays two types of movement-derived resumptive pronouns: (i)  $\phi$ -mismatched resumptives in oblique, genitive and ergative case-marked positions, which surface as 3SG regardless of the  $\phi$ -features of the fronted constituent, and (ii)  $\phi$ -agreeing resumptive pronouns which surface in absolutive case positions (preverbal subjects, subjects of intransitive verbs and objects of transitive verbs). The movement-related properties of these pronouns puts them in a broad class of resumptive elements which realized a trace of syntactic movement (see e.g. Koopman 1984; Engdahl 1985; Kandybowicz 2007; Landau 2006, 2007; Berbiers *et al.* 2010; Sichel 2014; van Urk 2018; Scott 2021; Georgi & Amaechi 2022; Martinović to appear). The following section argues that the mismatch in

<sup>&</sup>lt;sup>12</sup>The English translation of this example is ungrammatical due to the anti-c-command condition: a parasitic gap cannot be licensed by a trace that c-commands it (Engdahl 1983 *et seq*). The underlying structure of the Samoan example is different: the absolutive subject is merged in vP below the adjunction site of the temporal clause and does not undergo subsequent A-movement (Ershova 2023).

 $\phi$ -features between the fronted constituent and the resumptive pronoun is the result of postsyntactic feature impoverishment (Halle & Marantz 1993 *et seq.*), which is triggered by a combination of a marked case feature and an  $\overline{A}$ -feature.

# 5 The analysis: A-features affect pronominal forms

This section lays out the analysis of  $\phi$ -mismatched resumptive pronouns and their  $\phi$ -agreeing counterparts. Besides the ability to expone  $\phi$ -features, the two types of resumptive pronouns differ only in their case marking: both resumptives are movement-derived, but  $\phi$ -mismatched resumptives appear in syntactic positions associated with case particles (genitive, oblique and ergative), while  $\phi$ -agreeing pronouns surface in positions associated with unmarked case (as preverbal subjects, absolutive subjects of intransitive or middle verbs, and absolutive direct objects of transitive verbs). In a nutshell, I suggest that  $\phi$ -mismatched pronouns result from post-syntactic feature impoverishment in the presence of an A-feature [FOC] and a marked case feature (GEN, OBL, or ERG).

Within the copy theory of movement (Chomsky 1993 et seq.) movement-derived resumptives are analyzed as the spell out of a lower copy in a movement chain, with their realization conditioned by principles of economy (Kandybowicz 2007; Sichel 2014; van Urk 2018; Georgi & Amaechi 2022; Martinović to appear, a.o.). For Samoan, I propose that both  $\phi$ -agreeing and  $\phi$ -mismatched resumptive pronouns realize a DP which lacks a lexical nP, meaning that they have the same syntactic structure as base-generated pronouns (cf. 13b). This proposal is broadly in line with previous analyses which claim that resumption involves partial deletion of syntactic structure within the resumed phrase – thus, the lower copy of a fronted lexical DP is pronounced as a pronoun due to the deletion of the lexical nP. In departure from previous proposals which connect  $\phi$ -deficiency in resumptives to the deletion of syntactic structure, I propose that resumptive pronouns are structurally identical to base-generated pronouns and include the full functional structure associated with  $\phi$ -feature exponence. Since Samoan resumptive pronouns include the full set of  $\phi$ features, I do not adopt an elaborated functional structure for the DP where person, number and gender are hosted by different functional heads and specify  $D^0$  as the locus of pronominal  $\phi$ -features (see fn. 9).

The presence of the structure responsible for introducing  $\phi$ -features on the lower copies explains why resumptives in unmarked case positions fully match in  $\phi$ -specifications with the fronted constituent (24-25).

Mismatched resumptive pronouns are likewise specified for the full set of  $\phi$ -features. However, the combination of an  $\overline{A}$ -feature with a marked case feature (OBL, GEN, or ERG) on the adjacent head K<sup>0</sup> triggers postsyntactic feature impoverishment, resulting in the spellout of a default, underspecified form of the pronoun – 3SG inanimate.

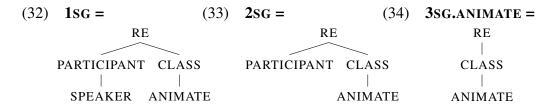
The analysis presented here is compatible with any theory of  $\phi$ -features which treats 3sG as a featurally underspecified form. For concreteness, I adopt the approach developed by Harley & Ritter (2002); Bejar (2003) where features are privative and hierarchically organized into a geometry. An illustrative feature geometry, which would account for the Samoan pronominal paradigm, is in (31).

(31) Adapted version of Harley & Ritter's (2002) feature geometry: REFERRING EXPRESSION

PARTI	CIPANT	INDIVII	CLASS	
	$\sim$		$\sim$	
SPEAKER	ADDRESSEE	GROUP	MINIMAL	ANIMATE

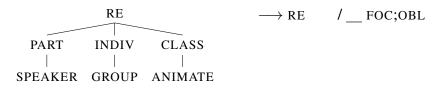
Different person values correlate with different degrees of underspecification. The full feature geometry in (31) would be mapped to 2DU.INCL, with dual number arising from the presence of both [GROUP] and [MINIMAL] and inclusive first person arising from the presence of both [SPEAKER] and [ADDRESSEE].

Singular number is associated with the lack of INDIVIDUATION, e.g. 1SG is specified with features associated with person and class, but not number (32). 2SG likewise lacks features associated with number, but is also underspecified for SPEAKER (33). 3SG.ANIMATE is underspecified for person, but includes the feature ANIMATE (34). Finally, 3SG.INANIMATE is mapped simply to [RE], meaning that this form is featurally the least specified.



The surface form of a pronoun is determined by an ordered sequence of postsyntactic operations: (i) feature impoverishment and (ii) contextually conditioned allomorphy (e.g. Embick 2010). Feature impoverishment deletes all  $\phi$ -features up to the root node [RE] in the context of an  $\bar{A}$ -feature (FOC) and a marked case feature (GEN, OBL, or ERG) on the adjacent head K<sup>0</sup>. Contextual allomorphy determines the form of the pronoun depending on the case value on K<sup>0</sup> and the form of the case particle in K<sup>0</sup> depending on the  $\phi$ -features of the adjacent D<sup>0</sup>. For example, a pronoun specified as 1PL.EXCL is spelled out as *mātou* in an unmarked case position (e.g. 24), but undergoes feature impoverishment in the context of [OBL] and the  $\bar{A}$ -feature [FOC] (35).

(35) 1PL.EXCL  $\rightarrow$  3SG.INANIMATE



The final form of the pronoun and the adjacent case particle is then determined through rules of contextual allomorphy: 3SG.INANIMATE is mapped to *ai* in the presence of oblique case (36a) and the oblique case marker is pronounced as *i* (36b).

(36) a. RE  $\longrightarrow ai / \_$  OBL b. OBL  $\longrightarrow i /$  elsewhere

The result of the impoverishment and allomorphy rules described above can be seen in (18b): the 1PL.EXCL pronoun is focus fronted and resumed by the oblique inanimate third person pronoun. A crucial part of the account is that impoverishment is triggered by the *combination* of an  $\bar{A}$ -feature and a marked case feature – by itself, neither type of feature triggers impoverishment, cf. the absolutive resumptive in (24) which bears the FOC feature, but expones full  $\phi$ -features. Likewise, a marked case feature alone does not trigger impoverishment, cf. (18a), where an oblique 1PL.EXCL pronoun is pronounced with the full set of  $\phi$ -features in the absence of focus fronting.

### 6 Conclusion

There is a growing body of evidence cross-linguistically that an  $\bar{A}$ -feature which originates on a moved element (the goal) may effect the phonological output of verbal functional morphology (the probe), including  $\phi$ -agreement (Watanabe 1996; Chung 1998; McCloskey 2001; O'Herin 2002; Baier 2018, a.o.). If A-features may generally be visible at the PF interface, it is surprising that these effects on the output are only observed on elements which have agreed with the A-feature-bearing goal, and not on the goal itself. Samoan resumptives fill this typological gap: when a lower copy of a movement chain is pronounced, its surface form is effected by the presence of the A-feature which triggers the movement. This effect is observed only in marked cases (oblique, genitive, and ergative), thus confirming that the underspecification of  $\phi$ -features in resumptive pronouns is a result of postsyntactic feature impoverishment rather than the deletion of syntactic structure due to economy conditions (cf. van Urk 2018; Scott 2021; Georgi & Amaechi 2022; Martinović to appear). The retention of full  $\phi$ -feature specification on resumptive pronouns in unmarked case positions would remain mysterious under accounts which connect  $\phi$ -deficiency to partial copy deletion, but is straightforwardly accounted for under an impover is have a count – underspecification of  $\phi$ -features in combination with marked case features is typologically well-attested (e.g. Arkadiev 2009).

#### References

- Arkadiev, P. 2009. Syncretisms and neutralizations involving morphological case: Challenges for markedness theory. In *New Challenges in Typology: Transcending the Borders and Refining the Distinctions*, ed. by A. Arkhipov & P. Epps. Mouton de Gruyter.
- Arkadiev, P. 2020. Syntax in morphological guise: Interrogative verbal morphology in Abaza. *Linguistic Typology* 24. 211–251.

Baier, N. 2018. Anti-agreement. UC Berkeley dissertation.

- Baier, N., & M. Yuan. 2018. Anti-agreement with bound variables. In Proceedings of WCCFL 35, 96–103.
- Bayer, J., M. Bader, & M. Meng. 2001. Morphological underspecification meets oblique case: syntactic and processing effects in German. *Lingua* 111. 465–514.
- Bejar, S. 2003. Phi-Syntax: A theory of agreement. University of Toronto dissertation.
- Berbiers, S., O. Koeneman, & M. Lekakou. 2010. Syntactic doubling and the structure of *wh*-chains. *Journal of Linguistics* 46. 1–46.

- Bittner, M., & K. Hale. 1996. The structural determination of case and agreement. *Linguistic Inquiry* 27. 1–68.
- Caponigro, I., & M. Polinsky. 2011. Relative embeddings: A Circassian puzzle for the syntax/semantics interface. *NLLT* 29(1). 71–122.
- Chapin, P. G. 1977. Samoan pronominalization. Language 46. 366-378.
- Chomsky, N. 1993. A minimalist program for linguistic theory. In *The view from Building 20: Essays in honor of Sylvain Bromberger*, ed. by K. Hale & S. J. Keyser, 1–52. The MIT Press.
- Chomsky, N. 2000. Minimalist inquiries: the framework. In Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik, ed. by R. Martin, D. Michaels, & J. Uriagereka, 89—155. MIT Press.
- Chomsky, N. 2001. Derivation by phase. In *Ken Hale: A Life in Language*, ed. by M. Kenstowicz. MIT Press.
- Chung, S. 1978. Case marking and grammatical relations in Polynesian. University of Texas Press.
- Chung, S. 1982. Unbounded dependencies in Chamorro grammar. Linguistic Inquiry 13. 39-77.
- Chung, S. 1994. Wh-agreement and "referentiality" in Chamorro. Linguistic Inquiry 25. 1-44.
- Chung, S. 1998. Design of Agreement: Evidence from Chamorro. University of Chicago Press.
- Collins, C. 2014. The distribution of unmarked cases in Samoan. In Argument Realisations and Related Constructions in Austronesian Languages: Papers from the 12th International Conference on Austronesian Linguistics, ed. by I. W. Arka & L. Mas Indrawati, volume 2, 93–110. Asia-Pacific Linguistics.
- Collins, J. 2017. Samoan predicate initial word order and object positions. *Natural Language and Linguistic Theory* 35. 1–59.
- Cook, K. W. 1978. The mysterious Samoan transitive suffix. In *Proceedings of the 4th Annual Meeting of the Berkeley Linguistics Society (1978)*, 53–66.
- Cook, K. W. 1991. The Samoan Cia suffix as an indicator of agent defocusing. *Pragmatics* 1. 145–167.
- Cook, K. W. 1994. The empathy hierarchy and Samoan clitic pronouns. *Cognitive Linguistics* 5. 57–75.
- Cook, K. W. 1996. The Cia suffix as a passive marker in Samoan. Oceanic Linguistics 35. 57–76.
- Elbourne, P. 2001. E-type anaphora as NP-deletion. Natural Language Semantics 9. 241–288.
- Embick, D. 2010. Localism versus globalism in morphology and phonology. MIT Press.
- Engdahl, E. 1983. Parasitic gaps. Linguistics and Philosophy 6. 5-34.
- Engdahl, E. 1985. Parasitic gaps, resumptive pronouns and subject extractions. *Linguistics* 23. 3–44.
- Ershova, K. 2021. Diagnosing clause structure in a polysynthetic language: Wh-agreement and parasitic gaps in West Circassian. *Linguistic Inquiry* 52. 1–38.
- Ershova, K. 2023. Ergatives are special: Parasitic resumptives and the ergative extraction constraint in Samoan. Presentation at LSA 97.
- Ershova, K. to appear. Phasehood as defective intervention: Possessor extraction and selective DP islandhood in West Circassian. *Syntax*.
- Georgi, D., & M. Amaechi. 2022. Resumption in Igbo: Two types of resumptives, complex phimismatches, and dynamic deletion domains. *Natural Language and Linguistic Theory*.
- Halle, M., & A. Marantz. 1993. Distributed morphology and the pieces of inflection. In *The View from Building 20*, ed. by K. Hale & S. J. Keyser, 111–176. MIT Press.
- Harley, H., & E. Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78. 482–526.
- Hohaus, V., & A. Howell. 2015. Alternative semantics for focus and questions: Evidence from Sāmoan. In *Proceedings of AFLA 21*, ed. by A. Camp, Y. Otsuka, C. Stabile, & N. Tanaka, 69–86. Asia-Pacific Linguistics.
- Hopperdietzel, J. 2020. *Resultatives: A view from Oceanic verb serialization*. Humboldt-University of Berlin dissertation.
- Hopperdietzel, J., & A. Alexiadou. to appear. Marked unergatives in Samoan nominalizations. In *Proceedings of WCCFL 40*.
- Kandybowicz, J. 2007. The grammar of repetition: Nupe grammar at the syntax-phonology interface. Benjamins.
- Koopman, H. 1984. The syntax of verbs: From verb movement rules in the Kru languages to

Universal Grammar. Tilburg University dissertation.

- van Koppen, M. 2012. The distribution of phi-features in pronouns. *Natural Language and Linguistic Theory* 30. 135–177.
- Landau, I. 2006. Chain resolution in Hebrew V(P) fronting. Syntax 9. 32-66.
- Landau, I. 2007. EPP extensions. Linguistic Inquiry 38. 485-523.
- Lander, Y. 2009. Množestvennaja reljativizacija: podlinnaja i mnimaja [Multiple relativization: genuine and imaginary]. In *Aspekty polisintetizma: Očerki po grammatike adygejskogo jazyka*, ed. by Y. G. Testelets, 612–653. RGGU.
- Lander, Y. 2012. *Reljativizacija v polisintetičeskom jazyke: adygejskie otnositel'nye konstrukcii v tipologičeskoj perspektive [Relativization in a polysynthetic language: Adyghe relative clauses in a typological perspective]*. Russian State University for the Humanities dissertation.
- Lander, Y., & M. Daniel. 2019. West Caucasian relative pronouns as resumptives. *Linguistics* 57. 1239–1270.
- Löbel, E. 1994. KP/DP-syntax: Interaction of case-marking with referential and nominal features. *Theoretical Linguistics* 20. 37–70.
- Martinović, M. 2023. Feature geometry and head splitting in the Wolof clausal periphery. *Linguistic Inquiry* 79-116.
- Martinović, M. to appear. [-Person] and [+Person] resumption in Igala. In *Proceedings of WCCFL* 40.
- McCloskey, J. 2001. The morphosyntax of wh-extraction in Irish. *Journal of Linguistics* 37. 67–100. Milner, G. B. 1966. *Samoan dictionary*. Oxford University Press.
- Mosel, U. 1991. Transitivity and reflexivity in Samoan. *Australian Journal of Linguistics* 11. 175–194.
- Mosel, U., & E. Hovdhaugen. 1992. Samoan reference grammar. Scandinavian University Press.
- Moskal, B. 2015. Limits on allomorphy: A case study in nominal suppletion. *Linguistic Inquiry* 46. 363–376.
- O'Herin, B. 2002. Case and agreement in Abaza. SIL International / Univ. of Texas at Arlington.
- Pesetsky, D., & E. Torrego. 2001. T to C movement: Causes and consequences. In Ken Hale: A life in language, ed. by M. Kenstowicz, 355–426. MIT Press.
- Postal, P. 1966. On so-called 'pronouns' in English. In *Report of the 17th Annual Round Table Meeting on Languages and Linguistics*, ed. by F. P. Dineen, 177–206. Georgetown University Press.
- Reintges, C. H., P. LeSourd, & S. Chung. 2006. Movement, wh-agreement, and apparent wh-in-situ. In *Wh-movement: Moving on*, ed. by L. L.-S. Cheng & N. Corver. MIT Press.
- Rezac, M. 2003. The fine structure of cyclic agree. Syntax 6. 156–182.
- Scott, T. 2021. Two types of resumptive pronouns in Swahili. Linguistic Inquiry 52. 812-833.
- Sichel, I. 2014. Resumptive pronouns and competition. *Linguistic Inquiry* 45. 655–693.
- Smith, P. W., B. Moskal, T. Xu, J. Kang, & J. D. Bobaljik. 2019. Case and number suppletion in pronouns. *Natural Language and Linguistic Theory* 37. 1029–1101.
- Tollan, R. 2018. Unergatives are different: Two types of transitivity in Samoan. Glossa: A journal in general linguistics 3. 35.
- Tollan, R., & D. Massam. 2022. Licensing unergative objects in ergative languages: The view from Polynesian. *Syntax* 25. 242–275.
- Travis, L., & G. Lamontagne. 1992. The Case Filter and licensing of empty K. *Canadian Journal* of Linguistics / Revue Canadienne De Linguistique 37. 157–174.
- van Urk, C. 2015. A uniform syntax for phrasal movement: A case study of Dinka Bor. MIT dissertation.
- van Urk, C. 2018. Pronoun copying in Dinka Bor and the copy theory of movement. *Natural Language and Linguistic Theory* 36. 937–990.
- Watanabe, A. 1996. Case-absorption and wh-agreement. Kluwer.
- Yu, K. M. 2021. Tonal marking of absolutive case in Samoan. Natural Language and Linguistic Theory 39. 291–365.