Suppletive kin term paradigms in the languages of New Guinea

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Abstract

Kin terms in some languages have suppletive roots according to the person of the possessor, as in Kaluli *na:la* ‘my daughter’, *ga:la* ‘your daughter’ versus *ida* ‘her/his daughter’.

Suppletion is generally seen as a language-specific morphological peculiarity, but in this context there are a number of lexical and morphological similarities across languages, suggesting the motivation may also lie in the nature of kin terms themselves. We offer a typological assessment suppletive kin terms through a case study of the languages of New Guinea, where the phenomenon appears to be particularly common.

Keywords: morphology, suppletion, kin terms, New Guinea, possession

1. Introduction

Kin terms in some languages may have suppletive roots according to the person of the possessor. Consider the words for ‘mother’ and ‘mother-in-law’ in (1) from Ankave (Trans-New Guinea phylum, Angan family). Both words mark possessor person with prefixes (2nd person *ri-*, 3rd person *xi-*, and zero for 1st person), while ‘mother’ additionally displays a distinction between a 1st person root *ino’ki* and a 2nd/3rd person root *na’i*.

(1) Ankave (Speece 2006)

‘mother’ ‘mother-in-law’

1	ino’ki’	neagwi’
2	ri-na’i’	ri-neagwi’
3	xi-na’i’	xi-neagwi’

While suppletion for number is a familiar occurrence in nominal paradigms (e.g. *one person ~ two people*), suppletion for properties of the possessor largely remains unexplored territory, though it has periodically been noted in the typological literature (e.g. Croft 1990, Dahl & Koptjevskaja-Tamm 2001, Drossard 2004, Heath 2004, Mel’čuk 2006, Dziebel 2007, Vafaiean 2013, Aikhenvald 2013). Its particular interest comes from the way it combines properties of inflectional paradigms on the one hand with the pragmatically motivated distribution of distinct lexical items on the other. As Heath (1982: 13f) writes, suppletive alternations

...might have something to do with elusive aspects of speech pragmatics or with emotive accretions on words which are inappropriate to some forms. [...] Because we are dealing with highly grammaticalised alternations there is no simple test to determine what attitudes the various stems evoke in speakers, but we cannot assume that just because the stem alternations are categorical (automatically determined by pronominal affixes) there is nothing further to be said about them than just to list them. (pp 13f)

Dahl & Koptjevskaja-Tamm (2001) provide a useful bridge between pragmatics and morphology with their discussion of what they call KIN TERM DOUBLETs, such as *mommy* vs.

mother), whose relative frequency may well differ according to the person of the possessor.

They write:

The members of kin term doublets usually differ with respect to their use. A common pattern is for one member to be more frequent in vocative and **egocentric uses**.

Sometimes, this seems to be regularized to an extent where it is motivated to talk of **suppletion** within a single paradigm. (p. 217)

On this view we expect a split between 1st person possessors and the rest, which is indeed what we find in (1). But this is far from being the whole story. For example, in the word for ‘father’ in Ekagi (Trans-New Guinea phylum, Wissel Lakes family) there is a split between the 3rd person root *na* and the root *ajtaj* found elsewhere, while in Vitu (Western Oceanic) there is a split between 2SG *mama* and the root *tama* found elsewhere (the inflectional affixes are also different; see §4.3 below).

(2) Ekagi (Drabbe 1952: 16f)

<i>suppletive</i>	<i>non-suppletive</i>
‘father’	‘uncle’

1SG	na-ajtaj	na-ama
2SG	aka-ajtaj	aka-ama
3SG	na -kamee	ama-kamee

(3) Vitu (Bachet & Van den Berg 2006: 15, 53f)

	<i>suppletive</i>	<i>non-suppletive</i>
	‘father’	‘spouse’
1SG	tama-gu	go-gu
2SG	ka-mama	go-o
3SG	tama-na	go-na

Evidently, there is a range of varying patterns, and not just a simple opposition between ego and other. But what these are and how to account for them has not yet been explored; there is no comprehensive overview, the existing work citing only isolated examples. There are good reasons for this. Such suppletive patterns do not appear to be frequent, either in terms of the number of languages they occur in, or the number of lexical items affected (never more than a handful in a given language). For example, Vafaeian (2013) in a cross-linguistic survey of suppletion in nouns in 64 languages (incorporating the sample used by Brown et al. 2004), includes only three languages with possessor-person based suppletion.¹ In practical terms, suppletive paradigms are hard to spot, since the authors of language descriptions may not flag them overtly, or omit mention of them completely. But the available evidence indicates that they are nevertheless found in a range of unrelated languages across the world, sharing a number of properties, which makes them a potentially fruitful topic of typological enquiry.

Given the rather elusive nature of the phenomenon, and the fact that the relevant typological parameters have not yet been defined, a definitive cross-linguistic investigation will be a daunting undertaking. As a first step we have undertaken the pilot study presented

¹ Quite a few more languages in the sample show suppletion according to whether or not the noun is possessed at all, but without values of person playing a role.

here, which is restricted to the languages of New Guinea. This region offers three advantages: (i) morphological marking of the possessor on kin terms is common, (ii) a variety of different patterns are found, and (iii) there is a large number of distinct language families. Our method has simply been to consult all the descriptions we have had access to, which runs into the hundreds. From that sample, the languages which are demonstrably of relevance are listed in Table 1, and their locations are indicated on Map 1.

The paper is structured as follows. §2 outlines the morphological characteristics of possessor person marking: its degree of irregularity, and its relationship to other categories that the language distinguishes morphologically. §3 explores the lexical items involved, and how these relate to pragmatically determined differences in the use of kin term doublets. §4 surveys the different paradigmatic patterns in terms of how different person values are opposed to each other, and how they interact with number. §5 asks to what extent these paradigms can still be treated as lexical competition, and to what extent they are better seen as morphologically encoded paradigms. §6 concludes, and opens up the prospect of cross-linguistic study of much wider scope.

Family

Language

Arai-Kwomtari		Kwomtari		
Austronesian	Western Oceanic	North New Guinea	Schouten	Arop-Sissano, Kairiru
		North New Guinea	Ngero-Vitiaz	Kaulong
		Meso Melanesian	S New Ireland-NW Solomonian	Siar-Lak
		Meso Melanesian	Bali-Vitu	Vitu
	South Halmahera - West New Guinea		Cenderawasih Bay	Biak
Border	Waris			Manem
Isolate				Yale
Piawi	Haruai			
Sepik	Ram			Awtuw
	Tama			Yessan-Mayo
	Yellow River			Namia
South Bougainville	Buin, Motuna			
South-Central Papuan	Morehead-Maró			Nen
Torricelli	Marienberg			Kamasau
	Arapesh-Kombio			Arapesh

Trans-New Guinea	Binanderean				Korafe
	Chimbu-Wahgi	Chimbu	Golin, Salt-Yui		
		Hagen	Imbongu, Umbu-Ungu		
	Kainantu-Goroka				Waffa
	Madang	Croisilles	Pihom	Kumilan	Mauwake
		Croisilles	Pihom	Numugenan	Usan
		Kalam-Kobon			Kalam, Kobon
		Rai Coast			Tauya
	Ok-Oksapmin	Mountain Ok	Bimin, Telefol, Tifal		
		Oksapmin	Oksapmin		
West, Wissel Lakes				Ekagi	
Trans-New Guinea?	Angan*				Akoye, Ankave, Kapau, Menya, Tainae
	Bosavi*				Kaluli
	Yareban*				Yareba

Table 1: Languages described in this study, classification based on *Ethnologue*, with Loughnane and Fedden (2011) for Ok-Oksapmin.

Families marked with ‘*’ are not treated as Trans-New Guinea by *Glottolog*.

[Map 1 about here]

Map 1: New Guinea and surroundings, showing locations of the languages or language families listed in Table 1

2. The morphological context

To paraphrase Mel'čuk's succinct formulation, suppletion involves a maximally regular semantic relationship and a maximally irregular formal relationship (Mel'čuk 1994:358, cited by Corbett 2007:11). In the most obvious case we have etymologically unrelated roots participating in a single inflectional paradigm, as with *go* and *went*. But there is no general agreement on how unrelated two forms have to be to warrant the name; indeed, there are schools of analysis that treat any formal alternation not ascribed to concatenation plus subsequent phonological rules as suppletion. For heuristic purposes we have aimed here for a fairly restrictive understanding of suppletion, limiting our scope to gross differences in the lexical root. That said, in some of the languages we see a cline of irregularity, with suppletive roots occurring in cells of the paradigm which are otherwise the target of lower-level irregularity, so that there is a unified domain of morphological irregularity that includes, but is not restricted to, suppletion (see Corbett 2007:22). For example, in Motuna (see (4)), morphological irregularity is concentrated in the 1SG. The regular system found with kin terms is illustrated by *nura* 'my daughter-in-law'. *Nuka* 'my mother' has an irregular stem-final vowel alternation. *Poowoi* 'my brother-in-law' has an irregular prefix, identical to the 3SG. *Umoka* 'my father' appears to have a suffix rather than a prefix. *Maama* lacks a prefix, and while the general shape of the root carries across the whole paradigm (*mVmV*), the vowels alternate in quality and length. *Taataa* 'my older brother' is fully suppletive.

(4) Motuna (Onishi 1994:94-107)

		‘man’s		‘man’s			
		daughter-		sister’s		‘older	‘older
	<i>prefixes</i>	in-law’	‘mother’	husband’	‘father’	sister’	brother’
1SG	ni-	n-ura	n-uka	po-owoi	umo-ka	maamaa	taataa
2SG	ro-	ro-ora	ro-okū	ro-owoi	ru-umo	ra-mamo	ra-rato
3SG	po-	po-ora	po-okū	po-owoi	pu-umo	pa-mamo	pa-rato

note: prefix vowel /o/ assimilates to the vowel of the following syllable; 1SG /i/ fuses with and raises an immediately following vowel

More broadly, the morphological marking of possessor person on nouns as such is exceptional, at least in the languages of the sample, as discussed in the following section; in nearly all cases it is restricted to kin terms. The links that this system has with the rest of the morphology varies widely across the languages. At one end there are languages where possessor marking is transparently derived from pronominal morphology. Motuna is one of these; compare the free pronouns *ni* ‘I’ and *ro* ‘you’ (singular) with the prefixes in (4). At the other end, the morphology appears to involve some word-formation process not directly related to person marking. For example, in Awtuw (5), specifically male and female variants of *napre* ‘opposite sex sibling’ are derived through suffixation, but only for non-1st person possessors. And in Tauya (6), distinct 3SG possessive forms of kin terms are derived through the polyfunctional suffixes *-fo* or *-mo*, which are found on various nominals in the language, in particular adjectives (*amufo* ‘large’, *ʔufumo* ‘heavy’).

(5) Awtuw ‘opposite sex sibling’ (Feldman 1986:173)

‘brother ‘sister
(to sister)’ (to brother)’

1	napre	
2	napre-r	napre-t
3		

(6) Tauya (MacDonald 1990:88, 97)

	general form	3SG form
‘son’	<i>ʔita</i>	<i>ʔita-fo</i>
‘husband’	<i>ota</i>	<i>ota-fo</i>

In Mountain Arapesh there is comparative evidence that the morphology of possessed nouns has a somewhat loose relationship to person marking. In the dialect spoken in the village of Wautigok, the distinction between 1st person and non-1st person forms involves a variety of morphological operations (in general, the non-1st person form appears to be the morphologically derived one; Dobrin 1997:109). In the neighbouring village of Balam kin terms have only a single form, which generally corresponds to the (derived) non-1st person form of Wautigok. In the village of Dogur, to the other side of Wautigok, the formal contrast is also reduced, at least for some items, but in this case in the direction of the 1st person form. This suggests that the marking of person as such is not inherent to these forms.

(7) Comparison of Mountain Arapesh varieties (Dobrin 1997:108)

<i>Wautigok</i>			<i>Balam</i>		<i>Dogur</i>	
‘maternal			‘maternal		‘maternal	
uncle’	‘mother’		uncle’	‘mother’	uncle’	‘mother’
1	wawen	yamo	wawen	yam	waken	amakek
2	waken	amakek ^w				
3						

Finally, there are cases where the morphology of possessed kin terms is so irregular that it is difficult or impossible to identify any regular system, let alone characterize it as pronominal or not. For example, in Kwomtari, the kin terms in (8) look as if they can be analysed as non-suppletive lexemes with segmentable prefixes according to three different patterns. But out of the eleven possessor-marked kin terms given by Spencer (2008:58), only these three behave this way (the rest are suppletive and even less obviously segmentable), so segmentation is a dubious undertaking to begin with. And in any case, the resulting prefixes have no obvious parallels in the pronominal system or anywhere else in the language.

(8) Kwomtari (Spencer 2008:58)

‘younger sibling			
‘ancestor’	same sex’		‘male’s sister’
1	ambue	wo-moo	wo-foli
2			
3	n-ambue	moo	ya-foli

The overall impression one gets is that the occurrence of suppletion is independent of the morphological and morphosyntactic particulars of possessor marking in the languages in question. That is, it occurs both in languages where possessor marking is transparently pronominal and thus explicitly encodes person (e.g. Motuna), and in those where the relationship to person values is oblique at best (e.g. Awtuw, where it is only gender which is explicitly marked). Indeed, as will be shown below, the patterns of suppletion show far more similarity cross-linguistically than do the systems of ‘regular’ affixal marking, suggesting that suppletion here is not simply a morphological irregularity, but has some other motivation shared across these languages, due perhaps to functional or semantic factors.

3. The lexical context

Possessor person based suppletion in the sample is almost entirely limited to kin terms. This is a striking restriction, but one whose significance is tempered by the fact that the morphological marking of possessor person itself is found only with kin terms in all but the Oceanic languages, and the Trans-New Guinea languages Golin and Tauya. (Tauya does show suppletion in body part terms as well, a point which we return to in §7.) But within this constrained domain we can make a number of lexical generalizations.

In Dahl & Koptjevskaja-Tamm’s discussion, suppletive kin terms are portrayed as an extreme example of the functionally segregated distribution of two distinct but referentially equivalent terms. On that interpretation, the paradigms we are considering here represent, either synchronically or diachronically, the collaboration of two or more lexical items. Although we do not know if this is always the case, it does provide a useful point of departure. Dahl & Koptjevskaja-Tamm suggest that these mixed paradigms are the product of lexical replacement, with novel kin terms entering the paradigm in vocative and egocentric

use, and that there is a link between which kin terms are affected and what replacement forms are used:

- Following what they call the parental prototype, terms for ascending generations – prototypically parents – will be renewed with “nursery language” (e.g. reduplicated forms like *mama* and *papa*), loanwords, slang or diminutives.
- Terms for horizontal generations (e.g. spouses) and descending generations (e.g. children) will be renewed with improper kin terms. Improper kin terms are those where ‘there is also a non-kin (typically non-relational) use which is at least as salient as the kin use’ (Dahl & Koptjevskaja-Tamm 201: 202), e.g. *woman*, *girl*, *boy*, as opposed to *wife*, *daughter*, *son*.

Reflections of these patterns are found throughout the current sample. Consider first the parental prototype. Thus, in Kamasau (9), the term for ‘older sibling’ has a suppletive paradigm but the term for younger sibling does not. The 1st person form is of the reduplicated sort, and so has the characteristics of “nursery language”.

(9) Kamasau (Sanders & Sanders 1994:12)

<i>suppletive</i>	<i>non-suppletive</i>
‘older sibling’	‘younger sibling’

1	jeje	qam
2	nu-se	nu-qam
3	ki-se	ki-qam

A particularly telling example comes from Siar-Lak (10), where there is a reciprocal term that means either ‘grandparent’ or ‘grandchild’. A grandparent speaking about their grandchild uses the regularly inflected non-suppletive form, while a grandchild speaking about their grandparent uses a reduplicated suppletive form (which distinguishes sex, unlike the regular term).

(10) Siar-Lak (Rowe 2005:42-44)

	‘grandchild’	‘grandfather’	‘grandmother’
1SG	tubu-k	tété	wowo
2SG	tubu-m		
3SG	tubu-n		

The use of improper kin terms is illustrated in (11) for languages with a dominant pattern of 1st ~ non-1st suppletion. In Kobon, the 1st person form for ‘husband’ is the generic word ‘man’ (Davies 1981:234), while in Tainae, the 1st person form of ‘wife’ is the generic word for ‘woman’ (Carlson 1991:42). In Yale, the 1st person form for ‘child’ is the generic word that appears also in non-referential contexts in various examples in Campbell & Campbell’s (1987) grammar (in which case the non-1st person root *-ko* might better be glossed as something like ‘offspring’).

(11) Paradigms employing improper kin terms for 1st person possessors

	<i>Kobon</i>	<i>Tainae</i>	<i>Yale</i>
	‘husband’	‘wife’	‘child’
1	bɪ	apaki	něba
2	na-gmul	sa-pepi	bi-ko
3	nu-gmul	ki-apepi ²	bo-ko

Useful as this triage of kin types may be (ascending, horizontal, descending generations), one should bear in mind that this provides only a rough guide. Consider the data from Kamasau more closely. Sanders & Sanders (1994) list the seventeen kin terms shown in (12). Seven are clearly suppletive, and two (‘mother’ and ‘father’) are irregular in that they appear to have otherwise unattested affixes, which are underlined here. Nearly all these refer to older relatives, but then ‘cross cousin’ is an exception. Otherwise, terms denoting horizontal or descending relations are all non-suppletive, but so are various terms denoting older relative (the final four in the list). As a further detail note the gloss for *mem*, which shows that individual kin terms may extend to various denotationally distinct relationships, describing in some cases fairly complex networks; this additional complication will however not affect the rough triage we have made.

(12) Kamasau kin terms (Sanders & Sanders 1994:12)

	1	2	3
‘mother’	mo- <u>yu</u>	nu-mo	ku-mo
‘older sibling’	jeje	nu-se	ki-se
‘maternal grandparent’	koku	nu-qo	ku-qo

² Carlson (1991) gives this form with the plural suffix *-pa* in place of singular *-pi*; we interpret this as a typo.

‘cross cousin’	yai	nu-qangri	ki-qangri
‘mother's younger sister’	mom	nu-motumo	ku-motumo
‘father's sister’	bobo	nu-nyam	ki-nyam
‘father's younger brother’	mom	nu-yitumo	ki-yitumo
‘father’	<u>wu</u> -yi	nu-yi	ki-yi
‘son’	wonyimi	nu-wonyimi	ku-wonyimi
‘daughter’	wonyumbu	nu-wonyumbu	ku-wonyumbu
‘younger sibling’	qam	nu-qam	ki-qam
‘brother’	nyimi	nu-nyimi	ki-nyimi
‘sister’	nyumbu	nu-nyumbu	ki-nyumbu
‘in-law (spouse’s parent)’	yine	n-ine	k-ine
‘paternal grandparent/ father’s older brother’	mem	nu-mem	ki-mem
‘mother's older sister’	bar	nu-bar	ki-bar
‘mother's brother’	wau	nu-wau	ku-wau

As noted above, Dahl & Koptjevskaja-Tamm suggest that the suppletive egocentric forms may have a diachronic interpretation, in that 1st person possessors are the locus for innovation. If this is the case, we should expect to see greater variation in the egocentric forms when comparing related languages. The only families in the sample for which this can reasonably be done are Angan and Mountain Ok. For the Angan languages, we can compare several words across the five languages Akoye, Tainae, Kapau, Menya and Ankave. Some appear to be cognate in all their forms: ‘maternal uncle’ (not suppletive), ‘wife’ (suppletive, with the improper kin term ‘woman’ for 1st person) and ‘father’. But the words ‘grandfather’ and ‘grandmother’, though clearly cognate in their non-1st person forms, show some variation

in the 1st person forms (13). Akoye has distinct t-initial forms for both ‘grandfather’ and ‘grandmother’, while Menya ‘grandfather’ lacks suppletion, so that its 1st person form does not match the others.

- (13) Comparison of various Angan cognates (Whitney & Whitney 1991:57, Carlson 1991:42, Speece 2006, Oates & Oates 1968:164, Whitehead 2004:231)

		Akoye	Tainae	Kapau	Ankave	Menya
‘grandmother’	1SG	täitä	atae-pi	äti	asi'	asi-pa
	2SG	s-ää	sa-yae-pi	t-äi	r-i'a'i'	t-ai
	3SG	ka-yää	k-iae-pi	q-äi	xi-i'a'i'	k-ai

		Akoye	Tainae	Kapau	Ankave	Menya
‘grandfather’	1SG	täito	ato	äto'o	arɪ'o	awi-qu
	2SG	s-äwo	s-awo	t-ä'wo	*	t-awi-qu
	3SG	ka-yäwo	k-iawo	q-ä'wo	xi-a'wo	k-awi-qu

* form not given in source

In the Mountain Ok languages, the 1st person form for ‘mother’ differs between the three languages that we have data for, while the non-1st person form is cognate. Alongside this we have the evidence of Mian, a Mountain Ok language which lacks morphological possessor marking. The default term for ‘mother’ is *awók*, cognate with the non-1st person form of the other languages, but there is also a doublet term *biém*, glossed as ‘mum’ (Fedden 2011:94), which suggests a pragmatic distinction that has not achieved paradigmatic status.

(14) ‘Mother’ in three Mountain Ok languages (Healey 1962:15, Boush 1975:4, Weber 1997:20)

	Telefol	Tifal	Bimin
1SG	áb-eén, ánfb-eén	akum-een	yem
2SG	k-oók-eén	k-awok	k-ouk
3SG	oók-eén	awok	auk

In sum, the lexical properties of suppletive kin terms are remarkably similar across the languages of the sample, with respect both to the terms affected, and to the properties of the constituent roots, in particular the one used for 1st person (or more broadly, egocentric) possessors. This suggests that the meaning of the kin term is itself an important determinant of the suppletive pattern, and that the choice of suppletive root is at least in part determined by shared lexical semantic strategies.

4. Patterns of suppletion

In line with prior discussions, we have so far framed the suppletive in terms of egocentric and non-egocentric usage. This implies the opposition 1st person ~ non-1st person, but as already indicated in §1, this is just one of various patterns found. Thus, given a distinction of three person values, all possible patterns are found (§4.1-4.4), along with additional patterns as a result of interactions with number (§4.5). One of the goals of the survey below is to explore to what extent these other patterns can be derived from the notion of egocentric reference.

4.1.1 First person ~ non-first person

This pattern follows Dahl & Koptjevskaja-Tamm's observation that suppletive kin term paradigms typically involve the opposition of egocentric reference versus other. And indeed, it is by far the most widely attested in the sample: all the languages in Table 1 display this pattern, except for those explicitly mentioned below in §4.2 and §4.3. Morphologically, the examples display a certain sameness, in that in every instance the 1st person form appears to be a bare stem, without any discernable inflection. This parallels the use seen in many languages of bare kin terms (e.g. unmodified or indefinite) for egocentric reference, as in English, where *mom* or *dad* used on their own imply a 1st person possessor (see Koch 1995: 51-55, Dahl & Koptjevskaja-Tamm 2001: 205).

In some cases this bare stem replaces (or at least appears to replace) a regularly inflected form. For example, in Mauwake (15), non-suppletive lexemes typically take a *y-* prefix in the 1st person, which is lacking with suppletive lexemes. The suppletive 1st person form thus has a different morphological composition from the corresponding non-suppletive form. In others, such as Namia (16), the 1st person form is normally the bare stem in any case.

(15) Mauwake (Berghäll 2010:57)

<i>suppletive</i>	<i>non-suppletive</i>
‘elder sibling’	‘sister’

1	paapa	y-ekera
2	n-eepe	n-ekera
3	w-eepe	w-ekera

(16) Namia (Feldpausch, Feldpausch & Yalweike 2011)

	<i>suppletive</i>	<i>non-suppletive</i>
	‘grandfather’	‘older brother’
1	aujwa	awa
2	aipau-kwa	awa-kwa
3	aipau-lwa	awa-lwa

In some cases the suppletive 1st person form introduces a morphological distinction not otherwise present in the paradigm. In all the examples this occurs where the default paradigm makes a two-way distinction between 2nd person and non-2nd. Thus in Telefol, most kin terms have an overtly inflected 2nd person form and a bare stem for 1st and 3rd person. The suppletive 1st person form in ‘mother’s brother’ introduces a third form. Compare this with the cognate item in closely related Tifal, which is not suppletive (17). Oksapmin shows essentially the same pattern: 1st and 3rd person typically take a suffix *-p*, and 2nd person takes *-n* (three lexemes take *-a*). Suppletive items have a distinct and apparently uninflected 1st person root. Here there is telling evidence from dialect variation: in the Upper Oksapmin variety described by Lawrence (2006), the suppletion found in the Lower Oksapmin variety described by Loughnane is largely absent, so the intrusive nature of the suppletive 1st person form is once again apparent.

(17) Variation between Telefol (Healey 1962:15) and Tifal (Weber 1997:20)

Telefol		Tifal
‘father’s	‘mother’s	‘mother’s
older brother’	brother’	brother’

1SG	aaloob	moom	(w)okos
2SG	k-aalob	k-okoot	k-okos
3SG	aaloob	okoot	(w)okos

(18) Dialect variation in Oksapmin ‘uncle’ (Loughnane 2009:133, Lawrence 2006)

	Lower Oksapmin	Upper Oksapmin
1	mam	əmnə-p
2	əmnə-n	əmnə-n
3	əmnə-p	əmnə-p

The Ok languages and Oksapmin are related, albeit somewhat distantly, but the same pattern is also found in Imbongu/Umbu Ungu (19), which is as good as unrelated (the languages belong to the Trans New Guinea Phylum, but have no closer relationship than that). Non-suppletive items (of which Stefaniw 1987 only lists two) have two forms, one ending in *-ena* (2nd person) and one in *-enu* (1st/3rd person). Some of the suppletive lexemes look as if they start on the basis of this type of paradigm, with an intrusive 1st person form.

(19) Imbongu (Stefaniw 1987:16)

suppletive *non-suppletive*
‘son’ ‘daughter’

1SG	malo	lemenu
2SG	marena	lemena
3SG	marenu	lemenu

4.2. Non-third person ~ third person

Suppletion that opposes a non-3rd person root to a 3rd person root might be thought of as representing an opposition based on speech act participants, as suggested by Heath (2004:1003). It is certainly possible to find a plausible bases for this split in the pragmatics of kin term use. For example, Dahl & Koptjevskaja-Tamm (2001: 202) invoke the distinction between in-family and out-of-family uses of kin terms, so that a term like *Granny* might be used equally with 1st or 2nd person reference when addressing family members, but would not as readily be used to refer to some else's grandmother from outside the family. But in a number of cases there is a further wrinkle: the suppletive non-3rd person form has properties that we have identified above as belonging specifically to 1st person forms. Aikhenvald (2013:10f) suggests that that this comes from an extension of the notion of ego:³

‘[i]n a number of languages, if the Possessor is the speaker or a Speech Act Participant, the possessive construction is more ‘closely knit’. [...] What belongs to ‘you’ and ‘me’ as the Speech Act Participants can be envisaged as more close and more intimate, bearing a closer relationship to what Bally (1995 [1926]:33) referred to as the ‘personal domain’. Conceptual proximity goes together with proximity in surface realization. This ‘egocentric’ aspect of possessive marking provides further evidence for the special status of speech act participants.

While we would not go so far as to say that semantic and morphological patterning necessarily go hand in hand, this suggestion provides a useful point of reference for this set of

³ Though she discusses suppletion, the example she adduces to illustrate this (from the Mba language 'Dongoka'; Pasch 1986: 240f) in fact displays three-way suppletion of 1SG~2SG~elsewhere, which does not directly follow from the stated analysis.

examples. On this view, we could interpret any pattern that unites 1st and 2nd person as the extension of an egocentric marking strategy to the 2nd person. And this is in fact what seems to be happening in a number of the languages in the present sample.

In the most obvious case, there is a system in which 1st and 2nd person forms are distinguished from each other in principle, but the 1st person form may optionally be extended to 2nd person. For example, in Namia, the dictionary by Feldpausch, Feldpausch & Yalweike (2011) gives distinct 2nd person forms for a number of terms, but the grammar by Feldpausch & Feldpausch (1992) consistently represents paradigms in which the 1st person form is used for 2nd person as well (20). The same variation is also found between the dictionary and grammar of Akoye.⁴

- (20) Variation in Namia ‘mother’ between dictionary (Feldpausch, Feldpausch & Yalweike 2011) and grammar (Feldpausch & Feldpausch 1992:21)

	<i>dictionary</i>	<i>grammar</i>
1	mo	mo
2	amao-ke	
3	amao-le	amau-le

In other cases we have to rely on typological diagnostics. For example, in Usan (21), there is a group of non-suppletive kin terms that take transparently pronominal prefixes for all three persons, while suppletive items have a single 1st/2nd person form. Crucially, this form is a bare stem, which we identified above (§4.1) as a characteristic of 1st person forms, while the 3rd person form has the expected pronominal prefix. Unlike the Namia example above, this does not constitute extension of a 1st person form, but it does arguably involve the use of

⁴ In the case of Akoye, the grammatical description (Whitney & Whitney 1991) has the full system, the later dictionary (Whitney 1995) systematically represents the system with 1st and 2nd person marking conflated.

a typically 1st person marking strategy. In this sense it resembles the Mauwake paradigm in (15), except that the intrusive suppletive form has taken over a greater portion of the paradigm.⁵

(21) Usan (Reesink 1987:49f)

	<i>suppletive</i>				<i>non-suppletive</i>
	‘older brother’	‘older sister’	‘father’	‘mother’	‘wife’
1	bain	imâ	tain	nani	yá-beni
2					ná-beni
3	ú-mom	u-móur	u-r	ú-nor	ú-beni

In Kwomtari and Tauya we can bring evidence from lexical semantics to bear. Recall from §3 that where one of the suppletive roots is an improper kin term, it is the one used for 1st person possessors. In these two languages we find exactly that for 1st and 2nd person forms (22)-(23), so that this combined form can be said to have properties otherwise associated with 1st person possessors. (Note that the Tauya paradigm does not involve a pure opposition of person, as number is implicated too; see §5.)

(22) Kwomtari (Spencer 2008:58)

	‘husband’	‘wife’	‘daughter’	
1	lufwa	inali	auteli	<i>lufwa</i> ‘man’
2				<i>inali</i> ‘woman’
3	nuguli	nariemu	luali	<i>auteli</i> ‘girl’

⁵ The two languages are related, and the pronominal prefixes are obviously similar, but we can find no resemblance in the kin term roots.

(23) Tauya (MacDonald 2013)

‘wife’			‘husband’			
	singular	plural	singular	plural		
1	fenaʔa		fanu			<i>fenaʔa</i> ‘woman’
2						<i>fanu</i> ‘man’
3	waya-mo		a-fo			

In Manem comparative evidence suggests that the form used with egocentric possessors is diachronically less stable: the two forms of ‘mother’, 1st/2nd person *bai*, 3rd person *afa* (Voorhoeve 1971:102) correspond to the single form *afa-g* in the related language Amanab (-g is a frozen marker of inalienable possession; Minch 1992:125). Clearly it is the non-egocentric form which is stable across the two languages; following the arguments given above (§3), diachronic mutability is a characteristic of 1st person forms.

The examples surveyed above all involve the use of a single syncretic form for both 1st and 2nd person possessors, a form which often has the properties characteristic specifically of 1st person possessors. This has allowed us to speculate that what is going on is that the 1st person form is being used for 2nd person possessors as well. In the remaining examples, however, it is only the ROOT which is shared between 1st and 2nd person possessors, the forms otherwise being inflectionally distinct. These cases cannot be portrayed as the wholesale extension of a 1st person form. In fact, in only one example does the shared root have any properties that we can identify as being explicitly those of a 1st person possessor: in Ekagi ‘father’ (24) the 1st/2nd person *-ajtaj* is clearly related to the term of address *ajta* (Steltenpool 1969). Recall that, cross-linguistically, there is often a close association between terms of address and those used for 1st person possessors (see the quote from Dahl & Koptjevskaja-Tamm in §1).

(24) Ekagi (Drabbe 1952, repeated from (2) above)

‘father’

1SG	na-ajtaj
2SG	aka-ajtaj
3SG	na -kamee

What sets Ekagi apart from the examples surveyed earlier in this section is not just the lack of syncretism between 1st and 2nd person forms, but also the fact that the 1st person form is not the bare stem. In fact, in all the examples where there is a suppletive 1st/2nd person root (but no syncretism between the two person values), the 1st person form is overtly affixed, namely in Salt-Yui (25), Kaluli (26) and Fas (27). While this is not a large number of examples, it is nonetheless striking, because there is a clear implication between the suppletive pattern and the morphological encoding of 1st person: 1st ~ non-1st suppletion implies a zero-marked 1st person form. The non-3rd ~ 3rd person patterns surveyed in this section allow for both zero-marked and overtly affixed 1st person forms.

(25) Salt-Yui (Irwin 1974:28)

suppletive

non-suppletive

‘father’

‘wife’ (root *eu*)

1	na-abe	eu-na-bi
2	n-ab-in	eu-ni-bi
3	ira -ng	eu-ng-bi

(26) Kaluli (Grosh & Grosh 2004:15)

suppletive *non-suppletive*

‘daughter’ ‘sister’

1	n-a:la	n-ado
2	g-a:la	g-ado
3	ida	ado

(27) Fas (Baron 1986: 7)

‘father’

1	ay-εw
2	ay
3	bafo

Thus, in spite of the relative paucity of examples, 1st/2nd ~ 3rd suppletion presents a morphologically more diverse picture than 1st ~ non-1st. Some examples ((20)-(23)) could be interpreted as resulting from the extension of a 1st person form to 2nd person possessors, so that one might lump them together with the examples described in §4.1 as egocentric forms, broadly construed. Other examples ((24)-(27)) appear to be a morphologically distinct phenomenon whose interpretation remains so far obscure.

4.3. Second person ~ non-second person

With a 2nd ~ non-2nd alternation, the 1st person form shares a root with the 3rd person. Can this be construed as an egocentric form, on analogy with 1st/2nd person combinations in (20)-(23)? What little evidence there is suggests not. The one clear example in the sample comes from

Vitu, where the terms for father and mother both have distinct roots in the 2SG, as well as an anomalous prefixal possessor marker in place of the expected suffix.

(28) Vitu (Bachet & Van den Berg 2006:15, 53f)

	<i>suppletive</i>		<i>non-suppletive</i>
	‘father’	‘mother’	‘spouse’
1SG	tama-gu	titina-gu	go-gu
2SG	ka-mama	ka-titi	go-o
3SG	tama-na	titina-na	go-na

The suppletive 2SG form has some properties – at least diachronically – otherwise characteristic of the 1st person forms seen in §4.1. First, it was based on a term of address: Bachet and Van den Berg (2006:54) observe that *mama* and *titi* are obsolete term of address, since replaced by the Tok Pisin loans *papa* and *mama*. (*Titi* remains in use for ‘grandmother’.) Second, it appears to have originally been an uninflected form, based on a frozen version of the alienable possession construction, involving the general possessive classifier *ka* with a 2SG suffix, as in (28).

(29) *ka-a* *ruma*

POSS-2SG house

‘your house’

(Bachet & Van den Berg 2006:53)

Thus the set of lexemes involved, and the substitution of a reduplicated term of address (*mama*) fits in with the parental prototype as described above. Only it is the 2SG form

which is affected, not 1st. This suggests that the notion of egocentric reference is a parameter separable from the lexical semantic and morphological parameters.

The only other example comes from Kobon, where it is a minor phenomenon alongside a predominant pattern of 1st ~ non-1st suppletion. Here it involves the terms for ‘son’ and ‘daughter’. As expected, one of the roots, which is used for 1st person reference, is in fact an improper kin term (‘boy’, ‘girl’), seen also in ‘husband’, where 1st person *bi* is simply ‘man’ (see (11)). But in Davies’s presentation of the data, the alternative root for ‘son’ and ‘daughter’ exists only for 2nd person. As with other dedicated kin terms, it bears overt inflection for 2nd person (all the 24 kin terms listed by Davies have the prefix *na-*).

(30) Kobon (Davies 1981:234f)

	‘son’	‘daughter’	
1	<i>ñi</i>	<i>pai</i>	<i>ñi</i> ‘boy’
2	<i>ñi</i> / <i>na-b</i>	<i>pai</i> / <i>na-böñ</i>	<i>pai</i> ‘girl’
3	<i>ñi</i>	<i>pai</i>	

4.4. Three-way suppletion

There are only a few examples of three-way suppletion in the sample, and they all occur in languages which also have one of the two-way patterns described above. Thus in Mauwake, the basic suppletive pattern involves a bare stem for the 1st person, as in ‘elder sibling’ in (31). The three-way pattern in ‘mother’ involves, quite unusually, a bare stem in the 3rd person as well, leaving only the 2nd person form bearing an affix.

(31) Mauwake (Berghäll 2010:57)

	<i>non-suppletive</i>	<i>2-way suppletion</i>	<i>3-way suppletion</i>
	‘brother’	‘elder sibling’	‘mother’
1	y-omokowa	paapa	aite
2	n-omokowa	n-eepe	n-iena
3	w-omokowa	w-eepe	onak

Telefol is similar, although here the basic pattern for kin terms is to have a bare stem in both 1st and 3rd person in any case. (The *t-* in place of *k-* in the 2nd person form is phonologically regular before /i/, as in ‘husband’.) Note that the 3rd person root *fik* is cognate with Mian *hek* ‘elder brother’ which, like all kin terms in Mian, does not distinguish possessor person.⁶

(32) Telefol (Healey 1962: 15f)

	<i>non-suppletive</i>		<i>2-way suppletion</i>	<i>3-way suppletion</i>
	‘father’s elder brother’	‘husband’	‘cousin’	‘elder brother’
1	aaloob	imák	neék	baáb
2	k-aaloob	t-imák	k-alák	t-ííŋ
3	aaloob	imák	alák	fik

In Kaluli it is the non-3rd ~ 3rd person alternation which is primary. Suppletive items all have an initial *i-* in the 3rd person, though its status as an affix is unclear, since it is not found with non-suppletive items. In the three-way pattern, an intrusive uninflected 1st person form is added for some lexemes, while the 2nd and 3rd person forms look morphologically like those found in 2-way suppletive patterns.

⁶ On the sound correspondence /f/ ~ /h/, see Loughnane & Fedden (2011).

(33) Kaluli (Grosh & Grosh 2004:15)

	‘sister’	‘daughter’	‘father’
1	n-ado	n-a:la	do
2	g-ado	g-a:la	g-ol
3	ado	ida	iya

A particularly striking piece of evidence for the layered nature of 3-way suppletion comes from Ekagi, where Steltenpool’s (1969) dictionary supplements the paradigm for ‘father’ with an additional 1st person root.

(34) Ekagi ‘father’ (Drabbe 1952:16f, Steltenpool 1969)

1SG	na-ajtaj	or	wauwa
2SG	aka-ajtaj		aka-ajtaj
3SG	na -kamee		na -kamee

4.5. Person and number

So far we have concentrated on person, avoiding explicit discussion of number. This is because in most of the examples number is not relevant, either because a single stem alternation pattern is maintained regardless of possessor number, or because possessor number is not distinguished at all. But there are also a number of languages where number also plays a role in shaping the paradigm, which means that there is more going on than just a person-based split. Below we review the paradigmatic properties of person and number marking in those languages that mark both number and person of the possessor. (Note that in some of the languages there may be divisions within non-singular number: dual, trial etc.;

these are factored out here, since these additional number values always pattern together with the plural.)

In some of the languages the interaction is quite simple. Thus in the Angan languages (as indicated by the data from Kapau and Menya) possessor number is distinguished in the 2nd person only. Suppletion here opposes the 1st person root to the rest, so this number distinction plays no role. In the Oceanic languages of the sample (Siar-Lak, Kairiru, Vitu) and in the South Bougainville languages (Buin, Motuna), possessor person and number are consistently distinguished. Suppletion in these languages opposes a 1SG root to the rest, or in Vitu, 2SG to the rest.

(35) Person and number in the Angan languages

	SG	NON-SG
1	a	
2	b	d
3	c	

(36) Person and number in the Oceanic and South Bougainville languages

	SG	NON-SG
1	a	d, e (INCL)
2	b	f
3	c	g

In the Mountain Ok languages, Haruai, Umbu-Ungu and in Tauya there is a more interesting interaction of person and number. Three patterns are found.

The first pattern is that all the plural forms are the same as the 3SG form, and is said to occur in Telefol and Tifal (Healey 1962:20, Healey & Steinkraus 1972:108). (In Telefol this exists alongside an alternative strategy in which there is no number distinction.) About Umbu-Ungu, Head (1976:22) writes that ‘[t]he third person form could be called the default form, in that it is usually used, along with the appropriate possessive pronoun, when referring to the kin of more than one person’, which means at least some words display the pattern in (37a). (Unfortunately, since there are no examples in the text, it is not clear how restrictive the qualification USUALLY is.)

The second pattern is for the 2PL and 3PL forms to be the same as the 3SG. This is found in Bimin (Weber 1997:20) and Haruai (Comrie & Davies, in preparation). (Note that the conflation of 2PL and 3PL is also found in the verbal systems of these languages – as it also is in Telefol).

The third pattern occurs in Tauya, where the paradigm is organized into two forms, one for 3SG, one for the rest of the paradigm.

(37) Plural possessor marking patterns that conflate person; ‘egocentric’ cells are shaded

	SG	PL		SG	PL		SG	PL
1	a			a			a	
2	b			b				
3	c			c			b	
Telefol, Tifal, Umbu-Ungu				Bimin, Haruai			Tauya	

If we see possessor-based suppletion in terms of egocentric reference – arguably justified in these cases – the paradigm structures in (37) delimit what actually constitutes

egocentric. But while the first two types still involve a distinction between 1st person and the rest, the third involves a combination of person and number values. In the following section we will consider more closely the implications of this pattern.

5. Discourse or paradigm?

Are the patterns under investigation here determined lexically – e.g. as the pragmatically determined choice between two competing kin terms – or inflectionally, as morphologically stipulated suppletive paradigms? If the choice of forms is discourse-based, then we should expect (i) that the alternates be distributed according to a semantically coherent set of person values, (ii) that both alternates be available for possessors of all person values (although there may well be statistical preferences). Let us take up each of these two points in turn.

5.1. Semantic coherence

The less transparent the semantic motivation for a form, the more we may be inclined to turn to a morphological explanation. Most of the patterns surveyed here involve a simple opposition of three person values, where any configuration could in principle be given a semantic account. But where number starts to play a role, things may become less transparent. The most extreme example in the sample is Tauya (see (37)). In some respects kin terms in this language have the properties associated with an opposition between egocentric (1st and 2nd person, in this case) and non-egocentric reference: the egocentric form is the bare stem, and for certain kin types, employs an improper kin term. But the actual distribution of forms is 3SG vs. non-3SG. This does not make a great deal of sense in semantic terms, as {1st/2nd singular+all plural} is a set of values hard to reconcile with the notion ‘ego’, however broadly construed. Rather, the division into 3SG ~ other appears to be a morphological fact of the paradigm, reflecting the affixation pattern of suppletive and non-

suppletive items alike. This makes it an example of what Corbett (2007:18) calls MORPHOLOGICAL as opposed to MORPHOSYNTACTIC distribution of a suppletive root, in that it corresponds to a purely morphological pattern, and not to the value of a morphosyntactic feature. Note that in this case morphology and semantics are intimately bound, as the morphologically defined paradigm provides the template through which the semantic patterns are realized.

5.2. Availability

In a discourse-based competition between kin term doublets, possessor person may skew the statistics without conclusively assigning one alternate over the other. Consider the competition between English *father* ~ *dad* and *mother* ~ *mom* as revealed in the Corpus of Contemporary American English (COCA)⁷ in Table 2, showing instances where these terms appear preceded by possessive pronouns.⁸ What should be observed here is the ‘nursery terms’ *mom* and *dad* are more likely to be used with 1st and 2nd person possessive pronouns (as opposed to 3rd person) than the corresponding neutral terms *mother* and *father* are. But we would have no justification in saying that *mom* and *dad* were specifically 1st/2nd person forms, or in describing their distribution as being at all paradigmatic.

⁷ <http://corpus2.byu.edu/coca/>

⁸ Similar results are obtained using equivalent terms in the British National Corpus.

raw figures

	<i>father</i>	<i>dad</i>	<i>mother</i>	<i>mom</i>
<i>my</i>	32875	8416	36075	7808
<i>our</i>	982	192	1037	172
<i>your</i>	7844	2336	7991	2580
<i>his</i>	31193	3435	22998	2213
<i>her</i>	18061	1715	27530	2480
<i>their</i>	3611	487	3933	391
total	94566	16581	99564	15644

percentages of total by possessor person

	<i>father</i>	<i>dad</i>	<i>mother</i>	<i>mom</i>
1 st	36%	52%	37%	51%
2 nd	8%	14%	8%	16%
3 rd	56%	33%	55%	32%

Table 2: Distribution by possessive pronoun of *father* vs. *dad*, *mother* vs. *mom* in COCA

Since all of the phenomena from the current sample reported here are described in paradigmatic terms, we assume that we should not view them in the same light. However, we do find instances of competition which are partly constrained by paradigmatic considerations, indicative perhaps of a mixture of discourse-based and morphological factors. For example in Haruai (38), Comrie & Davies indicate that for at least some items, the (uninflected) 1st person form can be used for any possessor person, though it is unclear what conditions this variation. This situation can be construed as the asymmetrical competition between two options, one of which is available to all possessors, the other only to a subset.

(38) Haruai ‘father’ (Comrie & Davies, in preparation)

<i>option 1</i>			<i>option 2</i>	
1SG	acö	~		
2SG	acö		nawö	
3SG	acö		nwö	

Such variation, involving the generalization of the form used for 1st person possessors, is said to occur also in Tainae (Carlson 1991) and Kalam (Pawley 1966:87), and evidence for it can be found through a close reading of the descriptions of Namia, Tauya and Yale, where variation occurs in text examples. Where the generalized form is an improper kin term, or otherwise semantically distinct from the person-restricted kin term, one may be inclined to view this as lexical competition. Consider the paradigm of Kobon ‘daughter’, seen above in (30). Since *pai* is simply the generic word ‘girl’, it might better be represented as lexical competition between *pai*, available to all possessors, and the defective kin term *böñ*, available only to 2nd person possessors.

(39) Kobon (Davies 1981:234)

‘girl’			‘daughter’	
1	pai	~	na-böñ	
2	pai			
3	pai			

This is as if one could say ‘your girl’ or ‘your daughter’, but only ‘my girl’. This corresponds to what (Corbett 2007:26, adapting a term from Juge 1999) calls DIRECTIONAL OVERLAPPING

SUPPLETION. It is not suppletion in the canonical sense, but displays the crucial property of having a paradigmatically restricted root.⁹

In all the cases alluded to so far, variation has in fact involved the choice between two coding strategies, either an uninflected form or an inflected form. In the sample there is only one exception to this, where there is just a single coding strategy, but variation between suppletive and non-suppletive root patterns (‘alternating’ suppletion in the sense of Corbett 2007:23). In Tainae the word ‘wife’ employs the improper kin term *apaki* ‘woman’ for 1st person possessors and the dedicated kin term *apepi* for non-1st person (40), but there are examples in the text where 3rd person possession is inflectionally marked with either root: *ki-apepi* or *ki-apaki*. It is not clear whether this should be analysed differently from the preceding examples, but it is noteworthy for its rarity, since there is nothing inherently unusual about it.

(40) Tainae ‘woman/wife’ (Carlson 1991:30, 42, 83)¹⁰

1	<i>apaki</i>		
2	<i>s-apaki?</i>	~	<i>s-apepi</i>
3	<i>ki-apaki</i>		<i>ki-apepi</i>

(2nd person form of *apaki* not attested in the grammar)

⁹ Comrie & Davies (in preparation) offer evidence from Haruai for a distinction between true suppletion and directional overlapping suppletion. Within the general pattern of 1st ~ non-1st alternations, they analyse some items as suppletive, as in (38), and others as involving a defective item that lacks a 1st person form, where another lexeme is substituted for the gap. In the former case, the default citation form is the 1st person form, in the latter case it is the 3rd person form. Unfortunately, we have insufficient information about the other languages in the present sample to know if anything similar happens in them.

¹⁰ In the paradigm on p. 42 Carlson gives the 3rd person form with the suffix *-pa* in place of the feminine classifier *-pi*. The expected form *kiapepi* is given in the example sentence on p. 86, so we interpret this as a typo.

In sum, many of the examples exhibit a state in between lexical competition and full paradigmaticity, where one root is available to all possessor persons, and another root available only to a restricted set, typically 2nd and 3rd person.

6. Conclusion

The kin terms surveyed here are remarkable in the way they deploy a phenomenon which is decidedly irregular, namely suppletion, with a remarkable degree of cross-linguistic consistency both morphologically and lexically. These patterns overlap to a great extent with the interplay of kin term doublets as discussed by Dahl and Kopjevskaja-Tamm (2001), suggesting that possessor person-based suppletion has its origins in the pragmatically determined choice of different lexical items. The overarching generalization is that the form used for ego – that is, 1st person possessors – is singled out for special treatment, with the following properties:

- root is distinct from 2nd/3rd person root
- form is uninflected
- shows tendency to replacement
- with terms for older relatives, use of ‘nursery terms’ such as *mom*, *dad*
- with terms for spouses or children, use of improper kin terms (e.g. ‘man’, ‘child’)

But this being morphology, a simple functionally based explanation will never be the whole story.

First, all the other logically possible patterns of person-based suppletion are found as well. In some cases we might plausibly derive them from the dominant ego-based pattern (see

the first half of §4.2). But there are also many cases where the motivation is opaque, at least given our current state of knowledge.

Second, the suppletive patterns may interact with more general morphological patterns in the language, as in Tauya, showing that whatever functional motivation an alternation may once have had, it can be adapted to the established morphological system. As a result, what we superficially label person-marking forms may in fact involve a disjunction of person values, possibly analysable as an elsewhere form.

Third, more general properties of morphological irregularity may be involved. In most of the languages under review here this possibility is obscured by the fact that kin terms form a distinct morphological system. But in one language (Tauya), body part terms may also show suppletive paradigms, along the same 3SG ~ non-3SG pattern as kin terms, e.g. *mopu-fo* ~ *-momo* ‘body’ (MacDonald 2013:55).¹¹ Clearly, the discourse-driven arguments offered for kin terms cannot apply in the same way to body parts. Among other things, frequency may play a role here, independent of semantics.

The present pilot study embraces a diverse sample of 10-13 unrelated language families, so it is possible that the observations made here will scale up to the languages of the world as a whole. (Alternatively, it may turn out that New Guinea is a discrete linguistic area.) A central aim of this paper has been to establish a range of useful typological parameters as a prerequisite for a general cross-linguistic investigation. The available evidence shows that possessor person based suppletion – or at least what has been described as such – is widespread, though not exactly common. We are aware of the examples listed in Table 3:

¹¹ Unlike kin terms, other inalienably possessed nouns in Tauya have pronominal prefixes in the non-3SG forms.

Africa

Afro-Asiatic*	Yaaku (Hobley 1910:149f)
Bantu	Proto-Bantu (Guthrie 1967, cited by Marck & Bostoen 2011), and then variously across the family (e.g. Drossard 2004 cites Kikuyu, Dziebel 2007 cites Bemba and Nyamwezi, Vafaiean 2013 cites Ewondo, Van de Velde 2008:81 cites Eton)
Nilo-Saharan*	Maa (Heine 1980), Ngiti (Kutsch-Lojenga 1994), Surmic languages: Majang (Unseth 1998) and Tirmaga (Bryant 1999: 52f)
Ubangi	Mba languages (Pasch 1986, cited by Aikhenvald 2013)

Australia

Gunwinyguan	Bininj Gun Wok (Evans 2003:44), Nunggubuyu (Heath, Rumsey & Merlan 1982:13f)
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North America

Caddo*	Pawnee (Parks & Pratt 2008:542)
Kiowa-Tanoan	Kiowa (Watkins 1984:105)
Otomanguean	Chichimec (de Angulo 1933:156; cited by Mel'čuk 2006:428)
Pomoan	Kashaya (Buckley 1992:361, cited by Vafaiean 2013; Southern Pomo (Walker 2010)
Siouan	Assiniboine (Cumberland 2005:141f), Lakhota (Buechel 1939:103, cited by Croft 1990)

South America

Arawakan	Mojeño (Françoise Rose, p.c.), Nanti (Michael 2013:157)
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Macro-Je	Karaja (Ribeiro 2012:38)
Tupian	Sataré-Mawé (Koch-Grünberg 1932:39, cited by Dzielbel 2007)

* We were made aware of these by Dzielbel (2007), but have used sources other than the ones he has cited for Yaaku, Maa, Tirmaga and Pawnee

Table 3: Languages outside of New Guinea with possessor person-based suppletion in kin terms

We should also mention Japanese here, where kin terms have plain and honorific forms, the opposition being suppletive for some items. Their use at least approaches a 1st ~ non-1st distinction (Kaiser et al. 2001, Ortmann 2006), though otherwise person is not generally considered a morphosyntactic feature of Japanese.

In general terms the behaviour of the languages listed in Table 3 resembles what we have seen in New Guinea: a predominance of 1st ~ non-1st person alternations, but the existence of other alternations as well. The range is illustrated in (41): 1st ~ non-1st (Tirmaga), non-3rd ~ 3rd (Camus), non-2nd ~ 2nd (Kiowa) and 3-way (Majang). The same themes reoccur here too, e.g. the egocentric use of CVCV nursery terms in Tirmaga and Camus, or the fact that the 2nd person root in Kiowa is transparently related to a term of address (by reduplication: *tô:*), just as in Vitu (see (28) above).

- (41) Different suppletive patterns for ‘father’ in four languages (Bryant 1999:52f, Heine 1980:110, Watkins 1984:105 & Harrington 1928:160, Unseth 1998:154)

	Tirmaga	Camus	Kiowa	Majang
1SG	babáá	papá	nó:-tól	bààbéy
2SG	cógó-nú	papá	tò:tó	ḃááḃá
3SG	cógó-né	ményé	tól	épén

But equally, these tendencies interact with idiosyncratic (or at any rate, language-particular) morphological patterns. Consider the Ngiti word for ‘mother’ in (42), which has the roots *iya* and *tsa*. It is as good as impossible to motivate the distribution of these roots semantically, as their sets of values do not constitute any coherent natural class. For example, *tsa* combines 3rd person and 1st person inclusive, while *iya* combines 1st person singular and 3rd person logophoric possessors. But the distribution is easily accounted for in morphological terms: *tsa* is used when there is a prefix, *iya* when there is no prefix.

- (42) Ngiti (Kutsch Lojenga 1994:143, 204)

<i>suppletive</i> ‘mother’			<i>non-suppletive</i> ‘sister’		
	singular	plural		singular	plural
1INCL	-----	àlɛ- tsá -nà		-----	al-avhè-nà
1	íyà-du	íyà-kà		avhè-du	avhè-kà
2	íyà-nu	íyà-ku		avhè-nu	avhè-ku
3	kà- tsá -nà	abádhí- tsá -nà		k-avhè-nà	abádhí-avhè-nà
LOG	íyà-nà	íyà-yà		avhè-nà	avhè-yà

Note: unmarked vowels have low-mid tone

From the perspective of morphological typology, the most compelling issue that further cross-linguistic study can address is how the functional and discourse-based oppositions are integrated into the morphological system. While the genesis of suppletion through the merger of distinct lexemes into a single paradigms has been explored for individual languages or language families (e.g. Chumakina, Hippisley & Corbett 2004 on Russian, Juge 1999 on Spanish, Strunk 1977 on Indo-European), the phenomena discussed in the present study present an opportunity to trace very similar processes in parallel across a wide variety of languages.

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Abbreviations

INCL-inclusive, PL-plural, POSS-possession, SG-singular,

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