Animacy-based gender systems in Central Africa

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Investigating the linguistic diversity of the Ituri rainforest in Central Africa, Vorbichler (e.g., 1963) observed that several languages of this zone display grammatical traits reflecting a categorization of nominal referents according to a ± animate distinction. However, only few languages of the area have been described explicitly to possess an overt animacy-based gender system. Based on a dedicated survey, I show that such noun classification is indeed an areal feature of Central Africa in general but that it is implemented in many languages by behavioral properties of nouns in other grammatical domains that can but need not lead to full-grown gender in the narrow sense. The article assesses noun classification in all relevant language groups, compares the different gender systems, and evaluates their distribution from a synchronic and diachronic perspective, with the final goal to determine its current areal significance and historical source.

Introduction

The African continent is a global hotbed of languages with grammatical gender (Heine 1982, Nichols 1992), as defined by these two authors as well as Greenberg (1978), Corbett (1991) and many other scholars, namely as noun classification expressed by agreement. Three types of gender systems have already figured prominently in the literature in African linguistics and beyond. First, there are the typologically unique systems with a large inventory of non-sex-based genders known under the term "noun classes" and commonly ascribed to the large Niger-Congo family in western, central and southern Africa (see, e.g., Westermann 1935, Williamson 1989: 31-40). Second, sex-based systems with two or three genders are mostly found in Afroasiatic languages of northern and northeastern Africa (see, e.g., Greenberg 1960, Frajzyngier 2012: 522-523, 538-40) and a few smaller families, for example, in Khoe-Kwadi, a language group of the Kalahari Basin (see, e.g., Köhler 1962, Güldemann 2004). Starting with Güldemann (2000), gender systems from two other families of the Kalahari Basin, Kx'a and Tuu, have also been subjected to systematic comparative investigation. The systems are typologically interesting for their systemic organization and are semantically based on animacy rather than sex. These three types, which all involve a considerable amount of semantically arbitrary assignment, account for the large majority of African cases heretofore discussed and also surveyed globally (see, e.g., Corbett 2013a, b).

   Gender systems in many languages of Central Africa are of a yet different type but remain far less known and documented. They are mostly binary, semantically transparent gender systems based on a ± animate distinction. An explicit and dedicated description of such a system is Vorbichler's (1963) treatment of the Ituri Bantu language Beeke (D335).[1]

(1)   a. **nyama**   **ndzo**   **ba-nyama**   **mbaa**
         animal   AN.SG.DEM   PL-animal   AN.PL.DM
         'this animal'   'these animals'

      b. **bitu**   **ni**   **ba-bitu**   **ni**
         bow   IAN:DEM   PL-bow   IAN:DEM
         'this bow   'these bows' (Vorbichler 1963: 33)

(2)   a. **seki**   **endi [< a-endi]**   **seki**   **bendi [< ba-endi]**
         tortoise   3AN.SG.SBJ:go   tortoise   3AN.PL.SBJ:go
         'the tortoise went'   'the tortoises went'

      b. **singa**   **esei**   **ba-singa**   **esei [< ? V-(e)sei]**
         trap   3IAN.SBJ:sleep   PL-trap   3IAN.SBJ:sleep
         'the trap "slept" (= remained set up)' 'the traps "slept"'
         (Vorbichler 1963: 33)

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1. For all Bantu languages, I provide the current reference code (Maho 2009) at the first mention, which, however, does not reflect their exact genealogical classification.

(3)   a. **mè-m̀-èní**   **tò**   **mè-ḿ-èní**   **tò**
        1SG.SBJ-3AN.SG.OBJ-see   ?   1SG.SBJ-3AN.PL.OBJ-see   ?
        'I saw him/[her]'   'I saw them (animal, human)'

      b. **mè-é-ènì**   **tò**
        1SG.SBJ-3IAN.OBJ-see   ?
   'I saw it/them (thing, tree)'   (Vorbichler 1963: 33)

Examples (1)-(3) show that in various agreement contexts an animate gender entailing a number distinction illustrated in the examples under a. is opposed to an inanimate number-insensitive gender shown in the counterparts under b.

Table 1 displays the entire agreement system of Beeke as described in the source. Throughout the five agreement targets, a tripartite coding distinction establishes three agreement classes that I label animate singular, animate plural, and inanimate.

Agreement Class	Adjective/ numeral	Possessor pronoun	Demonstrative	Subject on verb	Object on verb
1 AN.SG	**ma-**	**yV-**	**ndzo**	**à-**	**-Ǹ-**
2 AN.PL	**ba-**	**(m)bV-**	**mbaa**	**ba-**	**-Ń-**
3 IAN	**a-**	**Ø**	**(i)ni**	**?V-**[2]	**-è-**

Table 1. Agreement classes across various targets in Beeke

Figure 1 displays the picture in the form of a chart commonly used in describing gender systems (cf., e.g., Heine 1982, Corbett 1991). There is one difference to earlier conventions in that the second inanimate gender is represented as a circle around its single agreement class. This is tied to an important trait of gender exponence to be observed more often in the following discussion. That is, while the nouns themselves can vary for number (cf. (1)b and (2)b), the agreement class 3 only conveys inanimate gender and is "number-insensitive" or "transnumeral". While such agreement classes are not unknown (cf. Güldemann (2000) for Tuu and Kx'a languages of the Kalahari Basin) and can then be dedicated to the single meaning of a gender value (cf. also Harvey (1997) on Aboriginal languages of Australia), their significance in the typology of gender systems remains little explored until today.

         SG   **PL**
    1 -Ǹ- —————— AN
    2   ——— -Ń-
    3   ⓔ́ IAN
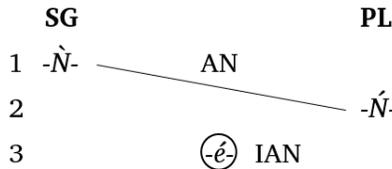
Note: agreement classes represented by verbal object indexation
Figure 1. The animacy-based gender system of Beeke (after Vorbichler 1963)

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2. The source does not specify the exact form of the inanimate subject index, so that I only represent it tentatively as **?V-**.

I am not aware of a study other than Vorbichler's of Beeke that focusses on the description of such a binary animacy-based gender system in a Central African language by analyzing it in a sufficiently transparent fashion let alone dealing with it from a comparative perspective. Related systems have only received attention when involving an additional semantic elaboration of the basic system by a sex-based distinction for animates, as is the case with Zande (cf. in particular Claudi 1985; see §1.2.6 below).

Vorbichler's work is also unique and pioneering in another way. Referring to a yet earlier contribution by Schebesta (1952: 435-437, 450), the author (1963: 23-24, 27, 34; 1968: 414-415) tries to tackle the historical origin of animacy-based gender systems in Central Africa. For the narrow context of the Ituri rainforest, he ventures the hypothesis that they result from prehistorical substrate interference by languages that were spoken by indigenous forager groups known as "Pygmies"[3] before their commonly assumed shift to languages of food-producing groups that colonized the area later. He writes (1963: 34):

> We owe the discovery of this (animacy-based gender) distinction in Sua-Kango (part of the Bira-Komo group of Bantu) to Schebesta. A problem still to be resolved is whether and how this distinction is conveyed in the East Sudanic Mamvu-Lese-Bvuba-Efe group (= Mangbutu-Efe of Central Sudanic) and what the situation is in Asua-ti, the close relative of the Mangbetu dialects (= Mangbetu-Asua of Central Sudanic). Should the division into animate and inanimate entities be shown to hold for all groups of rainforest-farmer and Pygmy forager languages of the Ituri, it can only be explained by means of a third still active language stratum, as neither Bantu nor East (aka Central) Sudanic languages know it. [translation TG]

The above observations make it worthwhile undertaking a more comprehensive synchronic and diachronic assessment of noun classification in Central Africa. A precondition for such a survey is a robust language classification that represents the relevant linguistic groups completely. Since Greenberg's (1963) classificatory framework is methodologically and empirically inadequate (cf., e.g., Campbell & Poser 2008), I follow the detailed outline in Güldemann (2018b), which is more cautious with taking genealogical relations for granted.

A first approximation to the area's linguistic diversity is contained in Vorbichler's hypothesis. He assumes for the Ituri forest three linguistic "layers", namely Bantu, "East Sudanic", and "Pygmy". The two last concepts are, however, in need of clarification according to a modern language classification. What Vorbichler refers to as "East Sudanic" is a concept going back to Tucker (1967) and must not be confounded with the East Sudanic proposed by Greenberg (1963), which is a very distinct and genealogically intended set of languages (see Güldemann 2022 for a recent detailed discussion). Tucker's East Sudanic is a genealogically diverse and purely areal concept comprising the modern Central Sudanic family commonly subsumed under Nilo-Saharan and Ubangi affiliated normally to Niger-Congo, which need to be separated here. With respect to the languages of Central African

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3. I refrain from the use of the term "Pygmy" as much as possible and replace it with "(Central African Rainforest) Forager." I am aware of the fact that this alternative term may not be fully adequate for each group that is/has been subsumed conventionally under the term "Pygmy".

Rainforest foragers aka "Pygmies", in spite of their potentially important historical role, they do not constitute a separate genealogical unit because all groups have undergone a shift to languages spoken by colonizing food-producing peoples, who were themselves linguistically heterogeneous (cf., e.g., Bahuchet 2012). In summary, the area at issue hosts a larger linguistic diversity than Vorbichler's three groups and I survey it below according to the four groups Central Sudanic, Ubangi, Bantu, and Central African forager.

A few theoretical remarks on gender and more widely nominal or noun classification systems as well as the assignment feature ± animate are, however, in order first. As indicated above, I adopt the typological approach by such works as Heine (1982), Corbett (1991), Nichols (1992) etc. in defining gender as noun classification expressed by agreement. That is, gender is a cross-section between two wider and in principle independent domains, the first primarily semantic-functional and the second purely morphosyntactic. Since gender is a structurally defined subtype of noun classification, it is fruitful to also have an eye on other "lexical or grammatical devices that group nominals, and/or their referents, into categories" (McGregor 2002: 1), which turns out to be particularly relevant in the area at issue. The traditional definiton of gender does not necessarily contradict such recent more complex approaches to gender as assumed by Corbett (2014) within canonical typology or proposed in Wälchli & Di Garbo's (2019: 330-331) "dynamic" characterization. I also follow Heine (1982), Corbett (1991: 5, 168-170), and other scholars in considering so-called "pronominal" gender systems as an instance of grammatical gender, even though pronouns do not instantiate the most canonical type of agreement.

I view the ± animate distinction as a binary "macrogender" opposition - a concept proposed by Nichols (1992: 126-127) for the highest **semantic** level of nominal categorization. This is much wider than narrow gender defined **structurally** by agreement. It is thus conveyed frequently by grammatical phenomena other than agreement. As I show below, such reflexes of noun classification turn out to be highly relevant in the area at issue and crucially inform the emergence of a certain type of gender system. The macrogender concept also turns up in other studies, for example, Croft (1994) and Dahl (2000a, b). Regarding "elementary gender distinctions", Dahl (2000a: 101), for example, comes to the following basic generalizations about gender and animacy:

(1) In any gender system, there is a general semantically-based principle for assigning gender to animate nouns and noun phrases.

(2) The domain of the principle referred to in (1) may be cut off at different points of the animacy [aka nominal] hierarchy: between humans and animals, between higher and lower animals, or between animals and inanimates.

Dahl's second generalization implies that the ± human opposition is a second macrogender option. The typical gender system of Niger-Congo is a good example, in that it involves one central human gender that is semantically opposed to a larger set of genders in the non-human domain (see §1.3 on Bantu as a salient example). This system with a multitude of non-human genders also entails another important

point regarding a binary macrogender opposition, namely that one or even both values can subsume a **set** of more specific agreement-based genders.

The term "animate" can be ambiguous. It occurs in the pertinent concept "animacy hierarchy", involving at least [human (animate) > (non-human) animate > inanimate],[4] but also as a specific cut-off point on this hierarchy vis-à-vis inanimate. In the present context, the second narrower meaning is crucial and needs to be kept apart from the wider concept. In order to avoid confusion, I thus speak here neutrally of the "nominal hierarchy", in line with Matthews (2014), rather than using "animacy hierarchy". Moreover, within a macrogender opposition entrenched in the nominal hierarchy, I refer to the values of animate and human as "higher", as opposed to the "lower" values of inanimate and non-human, respectively.

With respect to the grammatical treatment of specific nouns as animate, it needs to be kept in mind that it is a language-specific and, to the extent it is semantic, culture-specific phenomenon. This has been amply discussed regarding animacy-based gender systems in Algonquian languages (cf. e.g., Black-Rogers 1982, Straus & Brightman 1982, Goddard 2002, Kilarski 2007). Accordingly, nouns that count as animate in one system may well be treated as inanimate in another and vice versa and the categorization may not meet semantic expectations from a cultural European or scientific biological perspective. This also implies that the feature +animate may not simply be the mere summation of nouns for humans and (higher) animals.

A final caveat pointed out to me by R. Boyd is the problem of securely identifying animacy-based noun classification. Language descriptions that report it may spend little discussion on the problem but be content with a few examples where animal and human nouns are treated alike. With such limited evidence, there is indeed the risk to diagnose a grammatical distinction where one is only confronted with the recurrent personification of certain entities in special discourse genres, notably folktales. While this may be a possible source of error, I note that explicit reports of a ± animate rather than ± human distinction in the Central African zone at issue are unexpectedly frequent compared to other areas of the continent (see §2 for a more detailed discussion of the areal concept), so that I follow the information and terminology given in the cited sources.

The remainder of the paper is organized as follows. In §1, I survey the relevant area in Africa regarding the wider domain of noun classification, with a focus on gender but including differential animacy-based grammatical behavior. The four language groups to be considered are Central Sudanic (§1.1), Ubangi (§1.2), Bantu (§1.3), and Central African forager languages (§1.4). In §2, I summarize the results concluding in particular that animacy-based gender and associated noun categorization is an areal feature, for which Ubangi is most likely the central modern group.

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4. Further possible distinctions on the hierarchy are not relevant in this context and thus not discussed here (cf., e.g., Helmbrecht *et al.* (2018) on proper names or Contini-Morava (2008) on kinship terms within the domain of human referents).

1. Noun classification across Central Africa

The present survey aims first of all at establishing the so far unrecognized recurrent existence of animacy-based gender systems in Central Africa and determining their approximate areal distribution. As to be shown below, such systems are best understood against the background of phenomena that reflect the semantic categorization of nouns according to a ± animate opposition but do not yet establish the phenomenon of gender. The focal area turns out to straddle the savannah belt north of the rainforest and the transition zone to the Congo Basin and its northern parts.

This zone hosts numerous languages, many of them not yet described sufficiently. Table 2 shows my language survey for Central Sudanic and Ubangi based on Glottolog (Hammarström *et al.* 2022). It also lists comparative studies that partly substitute for a complete group survey, which applies to Bongo-Bagirmi, Moru-Madi, and Gbayaic.

	Language (group)	N	G	S	C	Comparative study
Central Sudanic	Bongo-Bagirmi + Sinyar	39	9	8	**12**	**Santandrea 1963b, Boyeldieu 2013**
	Kresh	1	0	1	**1**	-
	Aja	1	0	1	**1**	-
	Birri	1	0	1	**1**	-
	Moru-Madi	10	4	2	**2**	**Tucker 1967, Kilpatrick 2006**
	Lenduic	3	1	1	**2**	-
	Mangbutu-Efe	1/6	3	0	**3**	-
	Mengbetu-Asua	1/2	1	1	**2**	-
Ubangi	Gbayaic	14	5	1	**3**	**Moñino 1998, 2010a**
	Mundu-Baka	1/12	4	2	**6**	**Winkhart 2015**
	Bandaic	17	4	4	**4**	**Santandrea 1965**
	Ndogoic	5	0	5	**5**	**Santandrea 1961**
	Feroge-Mangaya	2	0	2	**2**	-
	Indri	1	0	1	**1**	-
	Togoyo	1	0	1	**1**	-
	Ngbandic	8	2	3	**4**	**Boyeldieu and Diki-Kidiri 1982**
	Zandic	6	1	5	**5**	**Tucker 1959, Santandrea 1965**
	Mbaic	4	0	2	**2**	**Pasch 1986**

Note: no. of languages in unit = N (forager/non-forager languages), grammars = G, sketches for languages without a grammar = S, consulted sources = C

Table 2. Language survey of Central Sudanic and Ubangi

I tried to attain an as dense sample as possible for the two groups, depending on the available grammars, grammar sketches, and comparative studies, but it can be seen that some subgroups are quite poorly known. Bantu languages of the area have been surveyed recently regarding their gender systems by Di Garbo & Verkerk (2021) and Verkerk & Di Garbo (2022), whose results only needed to be adapted and supplemented for the present purpose. My forager language survey is explained in more detail in § 1.4.

In the available sources, I recorded all gender systems described as such. Since many languages in the area have a pronominal gender distinction, which an author may not refer to explicitly as gender, I also looked systematically at the pronoun paradigms of surveyed languages, in order to determine whether these instantiate gender. Finally, I searched the sources for a few diagnostic terms. The mention of a "neuter pronoun" served as one proxy for a ± animate or ± human pronominal opposition. Looking for such terms as "(in)animate", "animal", "human" etc. facilitated to find grammatical phenomena that reflect a distinction between animate and inanimate nouns, including those beyond narrow gender.

1.1. Central Sudanic

Central Sudanic is an independent language family rather than a proven member of a Nilo-Saharan super-family (Güldemann 2018b: 261-271). It comprises nine basic groups listed and shown in Map 1. Mangbutu-Efe and Mangbetu-Asua have encroached into the rainforest.
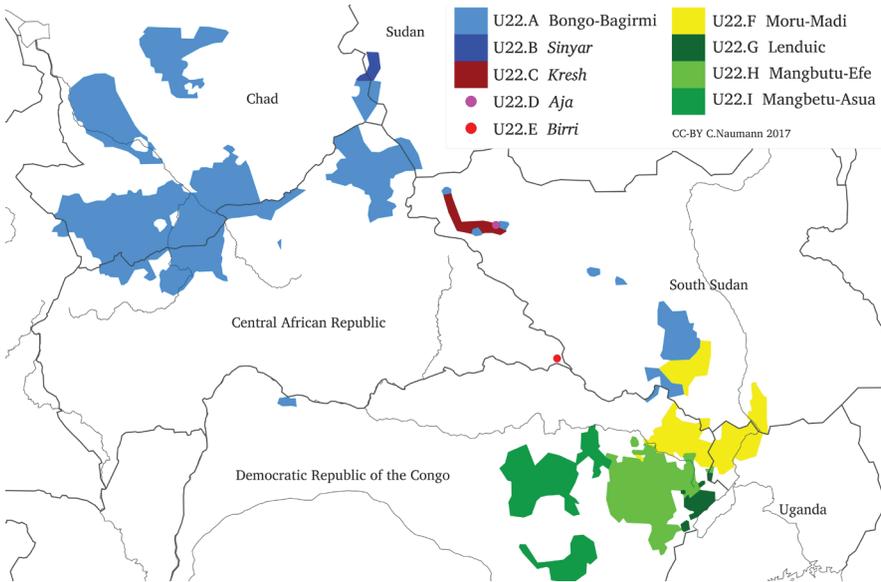
Map 1. Central Sudanic language groups (Güldemann 2018b: 261)

Gender and other forms of noun classification are generally not salient in Central Sudanic. I have not found any signs of gender or less grammaticalized forms of animacy-based differential noun behavior in the three units Birri (Santandrea 1966), Lenduic (Deleu 1934, Tucker 1967, Kutsch-Lojenga 1994), and Mangbetu-Asua (Larochette 1958).

The languages of two further units, Moru-Madi and Mangbutu-Efe, also lack gender but occasionally show an asymmetric noun behavior due to animacy. Thus, Blackings and Fabb (2003: 363, 378, 399) report for Ma'di (Moru-Madi) that some postpositions reflect a ± animate distinction. For Lese (Mangbutu-Efe), Vorbichler (1965; 1968: 410-footnote 2, 414) states that genitive constructions interact with animacy features of the possessor. Moreover, the goal postposition has two forms: while **-ɓɔ** is reserved for animates, as in (4)a and b, **-ni** is used for all inanimates, as in (4)c, and possibly animates, provided the noun is extended by another locative suffix, as in (4)d.

(4) a. **àfa-ɓɔ**
         father-AN.DIR
         'zu meinem Vater hin [to my father]'

     b. **u̱ra-ɓɔ**
         animal-AN.DIR
         'zum Tier hin [to the animal] '

     c. **mɛsà-ni**
         table-IAN.DIR
         'zum Tisch hin oder vom Tisch weg [to/away from the table]'

     d. **àfɔ̀-ba-ni**
         father-at-IAN.DIR
         'zum Vater hin oder vom Vater weg [to/away from father]'
   (Vorbichler 1965: 90-1)

While the two Central Sudanic isolates Kresh and Aja are among the least known languages, the situation for them seems to be somewhat different to that discussed so far in that the use of pronouns seems to be partly steered by a ± animate distinction. The following quote from Santandrea's (1976: 98) description of Kresh indicates that third-person pronouns tend to be reserved for human and other animate referents – a situation that may also hold in the geographically close Aja (Santandrea 1976: 244-text 5, footnote 4):

> The following may be taken as general rules about the matter, with a great allowance for exceptions. "Our" neuter pronoun is normally left out in these languages, both as a subject and as an object. If stress is laid on it, a suitable demonstrative may replace it. When speaking of a particular object, the word "thing" is frequently heard, usually followed by a demonstrative. For the plural, the pers[onal] pron[oun] is employed when clarity of speech is required. This is always done when speaking of animals, unless there are other terms which replace it: e.g. a demonstrative.

The last Central Sudanic unit to be dealt with is Bongo-Bagirmi. It is by far the largest group but historically understood well due to P. Boyeldieu's extensive

comparative research. Proto-Bongo-Bagirmi pronouns are assumed to have lacked any distinction concerning noun classification and this also applies to its closest relative Sinyar not included in Boyeldieu's reconstruction (cf. Boyeldieu 2013). However, some modern languages do show signs of nominal classification. For example, the Saraic language Mbay is described by Keegan (1997: 68, 74, 79, 99, 106, 158) to show various grammatical phenomena that are steered by an animacy-based distinction of nouns. In particular, verbal object cross-reference for humans and animals is conveyed by a pronoun as opposed to zero for inanimates, which parallels the situation described above for Kresh. Such special behavioral phenomena of animate nouns are also mentioned in the grammatical descriptions of Kenga (Neukom 2010: 50-2, 62-3, 68-9, 110-1, 114, 205, 236), Sar (Palayer 1989: 144-6, 270, 274, 276-7), and Kaba Na (Keegan & Koutou 2014: xiv). However, except for one language dealt with further below, no case of overt pronominal gender is known in the large western branch of Bongo-Bagirmi (cf. also Keegan's (2012) survey of Central Sara languages).

Pronominal sex-gender distinctions are known from two languages of non-western Bongo-Bagirmi, so that I surveyed this group to the maximally possible extent without finding any other cases (cf. Persson 1997, Waag & Phodunze 2015). According to Andersen (1981: 32-40, 45-46), Jur Modo distinguishes masculine, feminine, and neuter in third-person singular pronouns, whereby the neuter **mu~mò** only exists in one paradigm. However, it is unclear how deeply entrenched this tripartite divison is. Persson and Persson (1991: 13-14) report that Andersen's neuter form is related to information structure rather than gender and that the sex distinction is not categorical, whereby the "masculine" **bù~bò** in particular is not restricted to animate let alone masculine referents. The latter instability may be due to its recent grammaticalization from a person-referring noun also appearing in agent noun derivations (Andersen 1981: 35). All this uncertainty does not allow one to assess this pronominal system in terms of gender features, including animacy.
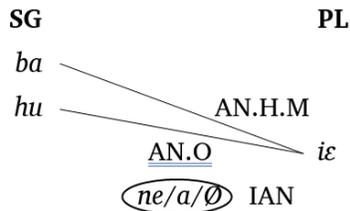
Figure 2. The pronoun system of Bongo (after Santandrea 1963a: 32-3)

For Bongo, Santandrea (1963a: 23, 32-36) also describes an inventory of four pronouns differentiating masculine human, feminine human+animal, and neuter, whereby the latter is said to have no plural counterpart. This information amounts to the tripartite gender system in Figure 2 with a basic animacy-based macrogender opposition in which animate referents show a further subclassification of masculine human vs. other animate. However, the picture is unclear, as Nougayrol (2013: 325-7) provides partly different information.

The western Bongo-Bagirmi language Furu, aka Bagiro, is special: this southernmost family member spoken on the Ubangi River behaves in various ways like its unrelated Ubangi neighbors (see §1.2 below). The expression of third-person singular pronominal possessors displays a distinction between a suffixal mid-tone for animate vs. *ná* for inanimate possessors, as shown in (5)a vs. (5)b (Boyeldieu 2000: 74-5, 86-92, 98, 118-20).

(5) a. **tàlā**   < **[tàlà-ˉ]**
        mouth:3SG.AN.POSSR
        'sa bouche [his/her/its mouth]'

    b. **tàlà**   **ná**
        mouth   3SG.IAN.POSSR~DEF
        'le/la/son bord, ouverture, tranchant [the/its edge]'

    c. **tàlā**   **ná**
        mouth:3SG.AN.POSSR   DEF
        'sa bouche en question [his/her/its mouth (referred to)]'
   (Boyeldieu 2000: 91)

The element **ná** has another grammatical function as a definite marker, which explains the ambiguity in (5)b. as well as the possibility that the mid-tone animate possessor form can co-occur with it, as in (5)c. The general situation amounts to a restricted animacy-based pronominal gender system comparable to the one described for Beeke in the introduction. Furu also resembles its neighbors in that animate and inanimate nouns display a different grammatical behavior in other respects. Thus, inanimate nouns are not resumed pronominally as verbal objects in relative clauses (Boyeldieu 2000: 111-113) and as subjects in clause chaining (ibid. 151, 211), which parallels the situation in Kresh and similar cases where the animacy-based classification is instantiated by an opposition of overt pronoun vs. zero. Finally, nouns appear to select demonstratives partly according to their animacy feature (ibid. 120-122).

1.2. Ubangi

In the following, I survey the languages commonly subsumed under Ubangi. While most linguists view these languages as belonging to Niger-Congo[5], they cannot be regarded as forming a proven family (cf. Moñino 1988, Güldemann 2018b: 213-223). While I keep using the term Ubangi, the language set is best conceived of neutrally as an areal pool of Non-Bantu Niger-Congo languages. Map 2 shows their distribution, which turns out to be most deeply entrenched in the area of interest; some languages have entered deeply into the rainforest region. Gbayaic in the west in particular is not closely related to the remainder (Moñino 2010b). But even without it, Ubangi is a complex group whose historical profile remains opaque. Güldemann (2018) recognizes about ten subgroups whose exact relations to each other are uncertain, whereby the picture is particularly unclear in western South Sudan for the cluster

5. Dimmendaal (e.g., 2011: 319-320) excludes Ubangi from Niger-Congo, albeit without justification.

referred to in Map 2 as NDOGOIC. Given the overall complexity of Ubangi, I deal with major subgroups in separate sections; for identifications on the language level and the subclassification of secure lineages I follow Glottolog.
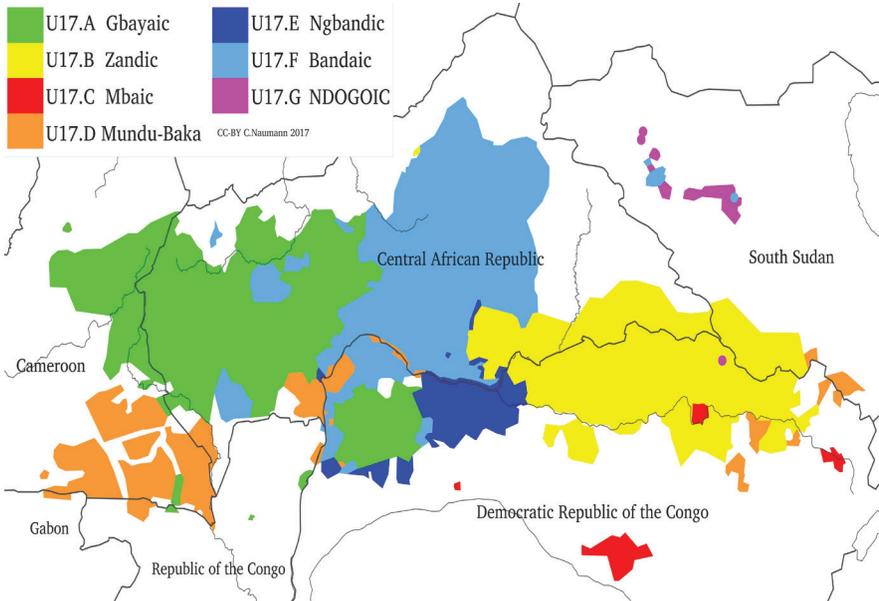
Map 2. Ubangi language groups (Güldemann 2018b: 213)

1.2.1. Gbayaic

I start out with the situation in the genealogically isolated Gbayaic family with 14 languages. The data given in Moñino's (1995, 2010a) comparative studies show that these languages recurrently have an animacy-based distinction in various third-person pronouns. A crucial point is that only some contexts involve an inanimate form while elsewhere an overt animate pronoun contrasts with zero anaphor, as described above for Furu. This situation is attested in all major branches of the family, particularly in southern and eastern languages. Table 3 gives a summary of Moñino's surveys and (6)-(9) are illustrating examples.

Classification (Hammarström *et al.* 2022)		Language (variety)	AN	IAN	
Southern-Western	Bokoto-Gbeya	Gbaya Bossangoa	ʔà̰	-à	POSSR
	Northwest	Northwest (Yaayuwee)	ʔà̰	-à	OBJ
	Southern	Southwest (Ɓuli)	ʔà̰	yò	SBJ
Eastern	Gbanu-Manza-Ngbaka	Manza	ʔà̰	mâ	SBJ
		Ngbaka Minagende	ʔà̰	má	SBJ

Table 3. Gender distinction in third-person singular pronominal forms across Gbayaic (after Moñino 1995: 65, 98, 169, 227, 242, 421-422; 2010a: 89)

Gbaya Bossangoa (Southern-Western, Bokoto-Gbeya)
(6) a. **ɗòŋ-à̰**   /ɗòŋá̰à̰/
        back-3SG.AN
        'his/her back ~ behind him/her'

    b. **ɗòŋ-à**   /ɗòŋáà/ ~ [ɗòŋá̰à̰]
        back-3SG.IAN
        'its back ~ behind/after it'
        (Moñino 1995: 169-170 including phonemic differences)

Northwest, Yaayuwee (Southern-Western)
(7) a. **ʔám   zɔ̀ká   ʔà̰**
        1SG   see   3SG.AN
        'Je l'ai vu [I have seen him/her]'

    b. **ʔám   zɔ̀káà**
        1SG   see:3SG.IAN
        'Je l'ai vu [I have seen it]' (Moñino 1995: 65)

Southwest, Ɓuli (Southern-Western, Southern)
(8) a. **ʔà̰   gàsá**
        3SG.AN   be.big
        'il est grand (qqun.) [s/he is big]'

    b. **yò   gàsá**
        3SG.IAN   be.big
        'c'est grand (qqch.) [it is big]' (Moñino 1995: 98)

Ngbaka Minagende (Eastern)
(9) a. **mbȧlȧwȧlȧ   yú,   à̰   úsú   tí   bùlúkù**
        monitor.lizard   escape   3SG.AN   hide   under   grass
        'le varan s'enfuit, il se cacha sous les herbes [the lizard escaped, it hid
         in the grass]'

b. **tè   má   tiá**
   tree   3SG.IAN   fell
   'l'arbre est tombé [the tree has fallen]' (Maes 1959: 19-20, 34, 120)

The above data only show cases of overt pronominal distinctions, which, depending on the language, arise in different morphosyntactic contexts, namely for bound possessors in (6), for partly bound objects in (7), and for free subjects in (8) and (9). The animate forms are cognate, despite the variable grammatical roles, and go back to Proto-Gbayaic ***ʔã̀** with a plural counterpart ***wà** (Moñino 1995: 421-422). The inanimate forms, however, differ in form as well as grammatical role and thus appear to have been innovated later in addition to the basic pronoun set ***ʔã̀/ wà**. This diversity indicates that individual languages refer(red) to inanimates by different devices in different contexts, including pronominal zero (see below). Hence, one must not conclude from the diverse modern data that animacy-based noun classification by means of pronouns is the result of recent innovation. It is in fact likely that the proto-language had a system as in Figure 3, which already encoded the distinction by overt pronouns for animates vs. zero for inanimates, at least as a strong discourse preference.

SG   **PL**

*ʔã̀ ⟍   AN
                              ⟍
                                    *wà

Ø   IAN

Figure 3. The possible animacy-based pronoun system of Proto-Gbayaic

The system in Figure 3 is also described today, for example, by Samarin (1966: 81, 102, 135) for Gbaya Bossangoa: overt pronouns, if used, are strongly preferred for animates, even if one grammatical context involves an inanimate form (see Table 3) and the system leaks depending on the discourse. The language also uses adnominal plural marking far less on inanimate nouns, a trait Tucker & Bryan (1966: 89) mention for Gbayaic in general.

The proposed Proto-Gbayaic system combines various traits mentioned already for other Central African languages. In particular, the structure in Figure 3 is basically that of Beeke in Figure 1 of the introduction. It is a binary system with a macrogender distinction of animate vs. inanimate, in which the lower gender does not entail the encoding of number. The major difference to Beeke is that anaphor for inanimate nouns in Proto-Gbayaic is not just number-insensitive but lacks overt exponence entirely. This pattern, emerging already in some Central Sudanic languages, is called henceforth a "partly covert" pronominal gender system.

It should be recognized that the situation in some Gbayaic languages is ambiguous because authors normally do not consider subtle tendencies regarding the presence or absence of pronouns to be a possible reflex of a meaningful grammatical distinction. Thus, V. Boyd's (1997) description of the Eastern Gbayaic language Mbodomo deals with various intricacies of third-person pronouns but

does not report the relevance of animacy. She only refers to this feature once when observing (p. 151-152) that certain anaphoric contexts strongly prefer the pronominal resumption of animate nouns, as illustrated in (10).

(10) **kóé   ká   mí   há   nè   kpòó   à   ná   àó   bòŋ**
      woman REL 1SG give 3SG.AN meat   3SG.AN COP   friend 1SG.POSSR
      '**The woman** to whom I gave meat, **she** is my friend.' (Boyd 1997: 152)

Screening through the data of her entire study, including the small text corpus, it turns out that the pronominalization of animate referents is recurrent, albeit not obligatory, but that there is not a single clear case where third-person pronouns resume an inanimate noun. Moreover, for all sentences where the English translation features a neuter pronoun *it* its counterpart in Mbodomo is zero anaphor. I give all examples encountered in (11)-(13),

(11) **mè   tí   kù   mà   gbàlà góχ   kè   láχ   né   Ø   ná**
      2SG must take IMP   bone   serpent DEM   leave COM   NEG
      'But you must not take **a bone of this serpent** and leave with **it**.' (Boyd 1997: 199)

(12) **ɓéɾkìdì kpòó   mbòŋgá   kè   ɲɔ̃ŋ   Ø**
      break   meat   zebra   DEM   eat
      '… cut off some of **this zebra meat** and ate **it**.' (Boyd 1997: 204)

(13) **Ø   ná   sɔ́nsí   mè**
            COP   chance   2SG.POSSR
      '**it** is your chance …' [COP *ná* normally preceded by subject topic] (Boyd 1997: 204)

While Boyd's description may lack some important facts, the available data suggest that third-person pronouns are effectively reserved for animate nouns. As shown in Figure 4, this makes Mbodomo another modern candidate for the partly covert system I have proposed for Proto-Gbayaic in Figure 3: an animacy bias in the use of pronouns leads to a partly covert pronominal gender system where the lower of the two genders has zero exponence.

Figure 4. The apparent pronoun use in Mbodomo (after Boyd 1997: 66)

1.2.2. Mundu-Baka

Winkhart's (2015) first comparative treatment of the Mundu-Baka family does not hint at an animacy-based pronominal gender distinction or other devices that single out animate nouns. However, a dedicated search in available descriptions reveals that various languages behave like those just dealt with. That is, basic third-person pronouns are used predominantly for animate referents, contrasting with no overt reference to inanimates or reference by means of a deictic element, a generic noun like 'thing' or the repetition of the noun itself.

Monzombo of the western family branch is the only language for which an overt animacy-based pronominal distinction is reported explicitly. Boyi (1983: 148, 245) presents a pronoun inventory involving three overt forms that implies the gender system in Figure 5; he also reports that the nominal plural enclitic -ō targets preferentially animate nouns.

SG   **PL**

ʔắ ———————— AN

wő

(ʔé) IAN

Figure 5. The animacy-based pronoun system of Monzombo (Boyi 1983)

In other related languages of the western Mundu-Baka branch, the picture remains unclear. The descriptions of Ngbaka Ma'bo and Gbanziri (Calloc'h 1911, Thomas 1963, Rombi & Thomas 2006) provide little relevant information with no indication of animacy-sensitive grammatical phenomena. While I present in §1.4 the situation in Baka, the only forager variety in Ubangi, here I provide data on the endangered language Limassa[6], Baka's closest non-forager relative. The pronoun forms of Limassa are essentially those in Monzombo and the following examples show that their use is also in line with a system as in Figure 5.

(14) **nuu   támbá   ʔá   gómu   mbómbo   wonì**
      other   monkey   3SG   break   corn   this
      'Another kind of ape ruined this corn.' (Winkhart field notes)

(15) **yee   sí   wó   zó   léa   mòsòsòmbɔ̀**
      DET:PL   fish   3PL   eat   seed   tree.species
      'These fish eat the seed of the Mosombɔ tree.' (Winkhart field notes)

(16) **zo   ʔé   koa   lɛ   bo   kpóde**
      food   3SG   enough   with   person   one
      'The food is enough for one person.' (Winkhart field notes)

(17) **ʔá   ngóma   ʔé   de**
      3SG   say   3SG   NEG
      'He/she said "No" ' (Lit. He/she said, it not) (Winkhart field notes)

6. I am grateful to Benedikt Winkhart for providing me with material from his ongoing PhD research.

Moreover, there are many examples where inanimate referents are not resumed by the apparent inanimate form ʔé, which significantly is the same as the lexeme for 'thing', but rather by deictic elements, as in (18), or the repetition of the noun itself, as in (19).

(18) **lénge dóló na mbɛyi lɛ́ yéé wonì nga kɔl-ɛ́**
      manner life POSS before with this this.here 1PL arrive-PST
      nde gbíé
      without field
      'the ancient way of life, with this we came to be without fields' (Winkhart field notes)

(19) **ma ʔɔ́ɔ́ lɛ́ bela kpóde ma mɛlè bela ʔa Pokola**
      1SG DIST:PL with work one 1SG do:PST work in Pokola
      'I had one job once, I did the job in Pokola' (Winkhart field notes)

With respect to plural number, Winkhart also observes that a) the pronoun *wó* is universally used for animate plural referents, while this is not so with inanimate nouns (some of them, notably masses and prices, occur in fact only with ʔé despite overt plural number), and b) the nominal plural enclitic *ó* is generally not obligatory but is more often missing with inanimates and is incompatible with pronominal ʔé.

  While the above patterns predominate, particularly among older speakers, there are also numerous counterexamples in Winkhart's modern text corpus contradicting a simple analysis in terms of a Monzombo-like system. However, given the advanced state of endangerment of Limassa and wide-spread language shift toward more prestigious languages, the modern ambiguous situation may well indicate a maceration of an earlier animacy-based classification system through language obsolescence.

  Similar to Gbayaic, some Mundu-Baka languages, notably of the eastern branch, are treated ambivalently in a given source. One such case is Mundu. Vallaeys' (1991) most extensive description lacks any reference to a differential treatment of nouns according to animacy. He (p. 25, 29) only mentions in an unspecific way the recurrent omission of third-person pronouns and a possible substitution by the demonstrative *ngu*. Santandrea (1969: 111), however, who is in general alert to different kinds of pronoun-like anaphor or its absence, explicitly observes that normal third-person pronouns in Mundu refer preferentially to animates. Inanimate nouns are more often not pronominalized at all or referred to by a generic noun *'ɛ* 'thing' or a demonstrative like *nɛ*, as exemplified in (20) for object anaphor.

(20) a. **ma mèrè Ø mé-rá**
         1SG make   self-1SG
    b. **ma mɛrɛ 'ɛ me-ra**
         1SG make thing self-1SG
    c. **ma mɛrɛ = nɛ me-ra**
         1SG make =DEM self-1SG
         'I did/made it myself.' (Santandrea 1969: 111)

In the natural discourse data provided by Jeffrey (1984), the default third-person singular pronouns **ah/(ngu)** are indeed used overwhelmingly for animate referents. In a corpus of five texts (pp.135-175), I merely found the six tokens in (21) where **ah** is translated into English as neuter **it** and thus refers potentially to an inanimate antecedent.

(21) a. **te ah bala**, …   'if **it** is like that'   (Jeffrey 1984: 105)
      b. **ah reke me-ye**?   'Isn't **this** good?'   (Jeffrey 1984: 117)
      c. **ah mbi**.   '[**it** is] good!'   (Jeffrey 1984: 157)
      d. **ah 'buru mbi**.   '**it** will be alright'   (Jeffrey 1984: 157)
      e. **te ah bala**, …   'if **it** is like that'   (Jeffrey 1984: 157)
      f. **ah de bala**.   'this is how **it** is'   (Jeffrey 1984: 161)

The examples are, however, unclear. All predicates involved refer to qualities (**bala** 'like this/that', **reke/mbi** 'good') and may come from a limited set of possibly partly fixed expressions, or alternatively, the reference of **ah** could be conceived of as relating more concretely to the animate entity involved in the relevant states of affairs.

Overall, the use of third-person pronouns can be represented as in Figure 6: overt number-sensitive forms are biased toward reference to animate nouns while inanimate nouns tend to involve zero anaphor – a partly covert animacy-sensitive pronoun use (as mentioned above, **ngu** can replace **ah** under certain conditions unrelated to animacy).
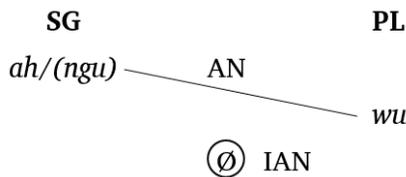

Figure 6. The apparent pronoun use in Mundu

Mayogo, a Mundu-Baka language genealogically and geographically close to Mundu, shows a very similar picture, albeit even more implicit in the available description by Sawka (2001). The author (p.68) reports a simple pronoun system of just two third-person forms distinguished according to number. While there is no reference to animacy, my survey of the data did not furnish a single example of these pronouns referring to an inanimate noun while they regularly resume human and non-human animates.

My search for any other grammatical distinction associated with a difference between animate and inanimate nouns yielded only one albeit significant occurrence concerning locative expressions with pronominal possessors. Sawka (2001: 89) writes:

> Locative case is indicated with locative prepositions. These locative prepositions can undergo reduplication of the first syllable to form locative nouns. […]

> Reduplicated locative nouns are only used to replace inanimate beings as shown in (153) [= (22)b. below] but not for animate beings as shown in (154) [= (22)a. below].

(22) a. **sa   anɨ**
     under   3[AN.]SG
     'under him[/her = animate TG]' (Sawka 2001: 89)

   b. **sa   ndula >   sa-sa   [*sa anɨ, *sa-Ø]**
     under   tree   REDUPunder
     'under the tree'   'under it [beneath, (t)hereunder TG] (Sawka 2001: 89)

I argue here that this interesting grammatical detail is in fact a variant of the more general theme of inanimate zero anaphor, here in conjunction with another phenomenon in Mayogo concerning a certain class of nouns. As shown in (22)a, an animate pronominal possessor is represented by the default third-person pronoun **anɨ**, while the only possible counterpart with an inanimate possessor is the reduplication in (22)b. Reduplication is characteristic of certain nouns and noun-like elements, including noun-derived prepositions like **sa**, which cannot occur in their bare form; they either must be in construction with another associated (pro)nominal item or be morphologically extended, whereby reduplication is the default option. This is reported by Sawka (2001: 51-54) himself but represents in fact a feature in the Mundu-Baka family as a whole (Winkhart 2015: 47-50). That is, as soon as a relational noun like **sa** involves an inanimate possessor, here 'under it (= tree)', the reduplication **sa-sa** in (22)b steps in for the form **sa-Ø** expected with plain zero anaphor. The "locative noun" **sasa** is possibly best translated as an adverb 'beneath, (t)hereunder', which avoids as in English the reference to an inanimate object. The phenomenon Sawka describes for Mayogo is thus a covert reflex of zero anaphor, as a counterpart of such examples as (5)b from Furu and (6)a from Gbaya Bossangoa, where inanimate anaphor has recourse to overt pronominalization.

    Summarizing all available information, I thus analyze Mayogo similar to Mundu as possessing a partly covert animacy-sensitive use of pronouns, as represented in Figure 7.
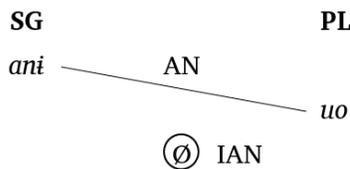

Figure 7. The apparent pronoun use in Mayogo

While it must remain open whether a synchronic analysis of Mundu and Mayogo in terms of an animacy-based gender system is adequate, the historical implications are nevertheless clear. If the pronoun use outlined for them is only a preference vested in discourse routines, they may still be aligned with cases of classificatory grammatical asymmetries in other contexts like, for example, overt or absent number marking on nouns. However, as soon as such pronoun use comes (close) to be categorical, the language can be said to possess a partly covert pronominal gender system.

In view of the cognacy of the overt Mundu-Baka pronouns ***a** (SG)/***wo** (PL) whose use is biased toward animate referents, the emerging picture for the family as a whole is parallel to that in Gbayaic. The Proto-Mundu-Baka system may thus have been similar to that in the languages of its eastern branch, while an inanimate number-insensitive proform ***E** apparently grammaticalized from the noun 'thing' in some western languages.

1.2.3. Bandaic

Languages of the Bandaic family also have systems with third-person pronouns that distinguish animacy, and for animates also number. A case in point is the system of Mono presented in Figure 8 (Kamanda Kola 2003: 269-279, 443-447).
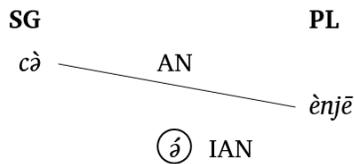
Figure 8. The animacy-based pronoun system of Mono (Kamanda Kola 2003)

Mono also displays various types of animacy-sensitive grammatical behavior of nouns. Thus, plural marking by the prefixes **à-/àlà-** is restricted to animate nouns or their quality attributes (Kamanda Kola 2003: 180, 247-259, 281-282, 288-289). There are various forms for the quantifier 'many', namely **úkpú** and **īlī** for animate nouns and **àgà** for inanimate nouns (ibid.: 318). Finally, genitive linkers interact with animacy features of both nouns involved in the construction (ibid.: 324-346).

A parallel situation can be observed in other Bandaic languages with relevant data, notably Bambari-Linda (Cloarec-Heiss 1986: 45, 58, 71, 81, 95, 100-101, 104, 203-206, 218), Mbandja (Tingbo-nyi-Zonga 1978: 68-69, 82-88, 94-96, 98-102), and Ndele-Tangbago (Sampson 1997). Regarding Banda in general, Santandrea (1965: 64-67) also reports zero anaphor with inanimate nouns in connection with prepositions, and Boyeldieu & Cloarec-Heiss (1989: 9) confirm an animacy-based distinction in genitive constructions. All these data indicate that animacy-based noun classification is entrenched in Bandaic, too, involving also pronouns.

1.2.4. Raga and Ndogoic

As indicated above, the capitalized label NDOGOIC in Map 2 refers to a heterogeneous group whose classification I deal with here according to Güldemann (2018b: 222-223) rather than Hammarström *et al.* (2022). Owing to very poor documentation, most languages are only known from Santandrea's (1950, 1961, 1969) published research, whose description does not always meet modern standards. In addition to the Narrow Ndogoic family (called Sere(ic) in other sources), it also subsumes Feroge-Mangaya, Togoyo, and Indri, which Santandrea subsumes together under the term Raga - a town around which they are/were spoken.

I begin with a treatment of the four Raga languages whose noun classification profile appears to be similar to that of Central Sudanic languages of the neighborhood (see §1.1). For Feroge-Mangaya, Santandrea (1969: 106-108) reports that third-person pronouns are used largely for humans and animals as opposed to other reference devices for inanimate nouns. Normally inanimates are not at all pronominalized, but depending on the context, a so-called "neuter" pronoun *a*, various demonstratives or, occasionally in Mangaya, the normal third-person pronouns can be used. Thus, personal pronouns essentially refer to animate entities. For Togoyo, Santandrea (1969: 110) reports that demonstratives are used instead of a proper "neuter" pronoun. Stein's (2023) exhaustive analysis of the Togoyo data confirms that ordinary third-person pronouns are used for animate entities, while inanimates are referred to by a proform **no/nu**, whose status as a demonstrative is unclear, though.

SG   PL

kI ——————— AN
                                  ——————— *so*
              (Ø/*lE*) IAN
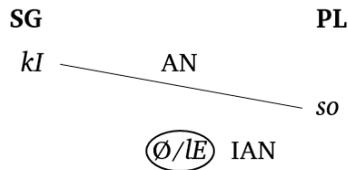
Figure 9. The animacy-based pronoun system of Indri (Huber 2017: 34)

Santandrea's data on Indri have been subject to a complete linguistic analysis by Huber (2017). This shows that third-person pronouns also distinguish nominal referents according to a ± animate opposition and for animates also number; a "neuter" pronoun **le/lɛ** or zero anaphor apply to inanimates. This suggests a partly overt animacy-based pronominal gender system as in Figure 9 (see also Santandrea 1969: 108-109). The preferential treatment of animates in Indri is also supported by Santandrea's (1969: 76) observation that the plural prefix **cu-** is restricted to such nouns. The overall picture in Raga languages thus echoes the situation in other Ubangi languages described previously.

The Ndogoic family proper is also known poorly. The only published sources are a missionary grammar of Ndogo (Ribero 1922), two grammatical family surveys (Santandrea 1961, Tucker & Bryan 966), and a short sketch of the noun phrase of Belanda Viri (Wau 2002). None of the sources reports a pronominal gender system, although Santandrea (1961: 30-31, 52-54, 58, 71, 108) refers to a "neuter pronoun" that interacts with other reference devices similarly to what he reports for other Ubangi and Central Sudanic languages. Moreover, Tucker & Bryan (1966: 89) observe that only animate nouns are regularly marked by a plural affix. Although animate nouns seem to have in some contexts a special grammatical treatment, the information is insufficient even for an approximate assessment.

1.2.5. Ngbandic

In Ngbandic, whose core is a language complex rather than a family of different languages, third-person pronouns also refer largely to animate entities, while zero or other proforms such as a generic noun *yé* 'thing' or a demonstrative refer to inanimates. Figure 10 displays this partly covert animacy-sensitive pronoun system as Toronzoni (1989: 271-292) describes it for Northern Ngbandi. While Samarin (1963: 127, 135-146) describes a similar situation for Sango, there is no relevant information for Yakoma (Boyeldieu 1975).

SG   **PL**

lo ——————— AN

—————— *ála*

Ⓞ IAN
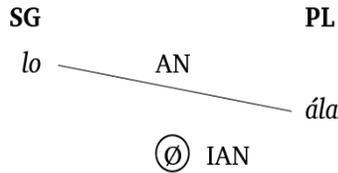
Figure 10. The animacy-based pronoun system of Northern Ngbandi
(Toronzoni 1989)

Animate nouns also behave differently from inanimate nouns in other respects. The plural word **á** is restricted to or at least strongly biased toward animate nouns (cf. Toronzoni (1989: 208-214) on Northern Ngbandi, Samarin (1963: 127, 132-134) on Sango). Toronzoni (1989: 313-316) reports a co-variation of genitive linkers and possessor nouns, namely **té** for animates vs. **tí** for inanimates (but see Lekens (1923: 16) for potential counterexamples). Finally, Toronzoni (1989: 493-494) states that wh-constructions depend on the animacy of questioned referents, as shown in (23)b. with an animate and (24)b. with an inanimate noun.

(23) a. **zɛ̃   hándà   nákȯ**
        leopard deceive turtle
        'Le léopard a trompé la tortue [the leopard deceived the turtle]'

     b. **zo   hándà   nákȯ   nà?**
        person deceive turtle   AN.INTERR
        'Qui a trompé la tortue? [who has deceived the turtle?]'
        (Toronzoni 1989: 493-494)

(24) a. **nzɛ́ngɔ̀   ho   lɔ̀ngɔ** (proverb)
        fatigue   kill   snake
        'La fatigue a tué la vipère [fatigue killed the snake]'

     b. **yé   ho   lɔ̀ngɔ   nɛ?**
        thing   kill   snake   IAN.INTERR
        'Qu'est-ce qui a tué la vipère? [what killed the snake?]' (Toronzoni 1989:494)

Taking anaphoric and interrogative pronominalization of Northern Ngbandi together, the animacy-based classification in third-person forms can be summarized as in Table 4.

Gender-number		Pronoun	Interrogative
AN	SG	**lo**	**zo … nà**
	PL	**ála**	
IAN		**Ø**	**yé … nɛ**

Table 4. The pronominal system of Northern Ngbandi (after Toronzoni 1989)

The situation in the geographically isolated Ngbandic language Gbayi is uncertain. From the information by R. Boyd (1988: 44), one can conclude that the structural organization of its pronoun system conforms to the areal canon, as shown in Figure 11. As opposed to the semantic situation in the core of Ngbandic and the general areal trend, however, the author explicitly reports that the overt pronouns are used for **human** referents, and alternative means, including zero, are employed for non-human nouns.

SG   **PL**

wō —— H or AN

————— *ála*

Ⓞ NH or IAN
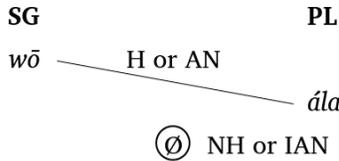
Figure 11. The pronoun system of Gbayi (after Boyd 1988: 44)

In personal communication, he admits, however, that his brief description might well be misleading and the pronouns could in fact express a ± animate distinction. Corpus data are needed to determine what macrogender opposition Gbayi has. Whatever the final analysis, the system is very close to that in the rest of Ngbandic, including the form of the two pronouns, and also pertains if not in its semantic at least in its structural profile to the larger phenomenon dealt with here.

1.2.6. Zandic

As opposed to most other Central African language groups, the Zandic family has received some attention in the literature on gender, with particular reference to its major language Zande (see in particular Claudi (1985) as the most extensive study). However, since this language has a sex distinction for human nouns, animacy has not been recognized as a salient feature for gender assignment. I argue here that pronominal systems in Zandic languages are from a structural viewpoint not completely different systems but rather more elaborate variants of the simpler pattern described above for neighboring languages (I deal with the historical relation between animacy- and sex-based gender in a different context).

That the family is in line with the general areal trend toward animacy-based noun classification is already suggested by the fact that in most Zandic languages prefixing plural morphology is also largely restricted to animate nouns (cf. Tucker 1959: 119, 140-141 and Tucker & Bryan 1966: 145-146). An analysis of pronoun systems confirms this indication.

I start out with the case of Zande itself, which has the most complex and best-described system. Figure 12 shows that it distinguishes four genders, inanimate, animate non-human, animate human masculine, and animate human feminine, whereby all but the first gender involve a number distinction.

```
      SG                                    PL
      rį̄
      kō ─────────────── AN.H.F
              AN.H.M ──────── į̄
      ų̀
              AN.NH ──────────── àmí
             (sí/tí)  IAN
```
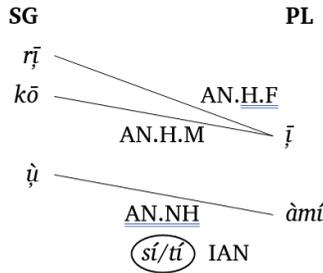
Figure 12. The pronoun system of Zande (after Boyd n.d.)

Earlier authors like Gore (1926), Tucker (1959: 45, 47, 86, 93, 98-99, 118), and Santandrea (1965: 69) used the gender labels "neuter" for inanimate and "animal" for animate, whose non-human meaning could suggest a primary ± human opposition. My analysis follows the later research, starting with Claudi (1985), which, based on various types of evidence, questioned such a dichotomy and eventually came to refer to the "animal" gender as animate (cf., e.g., Boyd n.d., Pasch 2012: 506). In particular, Gore (1926: 21-22) and Claudi (1985: 114-127) show that the distinction in the non-human domain is lexicalized and semantically not fully transparent, as the pronominal anaphor for certain inanimate nouns is that of non-human animates, which is parallel to the situation in Algonquian languages. Moreover, the pattern of number marking in pronouns is clearly that of other languages of the area in singling out the inanimate form for not encoding this feature. I thus argue that the pronominal gender system of Zande is also sensitive to the ± animate distinction and that this is more basic than the distinctions within the set of animate nouns, which are ± human and, for humans, feminine vs. masculine.

The pronoun systems of Geme and Nzakara, the closest relatives of Zande, have an overall similar structure. The situation in Geme appears to be identical to that in Zande according to Boyd & Nougayrol (1988: 71). Figure 13 gives the pronoun system of Nzakara as per Tucker (1959: 118-119, 126-137). It differs from Zande in that a) it lacks a feminine gender, the masculine form **kó** of Zande encoding now human, and b) its plural form **àkó** is not simplex but based morphologically on the singular by adding **à-**.

```
      SG                                    PL
      kó ───────────
              AN.H ──────── àkó
      ò ───────────
              AN.NH ──────── à
             (si/ti)  IAN
```
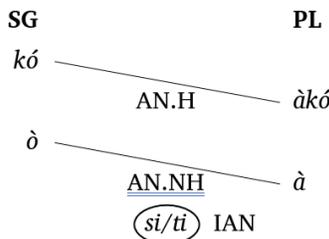
Figure 13. The pronoun system of Nzakara (after Tucker 1959)

According to R. Boyd (p.c.), Tucker's description is uncertain and other studies indeed vary from this picture by even failing to record a ± human distinction. Thus, Santandrea (1965: 75-76) and Foulou-Bazouma (2006: 78-86) only report the forms **kó/àkó** as general animate pronouns, which would yield a simple gender system of the ± animate type recorded so far for other Ubangi languages.

The insufficiently documented Ngala aside, the two remaining Zandic languages are Barambu and Pambia, which are closely related and treated here together. Their description by Tucker (1959: 184-192, 223-226), Santandrea (1965: 69, 77-79), and Tucker & Bryan (1966: 146-147) is also limited and provides an inconclusive picture summarized in Figure 14.
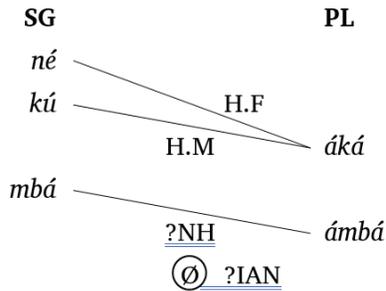
Figure 14. The pronoun system of Barambu-Pambia (after Tucker 1959)

The analytical problem revolves around the meaning of **(á)mbá** and the possibility of zero reference to inanimate nouns, represented by the encircled Ø at the bottom of the figure. If ignoring the latter, a striking difference to other Ubangi, including Zandic, languages would be a conflation of inanimate and non-human animate referents and the lack of an animacy distinction. However, the empirical evidence for a ± human gender distinction is scarce and Santandrea (1965: 78-79) reports zero reference for inanimate nouns and a plural "animal" aka animate pronoun at least for Pambia. Accepting this information, the resulting picture would be the full system in Figure 14 and in line with the trend in the family and the area.

The considerable differences across Zandic beg the question which profile the proto-system had. One way to assess this is to search for elements that occur in all/most languages and try to reconstruct them in some form. One clear candidate is ***kO** whose original plural was possibly formed by the addition of the plural prefix ***a-**; both elements are found in both subgroups of Zandic. The exact original meaning of ***kO** is not clear; it could have been either human masculine, as in Zande itself, or some more general type of human/animate.

However, even reconstructible ***kO** is not necessarily old as a pronoun due to its conceivable etymological transparency. Claudi (1985: 132-134)[7] proposes that it originates in a nominal lexeme 'male, man.' This idea is not only suggestive within Zandic but supported in Ubangi in general, as an etymon of this form and meaning turns out to be widespread in my ongoing historical-comparative research.

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7. Claudi (1985: §3.4) has discussed extensively the origin of pronouns in Zande and beyond, and made a number of proposals about their nominal source. There is no space and need to assess them all in detail and I restrict myself to elements pertinent to the present discussion.

A conclusion for other modern pronouns in Zandic differing across the family is that if the most plausible Proto-Zandic form is etymologically still transparent, more diverse forms are possibly even less deeply entrenched historically.

There is another pronoun form whose history informs the important question of whether the macrogender distinction in Proto-Zandic was ± animate as in Zande-Nzakara or ± human as potentially in Barambu-Pambia, namely the semantically indeterminate pronoun ***mba** of the last branch. While it seems to refer to non-human or even inanimate entities today, Claudi (p. 132-134) assembles evidence that makes it more likely that ***mba** started out as an animate pronoun. Thus, it occurs as the second component of compounds of the form ['male/ female'**-mba**], namely **ku-mba** 'male person' in Zande-Nzakara and similarly **kye-mba** 'male (animal)' vs. **na-mba** 'female (animal)' in Barambu-Pambia. These structures only make sense if ***mba** once referred to an animate entity, indicating that the reported modern reference of **mba** in Barambu-Pambia to inanimate nouns is a secondary development. If this analysis is correct, it implies that the earlier distinction in this branch was ± animate, too, which is also compatible with the existence of zero anaphor as well as the considerable diversity of overt pronouns for inanimate nouns across modern Zandic languages, which is not fully represented by the above information.

Comparing Zandic pronoun systems with those in other Ubangi languages, Zandic is without doubt more complex and the recurrent sex-gender distinction also makes it appear to be very different semantically. However, it must not be concluded that the modern picture reflects a very old difference to other Ubangi languages. On the contrary, the profile of modern Zandic does not just point to a late complexification and differentiation of language-specific pronoun systems; it is in fact compatible with the reconstruction of a simpler proto-system with a primary ± animate opposition.

1.2.7. Mbaic

The last lineage subsumed under Ubangi is Mbaic with four languages. The situation regarding noun classification in this family is unique in several ways – this not only in Central Africa but on the continent as a whole (cf. Heine 1982, Pasch 1986, Corbett 1991: 184-188). Of central relevance here is that all languages display a pronominal gender system which is mostly animacy-based. However, Mbaic also shows a system of "noun classes" of the Niger-Congo type (see §1.3 on the best-known case of Bantu for a more detailed structural outline and the distinction between nominal inflection and agreement-based gender which both convey noun classification). Such a system can be reconstructed to the proto-language (Pasch 1986). While elaborate classificatory suffixes on the noun exist in all modern languages, the non-pronominal agreement system of one language, Ma, is reduced to two genders (see below).[8] Last but not least, one language, Dongo, has in addition

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8. The existence of noun classes in Mbaic represents a historical puzzle, as Pasch's (1986) proto-system is not obviously cognate with systems in the rest of Niger-Congo, in spite of being inspired by available reconstructions in this family, nor can the Mbaic system be attributed to contact with neighboring Bantu.

a system of possessive classifiers, so far unique in Africa (not treated here, however). Overall, Mbaic seems to be the most complex family on the continent regarding noun classification.

I start with Mba, the largest Mbaic language, whose complex noun classification system is summarized in Fiedler, Güldemann & Winkhart (2021). It possesses two largely independent gender systems, a semantically transparent pronominal one with animacy- and sex-based distinctions and another semantic-formal one of the Niger-Congo type with a basic ± human opposition. While there is interaction in some agreement constructions between the pronominal and the Niger-Congo type system, the two are to a large extent independent in semantic and structural terms. Hence, Mba is best seen as a case of so-called "concurrent noun classification" in terms of Fedden & Corbett (2017). Figure 15 gives the partly covert pronominal gender system at issue here: it has a basic ± animate distinction in which the inanimate gender has zero exponence. In addition, the animate gender has a sex distinction between human masculine and all other animates.
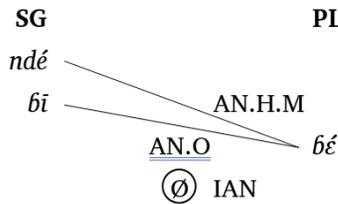
Figure 15. The animacy-based pronoun system of Mba
(Fiedler *et al.* 2021: 320)

Ndunga is genealogically closest to Mba, which is among other things clear from similarities of their Niger-Congo type gender and nominal inflection systems. However, the pronominal gender system of Ndunga, shown in Figure 16, does not bear close resemblance to that in Mba but only conforms in basic structural aspects to wider areal trends.
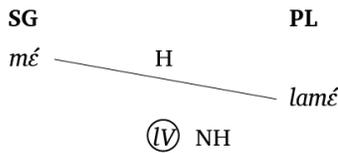
Note: non-human nouns are further sub-classified in the Niger-Congo type gender system

Figure 16. The human-based pronoun system of Ndunga
(after De Boeck 1952: 31-33)

Ndunga has two overtly marked genders, one of which not encoding number, lacks the sex distinction found in Mba, and, most importantly, divides nouns according to a ± human macrogender opposition. While this feature is unique in Mbaic, it makes sense insofar as it "streamlines", so to speak, the pronoun system according to the human-based Niger-Congo-type system. Ndunga is thus more similar to Bantu

languages (see §1.3), which completely surround this minority language (see the small westernmost red area in Map 2).

The pronominal system of Dongo presented in Figure 17 has resemblances to both Mba and Ndunga. In line with patterns entrenched in the area and the Mbaic family, the overt gender opposition is binary and based on animacy. Like in Ndunga, the macrogender distinctions of the pronominal and the Niger-Congo type systems of Dongo are identical. However, Dongo dissolved the original concurrency still evident in Mba in the opposite direction. Taking the pronominal system as the semantic baseline, it has reorganized the other Niger-Congo type system by reshaping its originally human to an animate gender (cf. §1.3 below for a comparable situation in some restructured Bantu languages).

SG   PL

zé ——————— AN

                                        ——— *zu*

wé ——————— IAN

                                        ——— *yé*
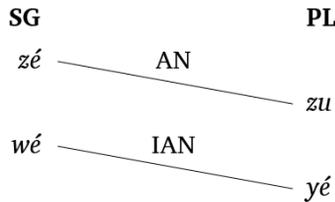
Note: inanimate nouns are further sub-classified in the Niger-Congo type gender system

Figure 17. The animacy-based pronoun system of Dongo
(after Pasch 1986: 188-261)

The last language Ma has the most complex pronominal gender system in Mbaic, which is presented in Figure 18 (cf. Junker 1888/9: 62, Dupont 1912: 24-25, Czekanowski 1924: 657-669, Pasch 1986: 339-351). The basic opposition is between inanimate, which appears to rely on zero anaphor and thus lacks a number distinction, and animate. The higher animate gender domain is divided further into non-human, human masculine, and human feminine, the latter two conflated into a single plural. In terms of systemic and semantic structure, this situation is exactly that of Zande – the major contact language of Ma (cf. Figure 12 in §1.2.6).

SG   PL

kɔ

ɔ ——————— AN.H.M

       AN.H.F ——— *ipo*

ndɛ

       AN.NH ——— *ndiro*

       ⓘ∅ IAN
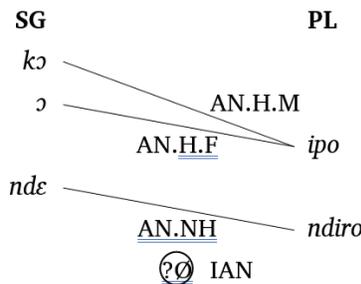
Figure 18. The animacy-based pronoun system of Ma (after Pasch 1986)

Ma kept the inherited Mbaic "noun class" system only intact in nominal inflection, while the relevant gender agreement has been largely lost. This trait makes it even more similar to Zande and other non-Mbaic Ubangi languages. However, Ma retained

some agreement in the noun phrase and this now follows semantically a binary ± animate distinction (Pasch 1986: 305-306, 309-313). There are four agreement exponents also encoding a singular-plural distinction. The two marker pairs are *ɓ/d* used for nouns of all three animate genders and *w/y* for inanimate nouns. From a historical perspective, it is crucial to note the affinity of these markers to forms Pasch (1986) reconstructs for the Proto-Mba "noun-class"-based gender system. The pair *ɓ/d* is close to the forms of the genders 12/8 and 12/10, which had a strong bias toward animate nouns, while the pair *w/y* displays the thematic consonants of the old inanimate gender 7/2 and, moreover, is cognate with the inanimate set of Dongo (see Figure 17). All these facts indicate that Ma went through a state similar to that in modern Dongo in which the agreement of the inherited Niger-Congo-type gender system was restructured in line with the pronoun system based on animacy.

Table 5 provides an overview of nominal classification in the Mbaic languages. I assume that the original situation in the family was the one still existing in Mba with two originally independent, aka concurrent, systems. This is because the situation in the other three languages can be derived from it by various generally known dynamics, each language having today its own specific semantic-structural configuration. Semantically, Ndunga extended the Niger-Congo-type pattern to the pronouns, while the opposite happened in Dongo and Ma, the latter also losing agreement beyond the animacy-based dichotomy.

Language	Ndunga	Mba	Dongo	Ma
Niger-Congo type noun inflection	Yes	Yes	Yes	Yes
Niger-Congo type gender agreement	± human	± human	± animate	(± animate)
Pronominal gender agreement	± human	± animate	± animate	± animate

Notes: frame = canonical Niger-Congo pattern,
        shading = typical for the area but untypical for Niger-Congo as a whole

Table 5. Summary of gender-based noun classification in Mbaic

1.3. Bantu

Bantu is the largest subfamily within Niger-Congo with an origin around the border between Nigeria and Cameroon (Greenberg 1972). While its historical-comparative reconstruction is advanced, its internal classification remains inconclusive despite considerable progress by recent research (cf., e.g., Grollemund *et al.* 2015). It is the largest language group in Central Africa. In the rainforest, it has its most compact distribution in the west and south, while it is interspersed with other languages in the north and east.

Bantu languages are known for their elaborate gender system that is reconstructed for the proto-language (cf., e.g., Meeussen 1967) and which goes back to a yet earlier state in the higher-order lineage Niger-Congo (Westermann 1935, Williamson 1989: 31-40, Güldemann 2018b: 123-141). The Proto-Bantu system represented in Figure 19 is characterized by extensive agreement as well as overt

gender-number marking on nominal controllers, thus involving a complex inventory of both genders and noun inflections with a large amount of alliteration. A semantic trait important in the present context is the ± human macrogender opposition, which is reflected by a basic distinction of the human gender 1/2 vs. all other, essentially non-human genders.[9]

Gender system   **Nominal inflection system**

AGR	SG	TN	PL		SG	TN	PL
					Ø		
*2			ba-				*ba-
*1	u-,a-						
*18		(mu-)			*mu-	(*mu-)	
*3	gu-						*mi-
*4			gi-				
*15/17	ku-	(ku-)			*ku-	(*ku-)	
*5	di-				*di-		
*6		(ga-)	ga-			(*ga-)	*ga-
*14	bu-	(bu-)			*bu-	(*bu-)	
*7	ki-				*ki-		
*8			bi̧-				*bi̧-
*9	ji-						
*10			ji̧-		*n-		*n-
*11	du-				*du-		
*12	ka-				*ka-		
*13			tu-				*tu-
*19	pi̧-				*pi̧-		
*16		(pa-)				(*pa-)	
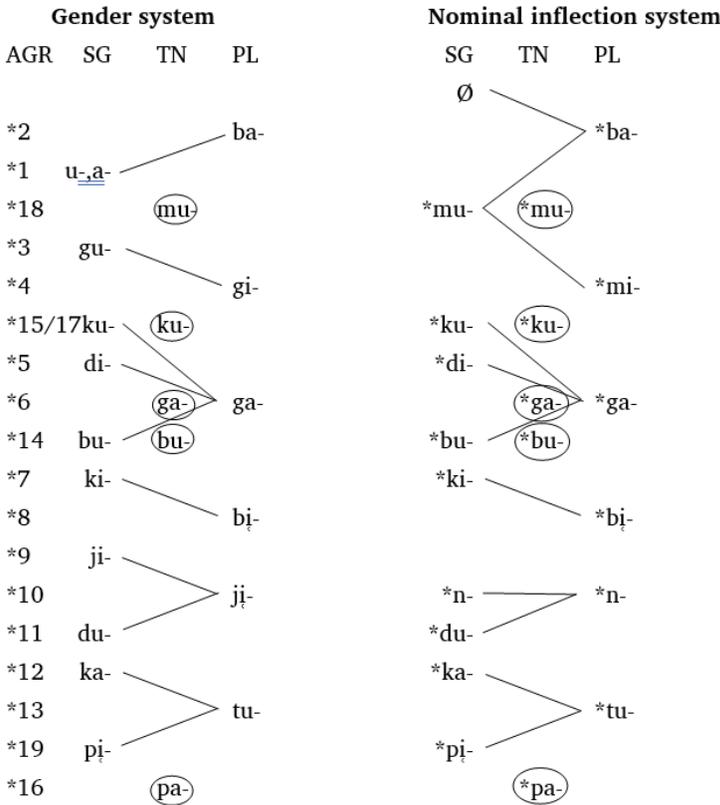
Figure 19: Proto-Bantu systems of gender (left panel) vs. inflection (right panel)

However, a number of Bantu languages, notably in Central Africa, possess nominal systems that are considerably restructured vis-à-vis that of Proto-Bantu. After first survey work by Maho (1999), this has been investigated systematically by Di Garbo & Verkerk (2022) and Verkerk & Di Garbo (2022). The deviant patterns in northern Bantu are due to two major types of change that are in principle independent of each other but can also co-occur. One change is the reduction of the originally elaborate inventory of more than ten genders, as in Figure 19, up to just two as described in the introduction for Beeke. The second change is the semantic shift from a ± human to a ± animate macrogender distinction. The complete loss of agreement-based gender aside, the two processes lead to three basic types of gender systems (II-IV) that deviate from the Proto-Bantu type (I), as given in Table 6.

---

9. Both human and non-human nouns may occur in an unexpected gender but are then "untypical" for their class in some way, like, e.g., a human affected by a permanent disability.

System changes		Macrogender	
		± human	± animate
Gender reduction	NO	I Inherited default	II Pagibete etc.
	YES	III Nzadi etc.	IV Beeke etc.

Table 6. Bantu languages and two types of gender-system restructuring

The most deviant type exemplified already with Beeke in the introduction is represented in Table 6 in the bottom-right cell under IV, namely a binary animacy-based gender system. It emerges by the cooccurrence of the two changes, that is, the semantic shift in the inherited gender 1/2 from human to animate as well as the loss of most "lower" genders except one that comes to cater for inanimate nouns and may eventually even lack a number distinction. Such systems are reported in Central Africa both in the east and west (cf. Verkerk & Di Garbo 2022, Appendix C). Schebesta (1953: 366-373), Vorbichler (1963, 1968), Krzywicki (1985), and Kutsch Lojenga (2003) report it for languages of the Bira-Komo group in the eastern Ituri in the neighborhood of Beeke; but only the two last authors provide more detailed empirical data for the additional cases of (Plains) Bera (D32) and (Forest) Bila (D311), respectively. Relevant languages in the west are Kako (A93) (Ernst 1992), Pande (C12) (Richardson 1957: 35), Mbati (C13) (Richardson 1957: 39-42, Bouquiaux & Thomas 1994: 93, LePage 2020: 37-41, 60-61), and finally Kinshasa Lingala (C30B) (Meeuwis 2010).

As in some cases already dealt with above, for some Bantu languages the description does not explicitly identify an animacy-based gender system but the available grammatical information strongly suggests its existence. A case in point is Komo (D23) in the eastern Ituri forest for which Thomas (2011: 4) reports a complete loss of the complex Bantu-typical agreement. At the same time, the author (2011: 24, 73-76, 129-130) records the three-way contrast in the verbal indexation of third-person objects shown in (25)-(27), which reflects an opposition of overt pronominalization vs. zero associated with a gender distinction.

(25) a. **ɓá-m-ɓéti**
        3PL.SBJ-3SG.OBJ-hit:PFV
        'They hit him/her. [him/her = segmental object prefix *m*]'

     b. **ɓέ-ɓéti**
        3PL.SBJ:3PL.OBJ-hit:PFV
        'They hit them. [them = vowel change on subject prefix]' (Thomas 2011: 76)

(26) a. **nɛ-ɓéti**
        1SG.SBJ-hit:PFV
        I hit it. [it = Ø]

     b. **ně-ɓéti**
        1SG.SBJ:3PL.OBJ-hit:PFV
        'I hit them. [them = high tone imposed on subject prefix]' (Thomas 2011: 74)

(27) a. **u-úbi**
         2SG.SBJ-know:PFV
         you know [it = Ø]

   b. **ŏɓ-úbi**
       2SG.SBJ:3PL.OBJ-know:PFV
       'you know them [them = -V́ɓ-]' (Thomas 2011: 129-130)

The overt third-person singular object index is a homorganic nasal immediately before the verb root, as in (25)a. Its plural counterpart is conveyed in a more complex way involving suprasegmentals on the initial subject index, namely a possible change in vowel quality, as in (25)b, and/or a high tone, as in (26)b, which are followed by ɓ before vowel-initial verbs, as in (27)b. This overt pronominal marking is in paradigmatic opposition to zero, as in (26)a, which, in being translated as 'it', is likely to refer to a non-human or inanimate entity. The systemic pattern of object indexation, represented in Figure 20, is parallel to the gender systems described previously. It is particularly reminiscent of the system of the genealogically close Beeke, as this language also possesses this type of partly covert verbal object indexation, including two potentially cognate exponents (cf. Table 1 and Figure 1).
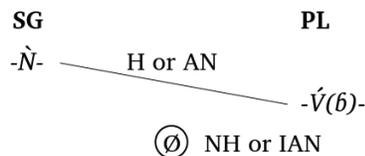
Figure 20. The verbal object-indexation system of Komo (after Thomas 2011)

Two further details suggest that the semantic distinction may in fact not be ± human but rather ± animate. Thomas mentions (2011: 20) in passing animacy-sensitive demonstratives, apparently instantiating canonical gender agreement, and reports (1994: 193) that the form of some adjectives also depends on the animacy feature of the modified noun. All agreement phenomena in Komo, summarized in Table 7, are thus quite similar to those in Beeke, albeit not as extensive and/or outlined transparently. Despite the scarce and partly inconclusive data,[10] I venture that Komo not only has pronominalization with a likely ± animate basis but in fact a binary gender system like its relatives (pace Di Garbo & Verkerk 2022: 1194-1195).

---

10. Harries' (1958: 273-274, 283) short sketch of Komo provides largely similar grammatical information about object indexation and demonstratives but remains unclear on the semantic differentiation.

Agreement Class	Demonstrative		Agreement-sensitive adjective	Object on verb
	proximal	distal		
1 AN.SG	**ḿbé**	**ḿbɔ́**	Reduplicated	**-Ǹ-**
2 AN.PL			**bá** Reduplicated	**-V́(b)-**
3 IAN	**ńdé**	**ńdɔ́**	PL only : Reduplicated	**Ø**

Table 7. Agreement classes across various targets in Komo
(after Thomas 1994, 2011)

A second deviant system type in Central African Bantu, represented in the bottom-left cell of Table 6 under III, seems to be rarer (see, e.g., Crane, Hyman & Tukumu 2011 for the case of Nzadi (B865)). It is similar to type IV regarding the drastic reduction of the gender inventory to a binary distinction but remains like Proto-Bantu by retaining the semantic macrogender opposition of ± human. It is thus less relevant for the present topic of animacy-based gender in Central Africa.

The third deviant Bantu system, given in the top-right cell of Table 6 under II, shares with type IV that gender 1/2 refers to animates but differs from it in that the other lower genders remain largely intact. Such a system with one animate and multiple inanimate genders is parallel to that in the Mbaic language Dongo (see §1.2.7). A good example for this situation is Pagibete (C401) according to Reeder's (2019: 454-456) description. The language has around ten "noun-class"-based genders quite similar to the picture in Proto-Bantu (left panel of Figure 19), of which most are assigned according to the morphological form of nouns (see right panel of Figure 19). The agreement class pair 1/2, however, is used for nouns referring to humans and animals irrespective of their inflectional marking, which is evident by the author's distinction of three nominal form classes, which all have class 1 agreement. They are *N*-root-(**yè/ɛ́**), root-(**yè/ɛ́**), and root-**ké**, of which only the first is the regular reflex of the inherited form of regular human singular nouns. Such an apparent ± animate macrogender distinction has additional reflexes in that Pagibete nouns distinguished according to this semantic criterion also behave differently in various other grammatical contexts. For example, in nominal coordination, the element **ɓúnà** is restricted to conjoining animate nouns as opposed to the other, more flexible marker **nà** (Reeder 2019: 462). Similarly, the form of the genitive linker depends on the possessor's animacy status: animate nouns involve an agreement marker followed by **kà**, as with 'chimpanzee' in (28)a., while inanimate nouns require a different series of connectives, as with 'village' in (28)b.

(28) a. **ngí**   **wé-kà**   **ɓà-kómbòzó**
      3.village   3-GEN.AN.POSSR   2-chimpanzee
      'village of the chimpanzees'

    b. **ɓà-gbàyá**   **ɓá**   **ngí**
      2-elder   2: GEN.IAN.POSSR 3.village
      'elders of (the) village' (Reeder 2019: 459)

Furthermore, the repetitive verb suffix has two allomorphs: **-ɛg-** is used for animate and **-ag-** for inanimate objects; hence, **bòm-ɛg-** 'beat an animate being, such as a dog' vs. **bòm-ag-** 'beat an inanimate object, such as a drum' (Reeder 2019: 465). Finally, there is a transitive verb type on which an object can only be indexed if it is animate, as shown in (29).

(29) a. **à-bìb-ìs-í**   **ò-ɓɔ́kɔ̀**
          3SG.SBJ:PST-raise-CAUS-PST   15a-arm
          'He strengthened the arm.

      b. **à-m-bìb-ìs-í**   **míkí**
          3SG.SBJ:PST-3AN.SG.OBJ-raise-CAUS-PST   1a.child
          'She raised the child. (Reeder 2019: 469)

The semantic reorganization of the inherited gender 1/2 from human to animate in contrast to a multiplicity of retained inanimate genders as well as differential grammatical behavior of animate nouns beyond gender agreement appears to be widespread in Bantu C40 languages. This emerges from descriptions of Ngombe (C41) (Motingea Mangulu 1988: 26); Bati (C43) (Nkabuwakabili 1986: 64, Motingea Mangulu 2005: 132); Boa (C44) (Motingea Mangulu 2005: 44-50); and Ngelima-Beo (C45A) (Gérard 1924: 13, 17, 24, 38, 104, 120).

There are other Bantu languages in Central Africa and beyond where the inherited gender system is intact, including gender 1/2 still being essentially human, but animacy-based agreement exists as a non-universal and/or non-obligatory phenomenon. Such so-called "animate concord" is far more widespread and more advanced cases have also been reported outside the area at issue here, for example, in eastern Africa (Wald 1975), the Cameroun Grassfields in the west (Hamm 2016), and southwest of the rainforest (Bollaert 2019). "Animate concord" is a gradient phenomenon (see Corbett 1991: 98, 248-256 for a theoretical discussion) and hence does not automatically imply a categorical and consistent gender distinction, although such a system may well emerge this way. In the present context, I distinguish the fully animacy-based types II and IV from partial animate agreement and analyze the latter as still pertaining to languages that keep in line with Proto-Bantu where gender 1/2 is essentially human.[11] Languages with the inherited picture are subsumed under type I in the top-left column of Table 6.

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11. Regarding this distinction, Di Garbo & Verkerk (2022: 1183) remark: "Our coding for animacy-based agreement aims at capturing whether any type of animacy distinction is marked on any of the fourteen target types, but does not differentiate between specific cutoff points along the Animacy Hierarchy (that is, whether the distinction is between 'human' vs. 'everything else' or 'animate' vs. 'inanimate')." Since their survey does not differentiate between my type II and partial animate agreement, it is insufficient for assessing languages regarding the problem at issue here.

1.4. Central African forager languages

Finally, the Central African rainforest hosts a number of (former) forager groups who are culturally and biologically distinct from their food-producing neighbors (Bahuchet 2012). Map 3 shows the distribution of the better-known groups.
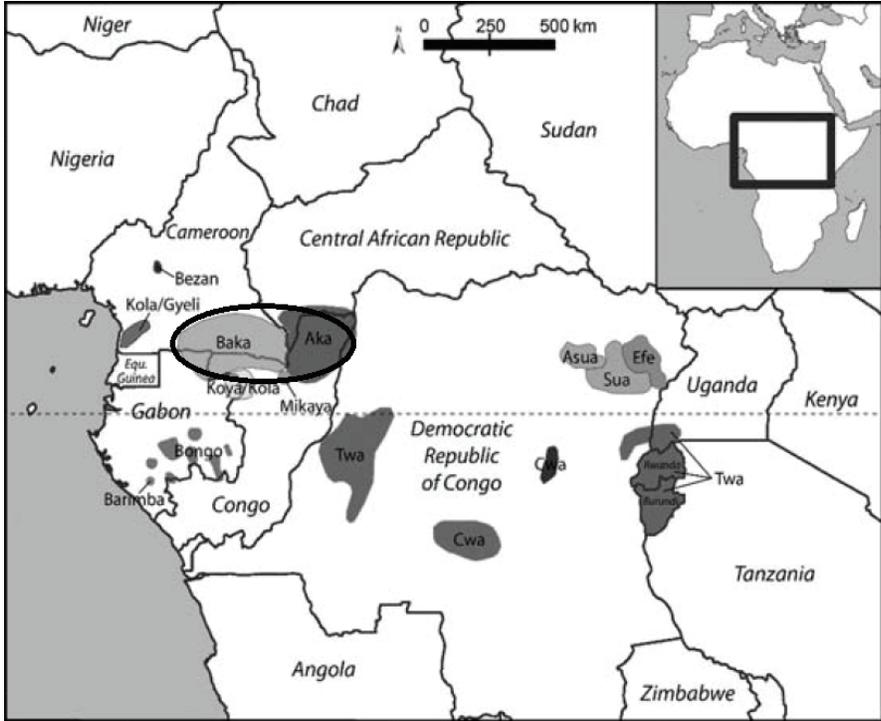
Map 3. Forager groups in Central African rainforest (Bahuchet 2012: 12)

All forager groups are assumed to have spoken earlier languages that became extinct due to language shift. Today, they speak languages of farmer groups who colonized the rainforest later; these are repeatedly not their current contact partners due to later population movements. While the approximate linguistic affiliation of the current forager languages is mostly clear, their documentation is overall very poor and/or outdated. Thus, it recurrently is unclear whether they speak a separate language or just a dialect of a language also spoken by non-foragers (see, e.g., Güldemann & Winkhart (2022) for a recent reassessment of Baka as a dialect of the language complex Baka-Gundi rather than a separate language, pace Bahuchet 2012). Figure 21 gives the genealogical classification of sufficiently known forager varieties, showing that they occur in all language groups encountered in Central Africa.

Lineage	Language (variety)
Central Sudanic	
Mangbutu-Efe	**Efe** (source may also involve the farmer language Mvuba)
Mangbetu-Asua	*Asua*
Niger-Congo	
Gbayaic	[Bofi]
Ubangi (Mundu-Baka)	**Baka**
Bantoid (Non-Bantu)	[Bezan]
Bantoid (Narrow Bantu)	many and in numerous sub-groups, e.g.:
Zone A:	**Kola ~ Gyeli (A801)**
Zone B:	Koya (B221), *Bongwe* (B303)
Zone C:	**(Y)aka (C104)**, *Nkundo Twa, Konda Twa, Foto, Jofe* (all C60)
Zone D:	4 varieties in 3 sub-groups: Kango and Sua 1 in Bira-Komo, Tchwa in Huku, Sua 2 in Liko-Bali group (cf. Demolin 2008)
Zone J:	[*Interlacustrine Twa*]

Notes: **Bold** = grammar, *Italic* = grammar sketch, [...] = no relevant data

Figure 21. Linguistic classification of sufficiently known forager groups

While the language varieties of foragers are overall poorly documented, what can be discerned from the available descriptions is that there are three principal types with respect to nominal classification. First, the two forager varieties within Central Sudanic, namely Efe of Mangbutu-Efe (see Smith 1938) and Asua of Mangbetu-Asua (see Beltrame 1876-7), display no signs of grammatically entrenched noun classification targetting animacy, whether gender or other marked noun behavior, in line with their closest farmer relatives.

The second type applies to the majority of Bantu languages spoken by foragers in the western and southern portions of the rainforest. They possess gender systems that are rather typical for the family, namely a large gender inventory and a basic ± human distinction. This can be discerned in Bongwe (B303, Walker 1937), Yaka (C104, Thomas & Bahuchet 1991), Nkundo Twa (C61, Hulstaert 1948), Foto (C611, Hulstaert 1978), and Jofe (C, Hulstaert 1986). A few languages have a typical Bantu system but non-human animate nouns can agree like human nouns in gender 1/2, which I still subsume under the Bantu type I of Table 6 above. Thus, according to Grimm (2015: 128-129), a number of animate nouns of Gyeli (A801) have shifted lexically to the human gender, often accompanied by a change in noun inflection. However, since this change also affects inanimate nouns but excludes other animate nouns, it does not indicate the incipient development of a genuine animate gender. For Konda Twa (C61E), Motingea Mangulu (1994: 358-359) reports the occasional agreement shift of animate nouns to gender 1/2 without inflectional change:

> Il convient ainsi de faire remarquer que le fait que tout substantif appartenant à n'importe quelle classe affecté du trait [+animé] impose parfois dans l'accord du verbe le préfixe de cl. 1 ou 2 n'est pas une irrégularité en soi. Il s'agit d'un phénomène très repandu dans les langues bantoues du Nord-Ouest.

(30)   **n-jɔu   bá-kó-yá   ené   n-goda**
       10-elephant   **2**-PST-come   to   9-field
       'les éléphants sont venus au champ [the elephants came to the fields]'
       (Motingea Mangulu 1994: 358-9)

Last but not least, some forager groups speaking Bantu and Ubangi languages have a genuine binary distinction of nouns based on animacy. While no concrete description is available, it is explicitly reported by Vorbichler (e.g., 1968: 412-415) for Kango (D211) and Sua, which are spoken by so-called "Mbuti" groups of the Ituri in the vicinity of related farmer groups speaking Beeke (see introduction) and genealogically yet closer Bira-Komo languages (see §1.3). In the Ubangi domain, a similar affinity holds between the Mundu-Baka forager variety Baka and its closest farmer relative Limassa (see §1.2.2). Thus, Djoupée (2017: 96-99, 198, 274, 281, 283) states that the third-person pronouns **ʔé/wó** of Baka have default animate reference and that inanimate objects are generally characterized by zero anaphor. However, the singular form **ʔé** can refer to inanimate nouns under specific conditions, so that the pronominal system of Baka is best represented as in Figure 22.
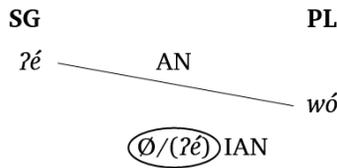
Figure 22. The animacy-based pronoun system of Baka (Djoupée 2017)

An animacy-based distinction in the nominal system of Baka is also supported by Djoupée's (2017: 140-141, 176-178) report that the genitive linker **-á** is restricted to animate possessors. However, the pronoun **ʔé** that in Baka can refer to animate and inanimate referents is formally identical to the inanimate pronoun in Monzombo and Limassa. The Baka system thus does not simply continue the situation in its related farmer languages but must have evolved further, possibly even on its way to lose the gender opposition.

     What can be summarized from the above data is that all forager varieties of Central Africa are rather inconspicuous vis-à-vis the relevant farmer varieties, so that from now on I no longer separate them from their genealogical relatives spoken by food-producers. This is important for the historical assessment of the feature in §2.

2. Summary and discussion

Based on the data of §1 I summarize the picture of animacy-based noun classification in Central Africa. In order to assess its entrenchment in the different language groups, I distinguish four language types that show some form of asymmetric grammatical treatment of animate nouns, labelled A-D in the order of their increase in grammaticalization and complexity. Type-A languages single out animate nouns in some grammatical contexts but not in the pronominal system, for example,

salient differential number encoding on the noun. That is, they have animacy-based noun classification but not a canonical gender system. Except for Birri, Lenduic, and Mangbetu-Asua from Central Sudanic, this phenomenon is attested in all language groups of this survey. It provides an important backdrop for the picture of animacy-based gender marking but it is nevertheless of limited diagnostic value in the present areal context, as it is cross-linguistically widespread.

Type-B languages involve an asymmetrical treatment of nouns through pronominal anaphor whereby referents lower on the nominal hierarchy, namely inanimate (or non-human) ones, display zero anaphor (or are resumed by a proform outside the pronoun paradigm like a demonstrative, a noun 'thing' etc.). I have called such a binary pattern, schematized in Figure 23, a partly covert pronominal gender system.

$$
\begin{array}{ll}
\textbf{SG} & \textbf{PL} \\
\text{X} \longrightarrow \text{HIGH} & \text{(overt exponence)} \\
 & \longrightarrow \text{Y} \\
\text{\textcircled{$\varnothing$} LOW} & \text{(covert exponence)}
\end{array}
$$
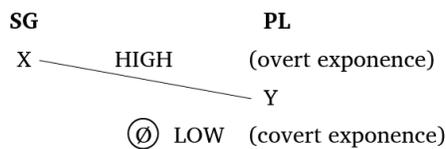
Figure 23. Partly covert pronominal gender system steered by the nominal hierarchy

Type C is similar to Type B except that inanimate (or non-human) nouns now involve overt exponence, too, as shown by one typical scheme in Figure 24. Such an overt gender system also holds when the inanimate gender has two exponents and thus is number-sensitive (cf. the systemic structure in Figure 17 of Dongo, although the languages as a whole does not belong to Type C, for which see below). I also assign a language to Type C if it displays an overt inanimate pronoun in just one context but has zero anaphor elsewhere, as, for example, in Bagiro (§1.1) or the various Gbayaic languages mentioned in Table 3 (§1.2.1).

$$
\begin{array}{ll}
\textbf{SG} & \textbf{PL} \\
\text{X} \longrightarrow \text{HIGH} & \text{(overt exponence)} \\
 & \longrightarrow \text{Y} \\
\text{\textcircled{Z} LOW} & \text{(overt exponence)}
\end{array}
$$
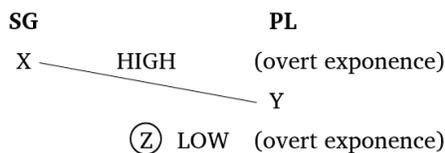
Figure 24. Overt pronominal gender system steered by the nominal hierarchy

Finally, Type D subsumes all languages with more complex gender systems, which applies here in two ways. For one thing, there can be additional genders beyond the basic macrogender opposition, this in the higher nominal domain, as in Zande with a tripartite distinction of human masculine vs. human feminine vs. non-human animate (§1.2.6, Figure 12), or in the lower domain, as in Dongo (§1.2.7, Figure 17 does not display the lower genders) or Pagibete (§1.4). Moreover, the language can convey gender by agreement beyond pronominal anaphor and is thus no longer just a pronominal gender system, which applies, for example, in Beeke (Table 1 and Figure 1) and again in Dongo and Pagibete-like Bantu languages.

A more grammaticalized or complex type often also has the classificatory device(s) defining the less grammaticalized or simpler type. For example, Type-B languages with a partly covert animacy-based gender system mostly have also a preference of animate adnominal number marking. Thus, the types may well establish a diachronic developmental cline. In this sense, a type refers to a stage a language has achieved on this historical path.

Table 8 gives a synopsis of the three language types involving animacy-based gender in those Central Sudanic and Ubangi groups where the feature is attested. It excludes likely but uncertain cases, for example, Gbayi (Ngbandic) and Barambu-Pambia (Zandic), as well as structurally similar systems with human-based gender, for example Ndunga (Mbaic). As indicated at the end of §1.4, forager languages do not warrant a separate treatment, so that I subsume the only relevant language Baka under its genealogical group Mundu-Baka.

Group	Subgroup	B Partly covert pronominal gender	C Over pronominal gender	D More complex gender
Central Sudanic	*Kresh*	1/1 ?	-	-
	Aja	1/1 ?	-	-
	Bongo-Bagirmi + Sinyar	2/12	1/12	1/12 ?
Ubangi	Gbayaic	1/3, Proto ?	5/3	-
	Mundu-Baka	2/6, Proto ?	2/6	-
	Bandaic	-	4/4	-
	RAGA	3/4 ?	1/4	-
	Ngbandic	2/4	-	-
	Zandic	-	1/5	2/5
	Mbaic	-	-	3/2

Notes: *italic* = single language, ? = data partly unclear

Table 8. Central Sudanic and Ubangi and three types of animacy-based gender

Table 8 also excludes the relevant Bantu languages, for which the reader is referred to the comprehensive surveys by Di Garbo & Verkerk (2022) and Verkerk & Di Garbo (2022); they always seem to be of Type D due to additional agreement beyond pronominal anaphor. The occurrence of the three types is represented by the relevant number of languages vis-à-vis the number of grammars and sketches consulted (cf. Table 2 above); if the first digit is higher than the second, additional data come from comparative studies. The individual languages are listed in the appendix at the end of this paper.

The numbers of languages with animacy-based gender may overall appear low but they are significant in both relative and absolute terms. For one thing, a high portion suggests that more cases of animacy-based gender exist among the many languages not yet documented and described, as it is then unlikely that these all turn out to lack the trait. Second and more importantly, the mere existence of semantically

transparent gender systems based on animacy is remarkable not only for Central Africa but for the continent as a whole and even globally, as they have not yet been recorded as such in this area let alone in this frequency. Thus, Corbett's (2013a, b) world-wide survey only identifies two clusters of languages with non-sex-based gender systems, namely Algonquian in North America and Niger-Congo in Africa. Significantly, he characterizes Niger-Congo as overall having formal assignment and being human-based in terms of macrogender, and he mentions exceptional animacy-based systems in this family only from eastern African Bantu. From Central Africa, the author only includes Lingala and Zande. While his specific analysis of Lingala remains unclear, he lists Zande under the different type of sex-gender languages and thus fails to recognize its deeper embeddedness in the various local animacy-based patterns at issue here.

Overall, the present survey of Central Sudanic and Ubangi summarized in Table 8 and the recent study of northwestern Bantu show that Central African languages display a previously unrecognized high incidence of semantically transparent gender systems based on animacy, this against the background of salient differential treatment of nouns according to this semantic feature. While such a gender distinction is ubiquitous in Ubangi, it only exists in some northern Bantu and southern Central Sudanic languages petering out south- and northwards, respectively. Map 4 shows that the relevant languages establish an area that comprises the savannah belt north of the Central African Rainforest and northern parts of the Congo Basin itself. In the east, neighboring Nilotic languages have not been described to possess this feature to my knowledge. Languages in the west are from Niger-Congo and many of them have a human-based gender system (see §1.3 for Bantu), which differs from the one at issue here (see below for more discussion of the western neighborhood).

Animacy-based gender displays a clustered distribution in Central Africa and should thus be characterized as an areal feature, raising the question of its historical nature. Since it is shared by languages of four groups that are not or only remotely related genealogically, namely Central Sudanic, Core Ubangi, Gbayaic, and Bantu, it cannot be due to inheritance from a common ancestor. Since such gender systems have so far not been attested frequently on both a continental and global level, multiple independent innovation by coincidence and/or universal trends are also unlikely explanations. Accordingly, I assume that this areal trend is induced to a considerable extent by language contact.

That language contact as such is a rampant phenomenon between the genealogically diverse languages of the area has been amply documented (see, e.g., Güldemann (2018a: 456-457) for a literature survey). Furthermore, genealogically related languages outside the area, relevant for Bantu and Central Sudanic, largely lack this gender feature. Languages of these two families are also responsible for most distributional gaps within the area, and at least some of them are likely to represent later arrivals – Bantu from the west, southwest and southeast and Central Sudanic from the north(east). Finally, their historically earlier stages, to the extent they have been reconstructed, are assumed to have lacked the trait (cf. Meeussen (1967) for Proto-Bantu with formal gender assignment and human-based macrogender and Boyeldieu (2013) for Proto-Bongo-Bagirmi with no gender).
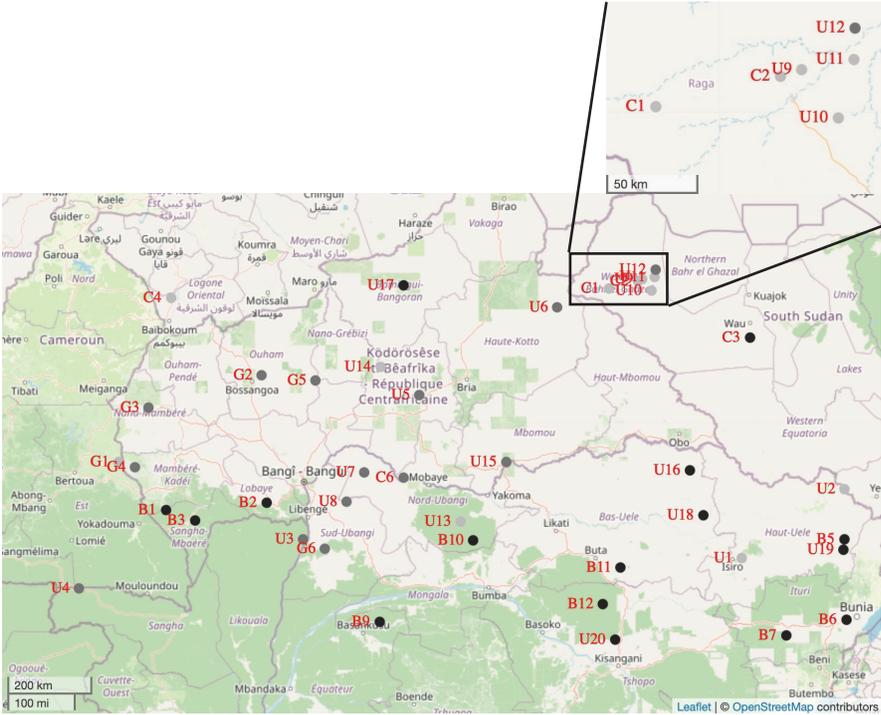
Note: Type B = light grey dot, Type C = dark grey dot, Type D = black dot

Map 4. Animacy-based gender systems in Central Africa[12]

Thus, probable cases of contact-induced animacy-based gender are the southernmost Bongo-Bagirmi language Furu (cf. §1.1) and even more so a number of Bantu languages of different subgroups (cf. intro/§1.3, see Di Garbo & Verkerk 2022; Güldemann, Di Garbo & Verkerk 2022; Verkerk & Di Garbo 2022). In Bantu, this innovation involves at least a semantic shift from a pre-existing different gender system to the local type. Recall that such a change also happend language-internally in the Mbaic family: Dongo and Ma streamlined their human-based Niger-Congo type gender system with the animacy-based pronoun system. Ndunga of Mbaic is yet more interesting in that the directionality of change is reversed: its pronoun system seems to have shifted from the Mbaic-typical animacy-based to human-based gender assignment. This change turns out to be the exception that proves the rule

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12. The map was produced by Alena Witzlack-Makarevich in R (R Core Team 2023) with the package lingtypology (Moroz 2017). It does not show Kenga (C5) of Type B in the north, as I do not consider it to partake in the area, and Kinshasa Lingala (B4) of Type D in the south, which does reflect the areal phenomenon despite its distance to the area by having its origin further north on the Ubangi River (see also Meeuwis 2020).

regarding language contact and gender restructuring: it is motivated by the strong Bantu influence on Ndunga for which Pasch (1987, 1988) provides substantial evidence in the very domain of noun classification.

My proposal that the proliferation of animacy-based, and very rarely human-based, gender in Central Africa is partly contact-induced is fully compatible with Seifart's (2018: 28) general finding about so-called "differential diffusability of nominal classification." He concludes that contact interference in this domain is more likely if it involves semantically transparent rather than opaque systems. This transparency indeed applies to the two macrogender distinctions of ± animate and ± human.

Attempting to assess the historical source of the areal feature, Table 9 summarizes the above findings according to the relevant language groups and states.

Language (group) Domain	*Proto-Bantu*	Local Bantu	Gbayaic	Core Ubangi	Central Sudanic	Modern forager	*Pre-shift Forager*
Grammatical asymnetry	?	(YES)	YES	YES	(YES)	(YES)	?
Gender system	NO	(YES)	YES	YES	(YES)	(YES)	?

Notes: *italic* = earlier language state, ? no information, (...) restricted occurrence

Table 9. Animacy-based noun classification in language groups of Central Africa

The two language groups Bantu and Central Sudanic have already been excluded as likely sources of the areal trait. Vorbichler (1963: 34) surmised for the smaller zone of the Ituri forest that animacy-based noun classification was a substrate feature of pre-shift forager language(s). However, he only looked at Bantu languages of both foragers and farmers while lacking relevant data on Central Sudanic and ignoring Ubangi languages, as these are not salient in the Ituri. The more comprehensive data assembled here do not furnish any concrete supporting evidence to his substrate hypothesis. As mentioned in §1.4, the profile of noun classification in modern forager languages, to the extent data are available, is regularly similar to that in the closest genealogical relatives spoken by farming groups. Hence, while one cannot exclude that some foragers before the shift spoke languages with some form of animacy-based noun classification and thus may have contributed to the modern areal feature, so far there is no positive evidence in favor of this idea. This is also in accordance with the fact that many languages with animacy-based gender are in fact spoken outside the rainforest in its northern savannah neighborhood.

According to the data presented in §1.2 and summarized in Table 8, the situation is different in all Ubangi groups (excluding Ndogoic with insufficient data). As highlighted also by the frame in Table 9, both the more isolated Gbayaic family and the remainder of Ubangi groups display the feature regularly. In all lineages with more than one language, namely Gbayaic, Mundu-Baka, Bandaic, Ngbandic, Zandic, and Mbaic, it is even justified to surmise that this trait was present there at an early language state. Hence, inasmuch as contact played a role, of all languages spoken in Central Africa today the most likely donors for various forms of animacy-based gender systems in Bantu, Central Sudanic, and at least partly even forager groups would have been Ubangi languages, whose distribution also coincides most closely

with the relevant area itself (see Map 2). At this stage, both of the principal contact patterns identified since Thomason & Kaufman (1988), namely borrowing and shift-induced interference aka substrate, should be considered for explaining the different contact outcomes.[13]

I briefly conclude with a couple of geographically yet wider aspects of the areal typology of animacy-based gender in Central Africa. First, the area at issue makes up a large part of the eastern half of a much greater zone of linguistic convergence called Macro-Sudan Belt (Güldemann 2008), without transgressing its borders. Accordingly, animacy-based gender should be added to the set of features defining this macro-area at least as a sub-areal trait (see the latest list in Güldemann 2018a: 479-486). Hence, the question arises regarding the status of the feature in the western half of the Macro-Sudan Belt and thus for the area as a whole. At least one family in the west has pronominal gender systems with transparent animacy-based semantics, namely Ijoid (cf., e.g., Jenewari (1977: 197-205, 245, 253, 265, 303-304) for Kalabari & Williamson (1965: 42, 62-63, 86-88, 114) for Izon). This case should be seen as genealogically independent, as Ijoid has not yet been shown to be a robust member of Niger-Congo (Güldemann 2018b: 174-177). Animacy-based gender has also emerged in West Africa in some genuine Niger-Congo languages (see, e.g., Güldemann & Fiedler 2019, 2022). The change there also goes often hand in hand with a reduction of a multiple-gender system toward a binary pattern, parallel to the phenomenon in Bantu in the east. It applies to several languages in the Potou-Tano and Ghana-Togo-Mountain groups. Further north, such Gur languages as Moba and Dagbani from the Oti-Volta branch are additional cases according to I. Fiedler (p.c.).[14] Recall also from §1.3 the cases in north-western Bantu, which are not inside but closer to the Central African area at issue. Overall, while the exact distribution of animacy-based gender systems in West Africa is still unclear, it is certainly far more dispersed than in Central Africa.

However, there could still be a more abstract parallel between the two parts of the Macro-Sudan Belt. In Central Africa, the unique and possibly independent case of the Mbaic family aside, the Bantu expansion brought the human-based gender system of Niger-Congo into the Congo Basin from the west and, what is commonly underestimated, the **south** (cf., e.g., Güldemann & Winkhart 2022). Gender systems in Bantu have thus been subject to change toward the locally entrenched ± animate pattern along a south(west)-to-north(east) trajectory. A similar hypothesis of relatively late substrate interference in Bantu by Central African languages emerges from Idiatov and Van de Velde's (2021: 97-101) study of labial-velar consonants in this family. In West Africa, gender systems of the Niger-Congo

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13. It is too early to speculate whether one of the two, and if so, which pattern was more important. If substrate played the central role, the present findings would support an idea so far entertained only rarely for the linguistic population history of the area, namely that, the extinct and unknown forager languages aside, at least some Ubangi groups preceded the other extant linguistic lineages. More extensive and dedicated research in the future should certainly consider this hypothesis.

14. In addition, Gur has innovative binary systems retaining the ± human distinction (e.g., Pana and Kalamsé from Grusi, Konni from Oti-Volta, and Koromfe), like Nzadi and similar cases in Bantu.

type were restructured and eventually shifted to a ± animate system according to a north-to-south vector. Moreover, Ijoid may well be a Non-Niger-Congo lineage and indigenous to the Niger Delta, a refugium south of expanding Niger-Congo groups, so that its animacy-based gender systems could be a remnant of a previously wider distribution of this feature. In conclusion, the advance of ± human gender systems in the two parts of the Macro-Sudan Belt appears to be geographically reversed: a north-to-south trajectory in its western half vs. a south(west)-to-north(east) trajectory in its eastern half, whereby in both regions ± human gives way to some extent to ± animate assignment. These two geographically distinct patterns could be explained in a unified way, if assuming that animacy-based gender was a trait more deeply entrenched in the Macro-Sudan Belt before Niger-Congo languages with a human-based gender system encroached from adjacent zones - in Central Africa from the south(west) and in West Africa from the north (see also the brief discussion in Güldemann 2018a: 505-507).

Another aspect of the gender systems in Central Africa concerns the fact that Zandic, Mbaic, and a couple of eastern Bongo-Bagirmi languages have additional sex-based gender assignment. Hence, the question arises whether there is any historical connection toward northeastern Africa where masculine vs. feminine is the areally predominant semantic distinction. For the time being, various considerations do not support such a hypothesis. The most important one is that the relevant languages, particularly Mba deep in the Congo Basin, have no likely donor languages with sex-gender. The closest candidate geographically is local Arabic, which, however, lacks the necessary time depth and contact intensity, at least for the cases in Zandic and Mbaic. For the record, possible donors for cases of sex-based gender in West Africa, notably again in the Ijoid family, would appear to be even more speculative.[15] In Güldemann (in preparation) I thus propose instead of contact that it is a generally latent natural development to elaborate systems with a pre-existing semantically transparent macrogender contrast by an additional sex-based opposition within the higher gender. That is, I assume that the occasional emergence of sex-based gender in Central Africa is likely to be a local independent innovation. This makes the historical dynamics of noun classification and gender in this area yet more interesting for the synchronic and diachronic typology of this linguistic domain, far beyond the African continent.

Acknowledgements

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15. Marchese (1988: 326-7) also reports the innovation of sex-based gender for human nouns in the two Western Kru languages Nyabwa and Wobe against the backdrop of a reconstructed ± human opposition.

Abbreviations

AGR	agreement
AN	animate
CAUS	causative
COM	comitative
COP	copula
DEF	definite
DEM	demonstrative
DIR	direction
F	feminine
FIN	final
GEN	genitive
H	human
IAN	inanimate
IMP	imperative
INTERR	interrogative
M	masculine
N	neuter (or none)
NEG	negation
NH	non-human
O	other
OBJ	object
PFV	perfective
PL	plural
POSSR	possessor
PST	past
RED	reduplication
REL	relative
SBJ	subject
SG	singular
TN	transnumeral

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Appendix: Central African languages with animacy-based gender systems

Language	Group	Glottocode	Gender type	Short label
Krech	Central Sudanic	gbay 1288	B	C1
Aja	Central Sudanic	ajas1235	B	C2
Bongo	Central Sudanic	bong1285	D	C3
Mbay	Central Sudanic	mbay1241	B	C4
Kenga	Central Sudanic	keng1240	B	C5 (not in Map 4)
Furu	Central Sudanic	furu1242	C	C6
Gbaya-Mbodomo	Gbayaic	gbay1281	B	G1
Gbaya-Bossangoa	Gbayaic	gbay1287	C	G2
Northwest Gbaya	Gbayaic	nort2775	C	G3
Southwest Gbaya	Gbayaic	sout2785	C	G4
Manza	Gbayaic	manz1243	C	G5
Ngbaka Minagende	Gbayaic	ngba1285	C	G6
Mayogo	Ubangi, Mundu-Baka	mayo1261	B	U1
Mündü	Ubangi, Mundu-Baka	mund1326	B	U2
Monzombo	Ubangi, Mundu-Baka	monz1249	C	U3
Baka	Ubangi, Mundu-Baka	baka1272	C	U4
Banda-Bambari	Ubangi, Bandaic	band1344	C	U5
Banda-Ndélé	Ubangi, Bandaic	band1345	C	U6
Mono	Ubangi, Bandaic	mono1270	C	U7
Mbandja	Ubangi, Bandaic	mban1263	C	U8
Feroge	Ubangi, Feroge-Mangaya	fero1244	B	U9
Mangayat	Ubangi, Feroge-Mangaya	mang1387	B	U10
Togoyo	Ubangi	togo1252	B	U11
Indri	Ubangi	indr1247	C	U12
Northern Ngandi	Ubangi, Ngbandic	nort2774	B	U13
Sango	Ubangi, Ngbandic	sang1328	B	U14
Nzakara	Ubangi, Zandic	nzak1247	C	U15
Zande	Ubangi, Zandic	zand1248	D	U16
Geme	Ubangi, Zandic	geme1244	D	U17
Ma	Ubangi, Mbaic	made1252	D	U18
Dongo	Ubangi, Mbaic	dong1290	D	U19
Mba	Ubangi, Mbaic	mbaa1245	D	U20
Kako	Bantu	kako1242	D	B1
Mbati	Bantu	mbat1248	D	B2
Pande	Bantu	pand1264	D	B3
Kinshasa Lingala	Bantu	ling1263	D	B4 (not in Map 4)
Beeke	Bantu	beek1238	D	B5
Bera	Bantu	bera1259	D	B6

Language	Group	Glottocodde	Gender type	Short label
Bila	Bantu	bila1255	D	B7
Komo	Bantu	komo1260	D	B8
Ngombe	Bantu	ngom1268	D	B9
Pagibete	Bantu	pagi1243	D	B10
Bwa	Bantu	bwaa1238	D	B11
Ngelima	Bantu	ngel1238	D	B12

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Résumé

Étudiant la diversité linguistique de la forêt humide de l'Ituri, en Afrique centrale, Vorbichler (p.ex. 1963) a observé que plusieurs langues de cette zone montrent des traits grammaticaux reflétant une catégorisation des référents nominaux suivant le critère ± animé. Cependant, seules quelques langues de la région ont été décrites explicitement comme possédant un système de genre basé sur le marquage de l'animéité. Sur base d'une enquête effectuée à cette fin, je montre qu'une telle classification nominale est en effet un trait aréal de l'Afrique centrale en général, mais qu'elle est mise en application, dans de nombreuses langues, à travers les propriétés comportementales des noms dans d'autres domaines grammaticaux qui peuvent, mais ne doivent pas, conduire à un genre au sens strict. Cet article analyse la classification nominale dans tous les groupes de langues pertinents, compare les différents systèmes de genre et évalue leur distribution dans une perspective synchronique et diachronique dans le but final de déterminer son importance géographique actuelle et son origine historique.