A new approach to gender in Somali

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1 Theoretical preliminaries

+ gender = classification of nouns and discourse referents (triggers) reflected by agreement on other word (targets)
- but gender rarely the only feature in the relevant agreement system, most often conflated with the number feature
> full understanding of gender system requires that all agreement factors other than gender are analyzed exhaustively and "subtracted", so-to-speak:

Gender = Agreement minus Number et al.

+ agreement of target(s) with a nominal trigger determined by:
- semantic properties of a nominal referent or a noun as an abstract lexicon item AND
- formal properties of a concrete noun form in a grammatical agreement context
> four crucial analytical concepts in the analysis of gender (cf., e.g., Corbett 1991, 2000, 2006; Evans, Brown and Corbett 1998; Güldemann 2000):

a) GENDER (CLASS) (symbolized here by Roman numbers):
= class of items in conceptual referent domain, mostly noun lexemes - ultimate goal of analysis at issue here

b) AGREEMENT CLASS (abbreviated here as AGR, not as in Corbett 1991):
= class of concrete noun forms established on account of identical behavior across all agreement contexts as overt but conflated reflex of diverse agreement features

c) NOUN (FORM) CLASS (abbreviated here as NFO):
= class of concrete noun forms established on account of identical properties in their own form which often determine agreement (≠ "noun class" in Niger-Congo)

d) DECLENSION (CLASS): = class of nouns in the lexicon established on account of their morphological variation in terms of number, gender, etc.

2 Gender in Somali

2.1 Traditional analysis

+ description of Somali in terms of a canonical bipartite sex-based gender system:

> There are two genders: all nouns are either masculine or feminine. For the most part gender is not predictable from the meaning of nouns. The exceptions include nouns for people and animals: *nín* 'man' is masculine and *náag* 'woman' is feminine, for example. Even here though there are arbitrary cases: the collective noun *hawéen* 'women' is masculine. (Saeed 1999: 54)

+ ever since Meinhof (1910, 1912) scholars speak of so-called "gender polarity" in Somali (and other Cushitic languages): based on the NP-internal agreement system as a prominent and consistent agreement context characterized by two thematic consonants *k* and *t* associated in the singular with masculine and feminine nouns, respectively

	DEF		**DEM**				**INT**
	remote	non-remote	close	further away	middle distance	far distance	
K	*kii*	*ka*	*kán*	*káa(s)*	*kéer*	*kóo*	*kée*
T	*tii*	*ta*	*tán*	*táa(s)*	*téer*	*tóo*	*tée*

Table 1: Forms of noun modifiers (after Saeed 1999: 112-4)

(1) *ìnan-kii*
boy-"M".S:DEF
the boy

(2) *inán-tii*
girl-"F".S:DEF
the girl

(3) *inammá-dii* (*dii* < *tii*)
boy:P-"F":DEF
the boys

(4) *inámo-hii* (*hii* < *kii*)
girl:P-"M":DEF
the girls (Serzisko 1982: 185)

+ argue here that the situation in Somali is in fact more complex in terms of its gender inventory as well as its assignment criteria

2.2 Agreement classes

+ agreement system of Somali indexes gender and number in various nominal modifiers (see Table 1), independent pronouns, focus marking, and subject cross-reference

(5) "Masculine" pattern 1
*baabùur-**kii*** *waa-**uu*** ***y**-imid*
truck-"M":DEF IS-"M" "M"-came
'the truck came' (Saeed 1999: 55)

(6) "Feminine" pattern 2
*náag-**tii*** *waa-**ay*** ***t**-imid*
woman-"F":DEF IS-"F" "F"-came
'the woman came' (Saeed 1999: 56)

(7) “Plural” pattern 3
*baabuurró-**dii*** *waa-**ay*** ***y**-imad**een***
truck:P-“F”:DEF IS-“P” “P”-came:P
‘the trucks came’ (Saeed 1999: 56)

(8) “Plural” pattern 4
*naagó-**hii*** *waa-**ay*** ***y**-imad**een***
woman:P-“M”:DEF IS-“P” “P”-came:P
‘the women came’ (Saeed, 1999: 56)

AGR	Traditional label	Modifiers	Focus clitic	Pronoun	Subject on verb	Example nouns
1	“Masculine”	*k-*	*-uu*	*isága*	*y-*	‘ox’, ‘boy’, ‘man’, ‘tea’
2	“Feminine”	*t-*	*-ay*	*iyága*	*t-*	‘oxen’, ‘girl’, ‘dagger’,‘sand’
3	“Plural”	*t-*	*-ay*	*iyága*	*y-_-een*	‘boys’, ‘daggers’
4	“Plural”	*k-*	*-ay*	*iyága*	*y-_-een*	‘men’, ‘girls’, ‘milk’

Table 2: Agreement classes in Somali

+ agreement contexts mostly entail only a binary distinction of class exponents (if discarding the number agreement suffix *-een* on verbs, even with all targets):
> however, only 2 contexts display the same coding pattern in the classification of noun forms, leading to three binary marking patterns:

1 vs. 2,3,4 pronouns and focus enclitics
1,4 vs. 2,3 determiners
1,3,4 vs. 2 verb prefixes

> 1 vs. 2 as primary distinction - basis of the traditional analysis in terms of 2 genders

AGR	Traditional label	Modifiers	Focus clitic + Pronoun	Subject on verb
1	“M”	A	A	A1
2	“F”	B	B	B
3	“P”	B	B	A2
4	“P”	A	B	A2

Table 3: Context-internal oppositions in agreement classes in Somali

+ even when disregarding gender, traditional labels misleading in several respects:
“M” = masculine singular also relevant for transnumeral nouns
“F” = feminine singular also relevant for transnumeral and plural nouns
“P” = plural lumps two agreement classes distinct in modifier context
> 4 agreement classes symbolized throughout by bare Arabic numerals: 1, 2, 3, 4

2.3 The structural gender system

2.3.1 Establishing genders

+ structural gender established by the agreement behavior of nominal lexemes/referents
> independent of relevant number values: S = singular, P = plural, TR = transnumeral
> hard to extract from grammars and dictionaries - often nontransparent in this respect

S	TR	P	S	TR	P	Serzisko (1982: 185-6)	Saeed (1999: 55-7)
“M”		“P”1	1		3	‘boy’	‘truck’
“M”		“P”2	1		4	‘man’, ‘street’	-
“M”		“F”	1		2	‘ox’, ‘camel’, ‘bull’	-
“F”		“P”2	2		4	‘girl’	‘woman’
“F”		“P”1	2		3	‘dagger’	-
	“P”2			4		-	‘milk’
	“M”			1		-	‘tea’
	“F”			2		-	-

Note: Evidence for last pattern “F”~2 based on Zorc and Madina (1993)
Table 4: Different Somali lexemes according to agreement behavior

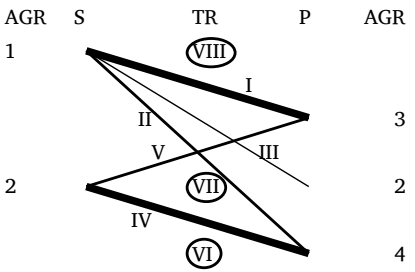


Figure 1: The structural gender system of Somali

> complex system of structural genders well beyond traditional account of M vs. F:

I-V symbolized by lines: count nouns with singular-plural distinction
VI-VIII symbolized by circles: transnumeral nouns

+ exhaustive analysis of a larger dictionary with more than 13.000 nominal items (Zorc and Madina 1993) in order to establish lexical frequencies of genders (transnumeral genders cannot be numerically specified individually due to insufficient dictionary information)
> considerable differences in size of genders (see Table 5, also represented by the thickness of the lines in Figure 1) but unlikely account of smaller noun groups in terms of “inquorate” genders (= lexical exceptions to be better dealt with in the lexicon, cf. Corbett 1991)

Gender	AGR (pair)	No. of nouns
I	1/3	5555
II	1/4	662
III	1/2	99
IV	2/4	3122
V	2/3	418
VI	4	3196
VII	2	
VIII	1	

Table 5: The lexical frequency of the eight structural genders

2.3.2 The myth of "gender polarity"

+ modifier system of major genders I vs. IV captured by "polarity" (cf. (1)-(4), Figure 2)
> pattern only holds in a single agreement context; not in three others with "convergence" (Figure 3, 4), let alone entire system (Figure 1) (cf. Speiser (1938), Corbett (1991: 195-7), Nilsson 2015)) - questionable even as "partial polarity" (cf. Figure 5 for German)
- much better candidates for "polarity" elsewhere - Mosel and Spriggs (2000) on Teop

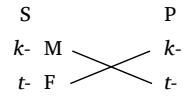


Figure 2: Thematic consonants in modifiers and traditional genders in Somali

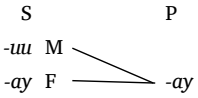


Figure 3: Focus clitics and traditional genders in Somali (same pattern for pronouns)

Figure 4: Subject cross-reference affixes and traditional genders in Somali

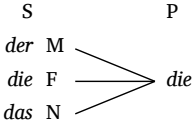


Figure 5: Definite articles and genders in German

2.3.3 Typologically remarkable and problematic features

(I) three agreement classes in the plural vs. two in the singular
> exception to Greenberg's (1963) Universal 37: "A language never has more gender categories in nonsingular numbers than in the singular." (cf. Plank and Schellinger 1997)

(II) agreement classes with flexible behavior regarding agreement values as major reason for multiply "crossed" system in terms of Heine (1982) (cf. similar cases in other African languages (Güldemann 2000), so far little appreciated in typology)

AGR	Traditional label	Number	Paired gender		Transnumeral gender
			S	P	
1	"Masculine"	S	I, II, III		VIII
2	"Feminine"	S, P	IV, V	III	VII
3	"Plural" 1	P		I, V	-
4	"Plural" 2	P		II, IV	VI

Table 6: (Non)correlation of agreement classes with gender and number

- AGR2 not dedicated to a specific number value
- none of the 4 agreement classes dedicated to a single gender
- "masculine" AGR1 with most specific semantic profile: largely singular nouns in the macro-domain of masculine genders (see §3 below), correlates with its unique coding profile in two of four agreement contexts (focus clitics, pronouns)
> traditional agreement terms indeed misleading and thus unsuitable, in particular:
- "Feminine" AGR2 also used in the plural of gender III and there marks MASCULINE nouns (cf. recurrent closer relationship in Cushitic between feminine and non-singular number)

(III) three genders (VI-VIII) formed by transnumeral nouns with a number feature that has both semantic and structural aspects
> question about theoretically possible alternative that they are singularia or pluralia tantum of genders established by countable nouns with a number distinction:

VI: plural in II or IV?
VII: singular in IV or V, or else plural in III?
VIII: singular in I, II or III?

- for the time being arbitrary decision to consolidate a transnumeral gender with a particular paired gender it shares an agreement class with
> intentional use of the term "structural gender", to be refined below on account of formal evidence of noun form classes

2.4 Noun form classes, number declension, and gender

+ nouns, as the trigger of agreement, have semantic and FORMAL properties
> long recognition of the fact that the segmental and even prosodic form of Somali nouns, in particular relating to number marking, can determine their agreement behavior
> establishment of the full system of noun form classes in order to better understand the complex gender system

2.4.1 The traditional system of declension classes

+ formal variation in noun morphology and prosody traditionally captured by a system of nominal declension classes: Andrzejewski (1964), Saeed (1999)

No.	Number	Number-specific segmental form	Tone pattern	Agree-ment	Example noun
DCL1	Singular	none	FH	“F”	*cabsí* ‘fear’
	Plural	*-(y)o*	FH	“M”	*cabsiyó*
DCL2	Singular	none	PH (FH)	“M”	*ólol* ‘flame’
	Plural	*-(y)o / -Co*	FH	“F”	*ololló*
DCL3	Singular	none	PH	“M”	*ílig* ‘tooth’
	Plural	*-(y)o* + vowel drop	FH	“M”	*ilkó*
DCL4	Singular	monosyllabic	PH	“M”	*sán* ‘nose’
	Plural	*-aC*	FH	“M”	*sanán*
DCL5	Singular	none	PH	“M”	*àwr* ‘male camel’
	Plural	none	FH	“F”	*áwr*
DCL6	Singular	final *-o*	(PH) FH	“F”	*dawó* ‘medicine’
	Plural	*-oyin*	PH	“M”	*dawóoyin*
DCL7	Singular	final *-e*	(PH) FH	“M”	*tuké* ‘crow’
	Plural	*-yaal*	FH	“F”	*tukayáal*

Note: (…) possible minor tone pattern

Table 7: Seven nominal declension classes (Saeed 1999: 59-63)

- complex inventory of segmental markers: mostly suffixes encoding number
- additional distinction between two pitch accent pattern of nouns: “penultimate high” (PH) vs. “Final high” (FH)
> recurrent shift between singular and plural in 5 of 7 declension classes, generally strong (though not absolute) correlation with number and gender category (cf., e.g., Hyman 1981)
- traditional declension classes integrate besides formal features also agreement as a major syntactic property - unsuitable as pure NFO class inventory according to above definition

2.4.2 A fuller account of noun form classes

+ total of 28 noun form classes in terms of segmental properties involving:
  - inherent root forms of uninflected and underived nouns
  - diverse morphological plural forms
  - large range of morphological derivatives
+ additional suprasegmental distinction according to the two tone patterns PH vs. FH
> presented in subsets according to diverse number-sensitivity and subsequently numbered:

S	dedicated to singular	fully
V	variable between singular and transnumeral	derivational
P	dedicated to plural	largely
F	free of any number restriction	inflectional

> focus on correlation between NFO class and agreement, and thus gender

NFO	Form	Tone S P	AGR	Genders	
F1	unmarked	PH FH	1, 2, 3	S-P: I-V	TR: VII, VIII
F2	*-(y)o*	(PH) FH	1, 2, 3, 4	S-P: I, II, IV, V	TR: VI, VII

Table 8: Noun form classes free of any number restriction

+ both NFO classes formally unmarked and also largely insensitive to nominal classification system regarding both agreement and gender
- F1 without any thematic segment subsumes several types of nouns like simplex nouns (including monosyllables with two typical plural strategies), loan words without Somali morphology, and Ø-nominalizations of verb roots
- F2 in final *-o* is morphologically diverse, subsumes morphologically productive plurals in *-(y)o* and theoretically expected non-plural forms with an inherent final root vowel *-o*

NFO	Form	Tone S P	AGR	Gender	Meaning/function
S1	*-le*	PH	1	I, III	owner/possessor of X
S2	*-Ce*	FH	2	I	agentive/instrumental
S3	*-ad*	FH	2	IV	derived feminine
S4	*-~~V~~ad**	PH	1	I	verbal noun

Note: * suffix recurrently causes loss of verb base vowel

Table 9: Noun form classes dedicated to singular derivatives

+ 3 classes (S2, S3, S4) dedicated to agreement class and gender
+ 1 class (S1) dedicated to agreement class but not gender

NFO	Form	Tone S P	AGR	Gender	Meaning/function
V1	*-to*	FH	2	IV, VII	agentive + collective
V2	*-darro*	FH	2	IV, VII	privative/antonym
V3	*-nimo*	FH	2	IV, VII	abstract [-ness, -ity]
V4	*-tinnimo*	FH	2	IV, VII	abstract
V5	*-tooyo*	FH	2	IV, VII	abstract [state of being X]
V6	*-asho*	FH	2	IV, VII	gerund [act of VERBing]
V7	*-xumo*	FH	2	IV, VII	opposite deadject. abstract
V8	*-iyad*	FH	2	IV, VII	abstract [-ism, -ology]
V9	*-id (-is)*	FH	2	IV, VII	gerund [act of VERBing]
V10	*-aan*	FH	2	V, VII	deadjectival abstract
V11	*-n*	FH	2	V, VII	gerund
V12	*-tan*	FH	1	I, VIII	reciprocal
V13	*-itaan*	PH	1	I, VIII	verbal noun
V14	*-s*	PH	1	I, VIII	verbal noun
V15	*-tin*	FH	1 2	I, IV, VII, VIII	result of VERBing
V16	*-aal*	PH FH	1 2	I, IV, VII, VIII	product of VERBing
V17	*-niin*	PH FH	1 2	I, IV, VII, VIII	gerund

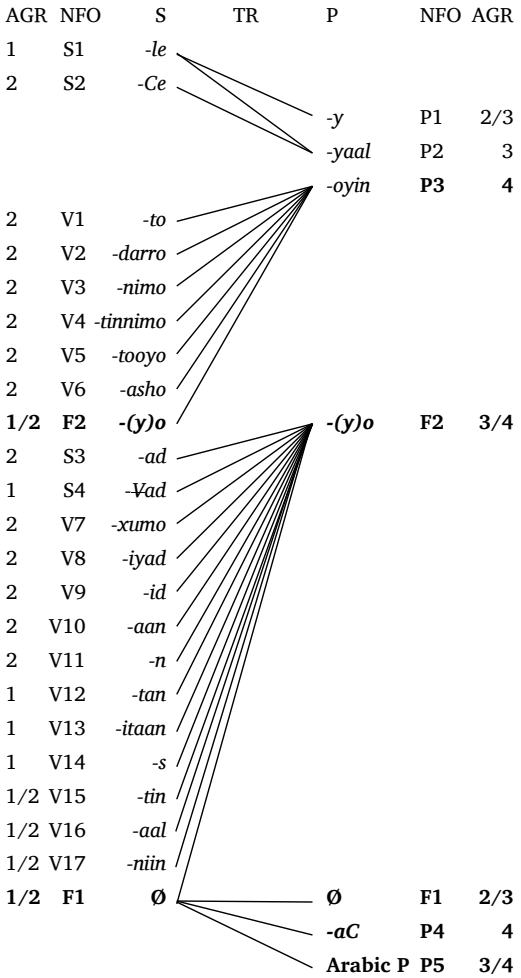
Table 10: Noun form classes variable between singular and transnumeral derivatives

+ 14 classes (V1-14) dedicated to agreement class but not gender (but see below)
+ 2 classes (V16, V17) in 2 agreement classes related to alternating prosody
+ 1 class (V15) in 2 agreement classes but apparently with single tone pattern

NFO	Form	Tone S P	AGR	Gender	Plural for:
P1	*-y*	PH	2, (3)	I, III	some S1- and all S2-nouns in *-e*
P2	*-yaal*	FH	3	I	some S1-nouns in *-e*
P3	*-oyin*	PH	4	II, IV	V1-6 and F2-singulars in *-o*
P4	*-aC* reduplication	FH	4	II, IV	monosyllabic F1-singulars
P5	Arabic plural	n.a.	3, 4	I, IV	Arabic-loans within F1

Table 11: Noun form classes dedicated to plural nouns

+ 1 class (P2) dedicated to agreement class and gender
+ 2 classes (P3, P4) dedicated to agreement class but not gender
+ 2 classes (P1, P5) not dedicated to agreement class and gender



Note: **bold** = **plain number inflection**, V classes not repeated in their transnumeral use

Figure 6: Mapping of noun form classes over numbers

Noun forms are crucial agreement triggers independent of meaning.

2.4.3 Structural genders and noun form classes

+ since noun form classes partly predict agreement, noun declension also expected to interact with/determine gender system - cf. Figure 1 with eight structural genders:

3 genders for count nouns with AGR1 in singular: I-III > Table 12
2 genders for count nouns with AGR2 in singular: IV, V > Table 13
3 genders for transnumeral nouns defined by AGR1/2/4: VI-VIII > Table 14

+ variable correlation between noun form classes and gender assignment:
- 4 derivational classes predict gender (as well as number and agreement):
S2, S4: singulars in gender I
P2: plurals in gender I
S3: singulars in gender IV
- 14 derivational classes predict gender (and agreement) including transnumeral nouns:
V1-9: singulars or singularia tantum in gender IV
V10-11: singulars or singularia tantum in gender V
V12-14: singulars or singularia tantum in gender I
- 2 derivational classes predict gender (and agreement) including prosody distinction:
V16-17, if FH: singulars or singularia tantum in gender IV
if PH: singulars or singularia tantum in gender I
- 8 classes entirely insensitive to gender: F1, F2; S1; V15; P1, P3, P4, P5
> relevance of semantic gender assignment!? - see §2.5 below
> derivational classes overall more dedicated to gender than inflectional classes

Gender	AGR pair	NFO pair (tone class) S	P	**Number of lexemes**
I	1/3	**S1 (PH)**	**P1 (PH)**	5555 (42,6%)
		S1 (PH)	P2 (FH)	
		S2 (FH)	P2 (FH)	
		F1	**P5**	
		F1	**F1**	
		S4 (PH)	F2	
		V12 (FH)	F2	
		V13 (PH)	F2	
		V14 (PH)	F2	
		V15 (FH)	**F2**	
		V16 (PH)	**F2**	
		V17 (PH)	**F2**	
		F1	**F2**	
II	1/4	**F2**	**P3 (PH)**	662 (5%)
		F1	**P4 (FH)**	
		F1	**F2**	
III	1/2	**S1 (PH)**	**P1 (PH)**	99 (0,8 %)
		F1	**F1**	

Note: bold = declension in more than one gender

Table 12: Declension of count nouns with AGR1 in singular number

Gender	**AGR pair**	**NFO pair (tone class) S**	**P**	**Number of lexemes**
IV	2/4	V1 (FH)	P3 (PH)	3122 (23,9 %)
		V2 (FH)	P3 (PH)	
		V3 (FH)	P3 (PH)	
		V4 (FH)	P3 (PH)	
		V5 (FH)	P3 (PH)	
		V6 (FH)	P3 (PH)	
		F2	**P3 (PH)**	
		F1	**P4 (FH)**	
		F1	**P5**	
		S3 (FH)	F2	
		V7 (FH)	F2	
		V8 (FH)	F2	
		V9 (FH)	F2	
		V15 (FH)	**F2**	
		V16 (FH)	**F2**	
		V17 (FH)	**F2**	
		F1	**F2**	
V	2/3	V10 (FH)	F2	418 (3,2 %)
		F1	**F2**	

Note: bold = declension in more than one gender

Table 13: Declension of count nouns with AGR2 in singular number

+ transnumeral nouns can be related to different paired genders on account of their agreement, but possibility that their NFO class profile favors a specific relation to a paired gender, so that they can be treated as its singularia or pluralia tantum
> indeed partly corroborated:
a) all specific NFO classes of VIII can be included as singularia tantum of gender I rather than genders II or III
b) most specific NFO classes of VII can be included as singularia tantum of gender IV rather than gender V, while V10-11 are singularia tantum of gender V rather than gender IV
c) F2 of VI remains indeterminate between analysis as pluralia tantum of gender II or IV on account of segmental noun form class marking - what about prosody?!
> predominant FH of F2 favors gender IV rather than II

Gender	AGR	NFO (tone class)	Number of lexemes
VI	4	F2 (?FH)	
VII	2	V1 (FH)	
		V2 (FH)	
		V3 (FH)	
		V4 (FH)	
		V5 (FH)	
		V6 (FH)	
		V7 (FH)	
		V8 (FH)	
		V9 (FH)	
		V10 (FH)	
		V11 (FH)	
		V15 (FH)	3196 (24,5 %)
		V16 (FH)	
		V17 (FH)	
		F1	
		F2	
VIII	1	V12 (FH)	
		V13 (PH)	
		V14 (PH)	
		V15 (FH)	
		V16 (PH)	
		V17 (PH)	
		F1	

Table 14: Noun form classes in structural genders of transnumeral nouns

+ consolidation of 8 structural genders to not more than 6 lexical genders in Figure 7

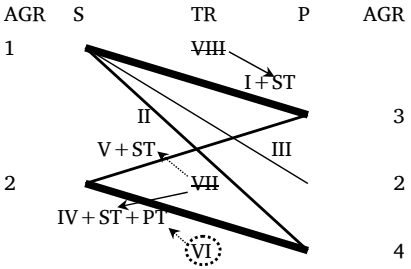


Figure 7: The consolidated gender system of Somali

2.5 Semantic gender assignment

+ so far only 2 macro-genders that correlate with specific agreement classes in the singular

> analytical bias towards Germanic with agreement class convergence to plural number?!

Gender	Macro-gender	Semantic core(s)
I	Masculine	???
II	(AGR1 in singular)	??? body part
III		??? animal (collective), plant
IV	Feminine	???
V	(AGR2 in singular)	???
(VI)	Non-count	???

Table 15: Semantic assignment criteria

+ detailed analysis still to do

> mapping of genders and noun form classes~declensions helps to determine the relevance of formal vs. semantic assignment, as appearance of one declension in more than one gender generally implies that noun form is irrelevant for gender assignment and hence predicts existence of non-formal semantic assignment criteria

	NFO (pair)	Masculine	Feminine	Non-count
a	F2-P3	II	IV	-
b	F1-P4	II	IV	-
c	F1-P5	I	IV	-
d	V15-(F2)	I	IV	-
e	F1-(F2)	I, **II**	IV, **V**	-
f	F1-F1	I, **III**	-	-
g	S1-P1	I, **III**	-	-
(h)	F2	-	IV	VI

Table 16: Different gender assignment of nouns despite identical declension

a-d semantic differentiation between masculine and feminine macro-genders

d-g semantic sub-differentiation within masculine and feminine macro-genders as basis of genders II, III, and V

(h semantic sub-differentiation to count nouns as basis of gender VI?)

3 Summary

+ analysis that recognizes and separately treats the four basic analytical concepts of agreement class, noun form class, gender (class), and declension (class) yields a considerably different picture of gender in Somali > several possible analyses of the system:

1. most complex system of 8 structural genders - unnecessary
2. less elaborate system of 6 genders - possible and quite in line with African context
3. smallest system with three genders, and additional sub-genders in 2 macro-genders:
   - A "masculine" with three subgenders: I, II, III
   - B "feminine" with two subgenders: IV, V
   - C "non-count": VI
4. potential merging of VI pluralia tantum nouns of IV:
   - A "masculine" with three subgenders: I, II, III
   - B "feminine" with two subgenders: IV, V

Any analysis is more complex than the traditional account!!!

Abbreviations

Roman numerals = Gender (class)

AGR agreement class, DCL declension class, DEF definite, F feminine, FH final high, IS information structure, M masculine, NFO noun form class, P plural, PH penultimate high, PT pluralia tantum, S singular, ST singularia tantum, TR transnumeral

References

Andrzejewski, Bogumil W. 1964. The declensions of Somali nouns. London: School of Oriental and African Studies.

Corbett, Greville G. 1991. Gender. Cambridge: Cambridge University Press.

Corbett, Greville G. 2000. Number. Cambridge: Cambridge University Press.

Corbett, Greville G. 2006. Agreement. Cambridge: Cambridge University Press.

Evans, Nicholas D., Dunstan Brown and Greville G. Corbett. 1998. Emu divorce: a unified account of gender and noun class assignment in Mayali. Chicago Linguistic Society 34: 127-142.

Greenberg, Joseph H. 1963. Some universals of grammar with particular reference to the order of meaningful elements. In Greenberg, Joseph H. (ed.), Universals of language. Cambridge, Mass.: MIT Press, 73-113.

Güldemann, Tom. 2000. Noun categorization systems in Non-Khoe lineages of Khoisan. Afrikanistische Arbeitspapiere 63: 5-33.

Heine, Bernd. 1982. African noun class systems. In Seiler, Hansjakob and Christian Lehmann (eds.), Apprehension: Das sprachliche Erfassen von Gegenständen, Teil I: Bereich und Ordnung der Phänomene. (Language Universal Series, 1/I.) Tübingen: Gunter Narr, 189-216.

Hyman, Larry M. 1981. Tonal accent in Somali. Studies in African Linguistics 12,2: 169-201.

Maniscalco, Samuele. 2015. The gender system of Somali. Master thesis: Humboldt University Berlin.

Meinhof, Carl. 1910. Die moderne Sprachforschung in Afrika: Hamburgische Vorträge. Berlin: Berliner Evangelische Missionsgesellschaft.

Meinhof, Carl. 1912. Die Sprachen der Hamiten. Abhandlungen des Hamburgischen Kolonialinstituts 9. Hamburg: L. Friederichsen.

Mosel, Ulrike and Ruth Spriggs. 2000. Gender in Teop (Bougainville, Papua New Guinea). In Unterbeck, Barbara and Matti Rissanen (eds.), Gender in grammar and cognition. Trends in Linguistics, Studies and Monographs 124. Berlin/ New York: Mouton de Gruyter, 321-349.

Nilsson, Morgan. 2015. Somali gender polarity revisited. Paper presented at the 46th Annual Conference on African Linguistics, University of Oregon, 26-28 March 2015.

Plank, Frans and Wolfgang Schellinger. 1997. The uneven distribution of genders over numbers: Greenberg Nos. 37 and 45. Linguistic Typology 1,1: 53-101.

Saeed, John I. 1999. Somali. London Oriental and African Library 10. Amsterdam: John Benjamins.

Serzisko, Fritz. 1982. Numerus/Genus-Kongruenz und das Phänomen der Polarität am Beispiel einiger ostkuschitischer Sprachen. In Seiler, Hansjakob and Franz J. Stachowiak (eds.), Apprehension: Das sprachliche Erfassen von Gegenständen, Teil II: Die Techniken und ihr Zusammenhang in Einzelsprachen. Language Universals Series 1/II. Tübingen: Gunter Narr, 179-200.

Speiser, E. A. 1938. The pitfalls of polarity. Language 14: 187–202.

Zorc, R. David and Osman M. Madina. 1993. Somali-English dictionary with English index (3rd edition). Kensington, Maryland: Dunwoody Press.