A new approach to gender in Somali

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1 Theoretical preliminaries

+ gender = classification of noun (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 mostly of a noun lexeme as an abstract item in the lexicon AND
- formal properties of a concrete noun form in a grammatical agreement context

> three 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 nouns in the abstract lexicon - ultimate goal of analysis

b) AGREEMENT CLASS (abbreviated here as AGR):
= 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; parallel to the concept of “noun classes” in Niger-Congo in only one of its two denotations

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 with two thematic consonants *k* and *t* associated with masculine and feminine, 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: The forms of the determiner system in Somali (after Saeed 1999)

(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 far 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	Pronoun	Focus	Subject on verb	Example nouns
1	“Masculine”	*k-*	*iséga*	*-uu*	*y-*	‘ox’, ‘boy’, ‘man’, ‘tea’
2	“Feminine”	*t-*	*iyéga*	*-ay*	*t-*	‘oxen’, ‘girl’, ‘dagger’, ‘sand’
3	“Plural”	*t-*	*iyéga*	*-ay*	*y-_-een*	‘boys’, ‘daggers’
4	“Plural”	*k-*	*iyéga*	*-ay*	*y-_-een*	‘men’, ‘girls’, ‘milk’

Table 2: Agreement classes in Somali

+ agreement contexts mostly entail only a binary distinction (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

AGR	Traditional label	Modifiers	Pronoun	Focus	Subject on verb
1	“M”	A	A	A	A1
2	“F”	B	B	B	B
3	“P”	B	B	B	A2
4	“P”	A	B	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
“F” = feminine singular also relevant for transnumeral and plural nouns
“P” = plural lumps two agreement classes distinct in determiner 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 an abstract nominal lexeme
> independent of relevant number values: S = singular, P = plural, TR = transnumeral
> hard to extract from grammars which are often nontransparent in this respect

S	TR	P	S	TR	P	Serzisko (1982)	Saeed (1999)
“M”		“P”1	1		3	boy (p.185, (4))	truck (p.55-6)
“M”		“P”2	1		4	man, street, ?thing (p.185, (3))	
“M”		“F”	1		2	ox, camel, bull (p.186, (7))	
“F”		“P”2	2		4	girl (p.185, (4))	woman (p.55-6)
“F”		“P”1	2		3	dagger (p.185)	
	“P”2			4			milk (p.57)
	“F”			2			
	“M”			1			tea (p.57)

Table 4: Different Somali lexemes according to agreement behavior

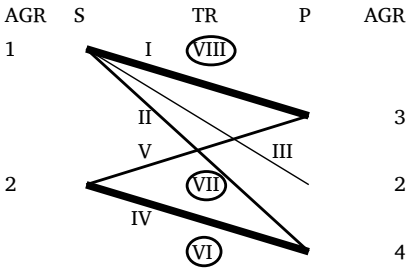

Figure 1: The structural gender system of Somali

+ establishment of a more complex system of structural genders:
I-V symbolized by lines nouns with singular-plural distinction
VI-VIII symbolized by circles transnumeral nouns
> goes well beyond traditional account in terms of a simple masculine-feminine distinction

+ exhaustive analysis of a larger dictionary with more than 13000 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 genders in terms of “inquorate” genders aka 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”

+ agreeing modifier system arguably captured in terms of “polarity” (exs. (1)-(4), Figure 2)
- however, relevant for just one of four agreement context but not hold for three other contexts showing convergence (Figure 3, 4), let alone the entire system (Figure 1) (cf. Corbett 1991: 195-7); questionable even as “partial polarity” - cf. German (Figure 5)
- much better candidates elsewhere, cf. Mosel and Spriggs (2000) on Teop

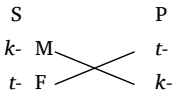

Figure 2: Thematic consonants in agreeing modifier and traditional genders in Somali

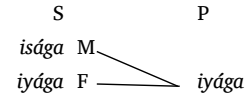

Figure 3: Pronouns and traditional genders in Somali (same pattern for focus clitics)

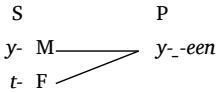

Figure 4: Subject cross-reference and traditional genders in Somali

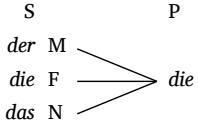

Figure 5: Definite articles and genders in German

2.3.3 Typologically remarkable 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.”

(II) agreement classes with ambiguous behavior regarding agreement values (cf. Güldemann (2000) regarding this phenomenon in other African languages):
- one agreement class not dedicated to a specific number value
- none of the 4 agreement classes dedicated to a structural gender

> multiply crossed system in terms of Heine (1982)

AGR	Traditional label	Number	Paired gender S	Paired gender P	Transnumeral gender
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

- “masculine” agreement class 1 as only class with a fairly specific semantic profile: largely singular nouns in the macro-domain of masculine genders (see §2.3 below) correlating with unique coding profile in two of four agreement contexts (pronouns, focus clitics)
> traditional agreement terms indeed misleading and thus unsuitable, in particular:
- “feminine” agreement class 2 also used in the plural of gender III and there marks MASCULINE nouns (cf. recurrent closer relationship in the family 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 theoretical alternative that they are singularia or pluralia tantum in the genders established on the basis of count 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

+ nouns, as the trigger of agreement, have semantic and FORMAL properties

> long recognition of the fact that the prosodic and segmental form of nouns, in particular relating to number marking, determines agreement behavior

> establishment of the full system of noun form classes in order to understand the gender system

2.4.1 The traditional system of declension classes

+ noun prosody and morphology traditionally captured first of all by a system of 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
- pitch accent pattern of nouns correlates with gender and number category (see, e.g., Hyman 1981 for more details)

> shift between two major tone patterns (“penultimate high” = PH and “Final high” = FH) from singular to plural in 5 of 7 declension classes

2.4.2 A fuller account of noun form classes

+ larger number of noun form classes in terms of segmental and suprasegmental properties:
  - prosodic distinction according to the two tone patterns PH vs. FH
  - inherent root form of non-derived and uninflected nouns
  - diverse morphological plural forms
  - a wide range of morphological derivatives

> diverse grammatical behavior, presented in subgroups according to number-sensitivity:

N	no number restriction
S	singular and/or transnumeral
P	dedicated to plural

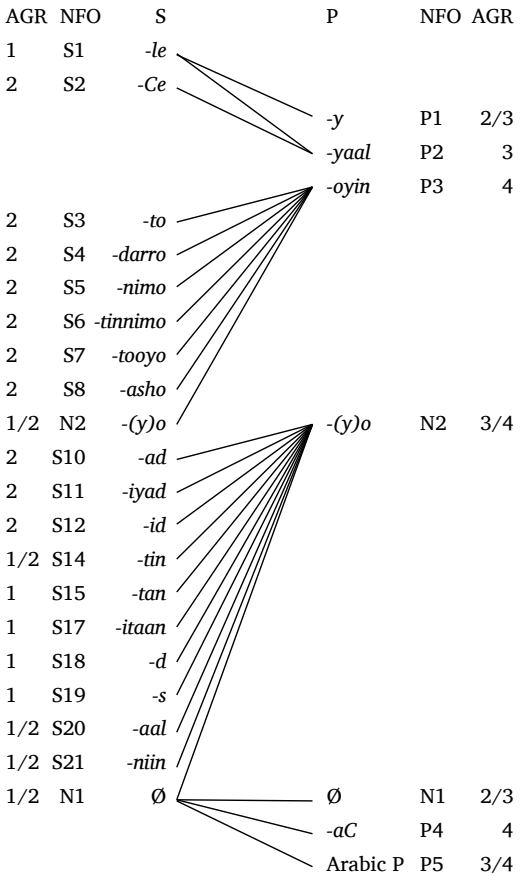

Figure 6: Mapping of number-sensitive noun form classes over numbers

NFO	Form	Tone pattern	AGR	Structural gender S-P	TR	No. in M15
N1	unmarked	PH FH	1, 2, 3	I-V	VII, VIII	0, 22, 23
N2	*-(y)o*	(PH) FH	1, 2, 3, 4	I, II, IV, V	VI, VII	24

Table 8: Noun form classes without number restriction

+ both NFO classes formally unmarked and also largely insensitive to classification system regarding both agreement and gender

> N1 without any thematic segment subsumes several types of nouns:

- simplex nouns, including monosyllables with two typical plural strategies
- loan words
- Ø-nominalizations of verb roots

> N2 in final *-o* is morphologically diverse and subsumes:

- productive morphological plurals in *-(y)o*
- theoretically expected singular forms with an inherent final root vowel *-o*

NFO	Form	Tone pattern	AGR	Structural gender	Approximate meaning/ function	No. in M15
S3	*-to*	FH	2	IV, VII	agentive + collective	19
S4	*-darro*	FH	2	IV, VII	privative/antonym	6
S5	*-nimo*	FH	2	IV, VII	abstract [-ness, -ity]	14
S6	*-tinnimo*	FH	2	IV, VII	abstract	18
S7	*-tooyo*	FH	2	IV, VII	abstract [state of being X]	20
S8	*-asho*	FH	2	IV, VII	gerund [act of VERBing]	4
S11	*-iyad*	FH	2	IV, VII	abstract [-ism, -ology]	10
S12	*-id (-is)*	FH	2	IV, VII	gerund [act of VERBing]	8
S14	*-tin*	FH	1, 2	I, IV, VII, VIII	result of VERBing	17
S15	*-tan*	FH	1	I, VIII	reciprocal	16
S17	*-itaan*	PH	1	I, VIII	verbal noun	9
S19	*-s*	PH	1	I, VIII	verbal noun	15
S20	*-aal*	PH FH	1 2	I, IV, VII, VIII	product of VERBing	1
S21	*-niin*	PH FH	1 2	I, IV, VII, VIII	gerund	13

Table 9: Noun form classes with singular and transnumeral nouns

+ 11 classes dedicated to agreement class (but not gender, but see below)
+ 2 classes (S20, S21) in 2 agreement classes related to alternating prosody
+ 1 class (S14) in 2 agreement classes but apparently single tone pattern

NFO	Form	Tone pattern	AGR	Structural gender	Approximate meaning/ function	No. in M15
S9	*-xumo*	FH	2	VII	negation	21
S13	*-n*	FH	2	VII	gerund	12
S16	*-aan*	FH	2	VII	abstract [-ness]	2

Table 10: Noun form classes restricted to transnumeral nouns

+ all 3 classes dedicated to agreement class (and gender)

NFO	Form	Tone pattern	AGR	Structural gender	Approximate meaning/ function	No. in M15
S1	*-le*	PH	1	I, III	owner/possessor of X	11
S2	*-Ce*	(PH) FH	2	I	agentive/instrumental	7
S10	*-ad*	FH	2	IV	derived feminine	3
S18	*-d*	PH	1	I	verbal noun	5

Table 11: Noun form classes restricted to singular nouns

+ 3 classes (S2, S10, S18) dedicated to agreement class (and gender)
+ 1 class (S1) dedicated to agreement class (but not gender)

NFO	Form	Tone pattern	AGR	Struct. Gender	Plural for	No. in M15
P1	*-y*	PH	2, (3)	I, III	some S1- and all S2-nouns in *-e*	26
P2	*-yaal*	FH	3	I	some S1-nouns in *-e*	27
P3	*-oyin*	PH	4	II, IV	S3-8 and N2-singulars in *-o*	25
P4	*-aC* redupl.	FH	4	II, IV	monosyllabic N1-singulars	28
P5	Arabic plural	n.a.	3, 4	I, IV	Arabic-loans within N1	29

Table 12: Noun form classes restricted 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)

+ overall strong correlation between NFO class and agreement: 21 of 28

Noun forms in Somali are central triggers for agreement and indirectly for gender assignment independent of the meaning of lexemes.

2.4.3 Noun form classes and structural genders

Gender	AGR pair	NFO pair (tone class) S	P	Number of lexemes
I	1/3	N1	N1	5555 (42,6%)
		N1	N2	
		N1	P5	
		S1 (PH)	P1	
		S1 (PH)	P2	
		S2 (both)	P2	
		S14 (FH)	N2	
		S15 (FH)	N2	
		S17 (PH)	N2	
		S18 (PH)	N2	
		S19 (PH)	N2	
		S20 (PH)	N2	
		S21 (PH)	N2	
II	1/4	N1	N2	662 (5%)
		N1	P4	
		N2	P3	
III	1/2	N1	N1	99 (0,8 %)
		S1 (PH)	P2	
IV	2/4	N1	N2	3122 (23,9 %)
		N1	P4	
		N1	P5	
		N2	P3	
		S3 (FH)	P3	
		S4 (FH)	P3	
		S5 (FH)	P3	
		S6 (FH)	P3	
		S7 (FH)	P3	
		S8 (FH)	P3	
		S10 (FH)	N2	
		S11 (FH)	N2	
		S12 (FH)	N2	
		S14 (FH)	N2	
		S20 (FH)	N2	
		S21 (FH)	N2	
V	2/3	N1	N2	418 (3,2 %)

Gender	AGR	NFO (tone class) S	P	Number of lexemes
VI	4		N2	3196 (24,5 %)
VII	2	N1		
		N2		
		S3 (FH)		
		S4 (FH)		
		S5 (FH)		
		S6 (FH)		
		S7 (FH)		
		S8 (FH)		
		S9 (FH)		
		S11 (FH)		
		S12 (FH)		
		S13 (FH)		
		S14 (FH)		
		S16 (FH)		
		S20 (FH)		
		S21 (FH)		
VIII	1	N1		
		S14 (FH)		
		S15 (FH)		
		S17 (PH)		
		S19 (PH)		
		S20 (PH)		
		S21 (PH)		

Table 13: Structural genders and noun form classes

\+ recall from §2.3.3 that genders with transnumeral nouns are partly related to paired genders in terms of agreement

> possibility that their NFO class profile strengthens a particular relation and they can be treated as singularia (or pluralia) tantum of a paired gender indeed partly corroborated:

a) NFO classes of VIII fully included as ST of I (rather than of II/III)

b) NFO classes of VII almost fully included as ST of IV (rather than of V)

c) single NFO class N2 of VI remains indeterminate between analysis as PT of II or IV on account of segmental noun form class marking

> what about prosody?! - predominant FH of N2 may be in favor of IV (rather than of II)

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

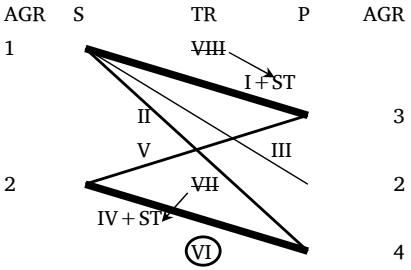

Figure 7: The consolidated gender system of Somali

+ variable correlation between the 28 noun form classes and gender assignment:

- 7 classes predict gender, ! also number- and agreement-specific:
  - S2, S18: singulars in gender I
  - P2: plurals in gender I
  - S10: singulars in gender IV
  - S9, S13, S16: transnumerals in gender IV
- 11 classes predict gender taking count~transnumeral distinction into account, ! also agreement-specific:
  - S3-8, S11, S12: transnumerals or singulars in gender IV
  - S15, S17, S19: transnumerals or singulars in gender I
- 2 classes predict gender taking in addition their prosody into account:
  - S20, S21: if FH, transnumerals or singulars in gender IV
  - if PH, transnumerals or singulars in gender I
- 8 classes are entirely insensitive to gender (see below regarding semantic analysis!):
  - N1, N2; S14; S1; P2, P3, P4, P5

2.5 Semantic gender assignment

+ still to be done in detail, currently only some generic information:

Gender	Macro-gender	Possible semantic core(s)
I	Masculine	???
II		body part, ???
III		animal, plant, ???
IV	Feminine	???
V		???
VI	Non-count	???

Table 14: Basic semantic assignment criteria

+ appearance of various noun form class pairs in more than one gender predicts in general existence of semantic criteria, because form is irrelevant for gender assignment:

Case	NFO (pair)	Masculine	Feminine	Non-count
(a)	N2	-	IV	VI
(b)	N2-P3	II	IV	-
(c)	N1-P4	II	IV	-
(d)	N1-P5	I	IV	-
(e)	N1-(N2)	I, II	IV, V	-
(f)	S14-(N2)	I	IV	-
(g)	S20-(N2)	I	IV	-
(h)	S21-(N2)	I	IV	-
(i)	N1-N1	I, III	-	-
(k)	S1-P2	I, III	-	-

Table 14: Different gender assignment despite identical noun form class(es)

(a) semantic sub-differentiation between non-count nouns (if two genders)
(b)-(d) semantic differentiation between masculine and feminine count nouns
(e)-(h) semantic differentiation between masculine and feminine count and non-count nouns
(i)-(k) semantic sub-differentiation among masculine count nouns

3 Summary

+ consistent analysis in terms of recognition and separate treatment of the three basic analytical categories of agreement class, noun form class, and gender (class) yields a considerably different picture of gender in Somali > several possible analyses:

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 “noun-count”: VI
4. potential possibility of merging VI with IV as its pluralia tantum set?!
   - A “masculine” with three subgenders: I, II, III
   - B “feminine” with two subgenders: IV, V

Any of these analyses 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

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