																								-1						
Label	Parameter ± grammaticalized morphology	Implication(s)	Label	Sic NCa											Wel Ma Hi								Yu Ev1 Ev		Uz Ka:	Kyr Tur	Bur cB 1	wB Wo M	lal Arc Lal	k Label
2 FGA	± grammaticalized morphology ± grammaticalized agreement	+FGM							+ + +		+ + +	+ + +			+ + +				_	_			+ + +		+ +		+ +	+ + +	+ + +	FGM 1
3 FGK	± grammaticalized Case	+FGM	_	_	+ +				+ + +	+ +	+ +	+ + +		+ + +			+ 0		+ +	_			+ + +		+ +		+ +		+ + +	+ FGK 3
4 SPK	± grammaticalized (ultra-)spatial Cases	+FGK	SPK	i li	+++	 	. 	+++	1111	(- - -	- - -	1 - 1 -	1 - 1 - 1 -	1 - 1 - 1 -		- 0				- + +				1 - 1 -	1:1:		- 0 -		- SPK 4
5 FGP	± grammaticalized person	+FGM	FGP	+ +	+ +	+ +	+ +	+ +	+ + +	+ +	+ +	+ + +	+ +	+ + +	+ + +		+ 0		_	_			+ + +	+ +	+ +	+ +	+ +	+ + +	+ + +	+ FGP 5
6 FSP	± semantic person	¬+FGP	FSP	0 0	0 0	0 0	0 (0 0	0 0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0 0	0 0	0 +	+ -	- 0	0 0	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	O FSP 6
7 FGN	± grammaticalized number	+FGP	FGN	+ +	+ +	+ +	. + +	+ +	+ + +	+ +	+ +	+ + +	+ +	+ + +	+ + +	+ +	+ 0	0 0	0 +	+ +	+ + +	+ +	+ + +	+ + +	+ +	+ +	+ +	+ + +	+ + +	+ FGN 7
8 SCO	± spread collective number	+FGM, ¬+FGN	_									0 0 0			0 0 0				_				0 0 0		0 0	0 0	0 0	0 0 0	0 0 0) SCO 8
9 GDP	± grammaticalized distributive plurality	+FGM, ¬+FGN	_	0 0	0 0	0 0	0 0) 0	0 0 0	0 0	0 0	0 0 0			0 0 0				_		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0) GDP 9
10 FSN	± number spread to N	+FGN	FSN	+ +	+ +	+ +	+ +	+ +	+ + +	+ +	+ +	+ + +			+ + +		_		0 +	_	+ + +	+ +	+ + +	+ + +	+ +	+ +	+ -		- + +	FSN 10
11 FNN	± number on N	+FSN	FNN	+ +	+ +	- +	+ +	+ +	+ + +	+ +	+ +	+ + +	+ +	+ + +		+ +	+ 0	0 0	0 +	_	+ + +	+ +	+ + +	+ + +	+ +	+ +	+ 0	0 0 0	0 + +	F FNN 11
12 FGT	± grammaticalized temporality	· sou	FGT	÷	+++-	+	+	++	ببب	H	الثلث		+++-	+ + +		₩÷				- -		+-+-		+++		+-+-		- + -		- FGT 12
13 FGG 14 FSG	± grammaticalized gender ± semantic gender	+FGN +FGN	FGG FSG	+ +	++++	++++	++++	+++	+ - +	- + 	- + -	+ + +	+ +	+ + +	++++		+ 0		0 +	+ -	- - -	1-1-		. - -	1-1-	1-1-	- -	- + -	. + +	
15 CGB	± unbounded sg N	+rdn	CGB	+ +	++++	++++	+++	4+	+ + +	+ +	- 	+ + +	+ +		+ + +	+ +	+ 0	U U	0 +		1	1 1					1 .		+ + +	
16 FPC	± grammaticalized perception		FPC	: :	+++	+:+:	+++	. . 	1111	- - 	/ 	: : :	 	 		+++	 	1 1	: : 		: : :	1 : 1 :	 		1	 	: : 			- FPC 16
17 DGR	± grammaticalized Specified Quantity	-FPC, +FGN	DGR	+ +	+ +	+ +	+ + 7	+ +	+ + +	+ +	+ +	+ + +		+		1.1.	- 0	0 0	0 +			1 - 1 -		. . .		1.1.	- -	- + -		- DGR 17
18 DGP	± grammaticalized text anaphora	¬+DGR	DGP	0 0	0 0	0 0	0 (0 0	0 0 0	0 0	0 0	0 0 0		0	0	1-1-				0 0						1-1-	- -	- 0 +	+ + +	+ DGP 18
19 CGR	± weak Specified Quantity	-CGB, +DGR	CGR								- +	+	0 0	0 0 +	+ 0 0	0 0	0 0	0 0	0 +	+ 0	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 CGR 19
20 NWD	± weak person	+FGP, -FSN or +DGR	NWD						- + +	+ +	+ +	+ + -	0 0	0 0 +	+ 0 0	0 0	0 0	0 0	0 -		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 -	- + -	- 0 0	0 NWD 20
21 DGD	± grammaticalized distality	-FSN or +DGR	DGD		<u> </u>		1-1-						0 0	0 0 -	- 0 0	0 0	0 0	0 0	0 -		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 -	+ + -	- 0 0) DGD 21
22 DPQ	± free null partitive Q	+FNN, -CGB	DPQ			0 -	<u>. - -</u>							<u> </u>	- 0 0	- 0	0 0		0 -	_		0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0) DPQ 22
23 DCN	± article-checking N	-FSN or +DGR	DCN			خلنا	+ -			- -	+ +	+ + +	0 0	0 0 -	- 0 0					_			0 0 0		0 0	0 0	0 -		- 0 0	
24 DNN	± null-N-licensing art	-DCN	DNN	خلت	- +	- +	0 -		+	+ +	0 0 (0 0 0	0 0	0 0 -	- 0 0	0 0	0 0	0 0		- -	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 +	+	- 0 0) DNN 24
25 DIN	± D-controlled inflection on N	+FSN +FGN	DIN	<u>بان</u>	1:1:	- - 	+++	+++		- -	- - -		1 - 1 -	1 - 1 -	1-1-1-	+-+-	- 0		0 +			1 - 1 -		1-1-		1-1-	- 0	0 0 0	0	DIN 25
26 FGC 27 FGE	± grammaticalized classifier ± general classifier	-+FGN -FGM, +FGC	_		0 0	0 0	1010		0 0 0		0 0 0	0 0 0			0 0 0		_		_				0 0 0		0 0	0 0	0 0		0 0 0	-
28 FCN	± general classifier ± person spread to predicate nouns	+FGP	FCN	- 0	+ - 0	+-+	1010	+++		0 0		0	0 0				+ 0	0 0				- 0			- 0		J U			FCN 25
29 HMP	± NP-heading modifier	,·	HMP	\leftarrow	++	++	++	+++	+++	: 	+	+++	+++-	+++	 	++-	1 . 1 .		<u> </u>	++++	- 	+++	 	+++	H	HH	+++	. î î	. 	- HMP 20
30 ARR	± free reduced relatives		ARR	+ +	+ +	1+1+	, + ,	+ + +	+	 		. . .	1.1.	 	- + +	+ -	- +	+ +	+ -	- 1	. . .	1.1.	+ + +	+ +	+ +	+ +	+ -	- + -	. . .	- ARR 30
31 GCN	± head-marking		GCN	一	T-1-	1-1-	. - -	-1-1	-1-1-1	- 1 - 1	-1-1	-1-1-	1.1.		1 - 1 - 1	1-1-	1 - l -	1-1-1		+ +	+ - +	+ +	+ + +	+ + +	+ +	+ +	+ -	- + +	+	- GCN 31
32 GFN	± Person controlled marking	+FGP, +GCN	GFN	0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 -	- +	+ 0 +	+ +	+ + +	+ +	+ +	+ +	+ 0	0 - 1	+ 0 0	0 GFN 32
33 GFP	± agreement with all pronouns	+GFN	GFP	0 0	0 0	0 0	0 0	0 (0 0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 +	+ 0 +	+ +	- + +	+ +	+ +	+ +	+ 0	0 0 +	+ 0 0	O GFP 33
34 GP3	± agreement with all 3rdPers DPs	+GFP	_		0 0		0 0) 0	0 0 0	0 0	0 0	0 0 0			0 0 0			0 0		_			0 + +	+ +	+ +	+ +	- 0	0 0 1	+ 0 0) GP3 34
35 GEI	± genitive inversion	+GP3		0 0	0 0	0 0	0 0	J 0	0 0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 -	- 0 0	1-T-	0	· -] -	↓ - ∏ -	-	0 0	0 0 -	- 0 0) GEI 35
36 CSE	± full c-selection		CSE	+ +	+ +	+ +	. + +	+ +	+ + +	+ +	+ +	+ + +	+ +	+ + +	+ + +	+ +	+ +	+ +	+ +	+ -	- + +	+ +	+ + +	+ +	+ +	+ +	+ +	+ + +	+ + +	+ CSE 36
37 EAL	± ergative alignment	+FGK, +CSE	EAL	خلت	+++-	+++-	+-+-			اخلت			- -				- 0	0 -	_	- 0	0	1:1:				1:1:		- 0 -	- + +	F EAL 37
38 CAL	± dausal alignment	+FGK, +CSE, ¬+GP3,¬+EAL	CAL	÷	- -	+++-	+-+-	+					- -	+++-		- +	+ 0	0 -		+ 0	0	0 0	- 0 0	0 0	0 0	0 0	+ -	- 0 0	0 0 0) CAL 38
39 LKA 40 LKO	± argument linker ± oblique linker	-LKA	LKA	÷	+++	++-	+++	+		- - 	- - -	+++	+-+-		+++-	+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$	- 0	+ +	0 -			+-+-		+-+-		+-+-		- + -		LKA 39
41 LKP	± predicative linker	-tot	LKP	i I i	++++	+:+:	$\pm \pm \pm$	++	+++	- - 		: : :	1:1:	 	1 1 1 1	+++	- 0	J -				1:1:	4	+ - + -	1:1:	+ - +	- 7	- 4		- IKP 41
42 DMP	± def matching pronominal possessives	+DCN		0 0	0 0	0 0) + 0	0 0	0 0 0	0 0	- +	. + +	0 0			0 0	0 0	0 0			0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 DMP 42
43 DMG	± def matching genitives	+DMP				0 0		0 0	0 0 0	0 0	0 -	0		0 0 0		0 0							0 0 0		0 0	0 0	0 0	0 0 0	0 0 0	0 DMG 43
44 GUN	± uniform genitive	(-GCN or (+GFP, -GP3)), -CAL, -LKA	GUN													- 0	0 0	0 0	0 0	0 0	0 + +	0 0	0 0 0	0 0	0 0	0 0	0 -	- 0 0	0 0 0	0 GUN 44
45 GAD	± free Gen	-LKA, ¬+GUN	GAD	+ +	+ +	+ +	+ .		- + +	+ +	+ +	+ + +		+	+ + +	+ +	+ 0	0 0	0 +	+ -	- 0 0	- +	+				+ +	+ 0 -		- GAD 45
46 GFL	± GenL	(-GCN or +GFN), ¬+GP3, ¬+EAL, ¬+GUN	GFL		T - L -	T-L-	+	+ +	+	- +	- +		+ +	+ + +	+	<u> </u>		- -	- 0	0 0	0 0 0	0 0	- 0 0	0 0	0 0	0 0	- -	- 0 0	0 0 0	O GFL 46
47 PGL	± partial GenL	-GFL	PGL	- +			- 0) O	0	- 0	- 0		0 0	0 0 0	0				- 0	0 0	0 0 0	0 0	- 0 0	0 0	0 0	0 0		- 0 0	0 0 0) PGL 47
48 GGH	± generalized GenH	+FGP, -CGR, +NWD, -+GFP, -+GUN	_	0 0	0 0	0 0	0 0) 0	0 + -	- -	+ 0 -	+ + 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0) GGH 48
49 GSI	± grammaticalized inalienability		GSI	خلت		علتل	44		لتلتلت	اخلت	الملاح	<u></u>	1-1-	 	 - - -	خلتا				- -		1-1-			- -	- -				- GSI 49
50 ALP	± alienable possession	-GSI	ALP	خلت	+++-	+++-	+-+-			اخلت			- -	1-1-	 - - -	+++-				- -		- -	- + +	+ + -		1-1-				- ALP 50
51 GIT	± genitive-licensing iteration		GIT	÷	┿	ᅷ	++-	+	ليليك	اخلف	- - -	: : :	 	1 1 1 2		بان						 		+++		+-+-				. GIT 51
52 UST 53 GPC	± unstructured modifiers ± gender polarity cardinals	+ARR +FGG	UST GPC	÷	- -	+++	+++	++	- 0 0	0 0	0 0 0	0 0 0	0 0	0 0 0	101-1-		- 0		_				0 0 0		0 0		- 0	0 - 0	0 0 0	OS1 52
54 PSC	± plural spread from cardinal quantifiers	+FSN, ¬+UST, ¬+GPC	PSC	H	++++	+++-	+++-	++	+ + +	<u> </u>	++++		1 1	1 1 1	 		+ 0		0 0	_	0 0 0	0 0	0 0 0	0 0	0 -	0 0	- 0	0 - 0	0	PSC 54
55 PCA	± plural spread through cardinal adjectives	-PSC	_	0 0	0 0	0 0	0 (0 0	0 0 0	0 0	0 0	0 0 0	0 0	0 0 -	- 0 0		_		0 0	_	1 1 1	1	0 0 0	0 -	0 -	+++++	- 0	0 0 0	0	- PCA 55
56 PMN	± person marking on numerals	+GFP	_		0 0		0 0	0 0	0 0 0	0 0	0 0	0 0 0	0 0			0 0		0 0		_		+ +		. . .		1-1-	- 0	0 0 .	- 0 0	0 PMN 56
57 RHM	± head marking on relative clauses	+FGP	RHM		1-1-	1-1-	. - -	- -								1-1-	- 0	0 0	0 -	- +	+			- +	- -					- RHM 57
58 FRC	± finite relative clauses		FRC	+ +	+ +	+ +	+ +	+ +	+ + +	+ +	+ +	+ + +	+ +	+ + +	+ + +	+ -	- +	+ +	+ +	+ +	+ + +	+ +					- +	+ + +	+	- FRC 58
59 NRC	± participial relative clauses	+FRC	NRC												- + -	+ 0	0 -	- +			+ - +	+ +	0 0 0	0 0	0 0	0 0	0 +	+ - 1	+ 0 0	O NRC 59
60 DOR	± def on relatives	+DGR, +FRC	DOR										0 0	0 0 -	- 0 0	0 0	0 0	0 0	0 +		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 + 0	0 0 0	ງ DOR 60
61 FFP	± feature spread to particles	+FGN, (+LKA or +LKP or +LKO or +GAD), ¬+GFP	FFP		علنا	خلنا	0	0 (0		النات	خلنات	0 0	0 0 -	- + +	خلنا	- 0	0 0		- 0	0 0 0	0 0	- 0 0	0 0	0 0	0 0	0 -	- + 0	0 0 0	Ü
62 NUP	± NP under non-genitive arguments	+FGP, (+CSE or +LKA or +LKO)	NUP	ᆣ	+-+-	+++-	+++	+	<u>- - - </u>	لنبن		- - -	1-1-	 	- + +	+ +	+ 0	0 0		- 0	0	+ +	+ + +	+ + +	+ +	+ +	+ +	+	- + +	
64 PNP	± complement under P ± NP under D	+FGP, -CSE or -NUP +FGP	NUD	+ + +	+ +	++++	+++	+++	+ + +	+ +	+ + + -	+ + +	+ +	+ + +	+ 0 0		0 0		0 +	+ -		0 0	0 0 0	0 0	0 0	0 0	0 0	U + +	+ 0 0	-
65 NUC	± NP under D ± N under cardinals	+FGP -+UST, +PNP, +NUD	NUC	+ +	++++	++++	++++	4++	+ + +	+ + +	+++	+ + +	+ +	+ + +	+ + +	0 0		0 0		+ + - 0	1 + +	0 0	0 0 0	+ +	1 + +	+ +	+ -	0 0	- 0 0	
66 NM1	± N under M1 As	+NUC	NM1	~+ ÷	++++	 	. <u>;</u> †	+++	+ + +	 	: 	: : :	1717	++++	- 0 0		0 0		0 0	·		0 0	0 0 0	1 0 0	0 0	0 0	0 0	0 0 7	0 0 0	-
67 NM2	± N under M2 As	+NM1	NM2	0 0	 	 	0	0 +	+ + +	+ +	+ +	+ + +	+ +	+ + 0	0 0 0		0 0		0 0			0 0		0 0 0	0 0		0 0		0 0 0	-
68 NUA	± N under As	+NM2	NUA	0 0	0 0	0 0	0 0		+ + +	+ +	+ +	+ + +	+ +	+ + 0		0 0			0 0				0 0 0	0 0	0 0		0 0		0 0 0	-
69 NGL	± N under GenL	(+FGP, +UST) or +NUA, (+GUN or +GFL or +PGL)	NGL	0 0	0 0	0 0	0 0	o -	- 0 0	0 -	0 - (0 0 0	1-1-	0	0 0 0	0 0		0 0	0 0	0 0		0 0	0 0 0	, ,	0 0	0	0 0	0 0 0	0 0 0	o NGL 69
70 EAF	± fronted high As	-NM1	EAF	تكن	0 0		0 -	•	0 0 0	•	,	0 0 0		0 0 +			0 0		0 0		0 0 0		0 0 0			0 0			0 0 0	-
71 ACM	± class MOD	-ARR, -NGL				0 0			0 0 0			0 0 0			0 0 0		0 0		0 0				0 0 0			0 0			0 0 0	
72 DSN	± def spread to N	+DCN	DSN			0 0			0 0 0			+ + -	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0) DSN 72
73 DSA 74 DSS	± def spread to ARR	+DGR, +ARR	DSA			<u> </u>				0 0					0 0 0															
75 DOC	def spread to structural categories def on cardinals	+DGR, (-ARR or +DSA) -NWD, +DCN, +NUC				0 0									- 0 0 0 0 0															
76 NFX	± Proper names in D	(-FSN or -CGR), -NWD, -+NUA													0 0 0															
	± Personal proper names in D	+NEX													0 0 0															
	± Partial personal proper names in D	+PEX	FEX	+ +	1+1+	1+1+	, + r	ا ہ ا	0 0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 +	+ 0 0	0 0 0	0 FEX 78
	± D-checking possessives	+DGR, (~-CGR or -NWD), ~+GFP	PDC	- -	- +	+ +	+		- 0 0	0 0	0 + 0	0 0 -	0 0	0 0 +	+ 0 0	0 0	0 0	0 0	0 -	- 0	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 - 0	0 0 0	0 PDC 79
80 PCL	± clitic possessives	+FGP, ¬+GFP, ¬+DMP, ¬+UST, (-PDC or ¬+DGR)	PCL		- 0	0 0	0 0 +	+ +	+ 0 0	0 0	0 0 0	0 0 0		0	0	+ -	- 0	0 0	0 -	- 0	0 - 0	0 0	0 0 0	0 0	0 0	0 0	0 -	- + 0	0	PCL 80
	± adjectival possessives	-+GFP, -+UST								ا ا ا		+	+ +	+ + -		1-1-	1-1-	- 0	0 -	- 0	0 - 0	0 0	0 0 0	0 0	0 0	0 0	0 -	0	0	. APO 81
	± Wackernagel possessives	-+DMP, +NUD, -PDC, -APO or (-NM1, +APO)													0 0 0															
	± adjectival genitive	+APO													0 0 0															
	± null possessive licensing article with kinship nouns	+DGR, -GSI								لتلتم	+ +	+ + -	0 0	0 0 -	- 0 0	0 0	0 0	0 0	0 +	+ -	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 - 0	0 0 0) OPK 84
	± split deictic demonstratives	-FSN or +DGR	TSP	خلت	البه	++-	خليه	44		لجلتم	التهات		0 0	0 0 -	- 0 0	0 0	0 0	0 0	0 -		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 -	- - +	+ 0 0	TSP 85
	± split demonstratives ± D-checking demonstratives	+TSP -TSP													0 0 0															
	± b-checking demonstratives ± structured demonstratives (adjectival)	-+UST, -+TSP, ((+DGR, +NM1) or (-ARR, -NM1) or -NUC)							- + +						- 0 0 + 0 0															
	± unstructured demonstratives ± unstructured demonstratives	+ARR. ¬+TSP								0 0	0 0	0 0 0	0 0	0 0 1	0 + +	1 1 0	1011	+ +	+ 0	0 0	0 0 0	0 0			+ .	+ +	- 0	0 - 6	0 0 0	0 TAR 80
	± Dem fronting to Loc	-+TSP, -+TDC, (+TSA or (+PNP, +TAR))	TLC	0 0	101	101	100	+++	+ 0 0	0 0	0 0	0 0 1	0 0	0 0 -	- 0 0	0 0	0 0	0 0	0 +	- n	0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	O TLC 90
	± long distance D-checking demonstratives	+CGR, (+TSA or +TAR)													- 0 0															
91 TND	± split def on adjectival demonstratives	(+DSS or +DSA), (+TSA or +TAR)													0 0 0															
																														+ TNL 93
92 TDA 93 TNL	± DP under Loc	+TSP or +TLC or (-+TSP, -+TDC, -+TSA, -+TAR)	TNL	0 0	<u> </u>	1-10	<u>, , , ,</u> , ,	<u>, + </u>	+ 0 0	0 0	0 0 .	0 0 +	+ +	+ + 0	0 0 0	0 +	+ 0	0 0	0 +	0 +	+ + +	+ +	+ 0 0	0 0	0 0	0 0	+ 0	+ 0 -	<u>- +</u> +	
92 TDA 93 TNL		+TSP or +TLC or (¬+TSP, ¬+TDC, ¬+TSA, ¬+TAR) +FAG, -NWD	FVP	- +	- +		- + +	+ +	+ 0 0	0 0	0 0	0 0 +	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 +		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 +	+ 0 0	0 0 0	0 FVP 94
92 TDA 93 TNL	± DP under Loc		FVP	- +	- +		- + +	+ +	+ 0 0	0 0	0 0	0 0 +	0 0	0 0 0	0 0 0 0 0 0 Wel Ma Hi	0 0	0 0	0 0	0 +		0 0 0	0 0	0 0 0	0 0	0 0	0 0	0 +	+ 0 0	0 0 0	0 FVP 94