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Syntactic diversity and language learnability

On-line Supplementary Materials

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Available, upon request, at

https://github.com/CristinaGuardiano/Parameter-setting-Questions

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Questions for parameter setting

The following information is the protocol for the full replicability of the collection of the data used in the article and their coding as parameter states.

1.   Formal structure of the questions

Each parameter is associated with one or more questions that can set its state. Each question on its own can set the relevant parameter, and is always a YES/NO question asking about the truth of an existential statement of the type "in language L, there is an observable grammatical object (construction/morpheme/feature/etc.) α with property X", or a conjunction of two or more statements of this type.

The questions strictly obey the following properties:

1) YES answers can always be provided just on the basis of positive evidence. For this purpose, all bare plurals in the formulation of the questions are meant to be interpreted as existential rather than generic/universal. We made sure that for every parameter there is at least one question that might be answered YES in some known language. This guarantees the minimal requirement of cognitive plausibility for that parameter, given that language learners can certainly access positive evidence.

2) one YES answer is sufficient to set a parameter's value unambiguously to '+'. In a language, all the manifestations of a parameter should co-vary across languages by definition. Thus, normally, one YES answer correlates with YES answers to all the questions for the same parameter. Thus, an answer NO normally sets the opposite value; occasionally, however, it may just be the consequence of the absence of the relevant construction owing to independent combinations of other parameter values or to the accidental lack of the relevant functional morpheme due to lexical idiosyncrasies.

3) if no question relative to a certain parameter in a language receives an answer YES, the value '-' will be assigned by default to that parameter. Therefore, '-' is the unmarked state of each parameter, while '+' is always chosen on the basis of positive evidence.

4) for several parameters, there may also exist questions whose YES answer, decided on the basis of the usual positive evidence, sets the value '-', i.e. a state identical to the default one. Such questions are thus not indispensable to the functioning of the setting system ('-' could also be set by default), but may be practically useful to the linguist working on the field, because they provide the value '-' without going through a full list of NO answers. Such questions have been called *Stop Questions* and reported at the end of the set of questions for each parameter in a font with a different color. If any of the other questions of a parameter receives an answer YES, the Stop Questions of that parameter will necessarily be found to receive an answer NO, and vice versa.

2.   Conditions of application of the questions

The questions setting each parameter are so formulated as to be properly relevant only if the parameter needs to be set to '+' or '-', i.e. it is not implicationally neutralized in a language owing to the implications with other

parameter values (the state marked as '0'): if a parameter is implicationally neutralized in a certain language, the questions for that parameter in that language should be disregarded altogether: they would be irrelevant and in some cases misleading.

Furthermore, some questions also include a set of conditions that must be met for them to apply meaningfully (preconditions), for example the existence in the language of other constructions/morphemes/features/etc. If the preconditions for one question of a parameter do not hold in a language, that particular question must be disregarded, even if the parameter in the relevant language is not implicationally neutralized (i.e. ends up as '+' or '-').

3.   Legenda

1. The table that follows contains, for each parameter, all the questions usable to set the 94 parameters. This ensures that, following the directions above, the process leading from empirical data (specifically native speaker consultants) to the settings in the Table of parameter states is fully replicable.

In particular:

a.   the green-shaded rows correspond to each of the 94 parameters

b.   the white rows below each green row contain the questions relative to that parameter.

c.   in the green rows:

1st column: progressive number of the parameters (P1, P2, P3, …)

2nd column: acronym of the parameter

3rd column: name of the parameter

4th column: implicational conditions on the setting conditions of the parameter

d.   in the white rows:

1st column: progressive letter of the questions (a, b, c…); Stop question have the lable QSa, b, c…

2nd column: pre-condition(s) of each question, if any

3rd column: text of the question

4rth column: additional notes/information for the fieldworker

1	FGM	± grammaticalized morphology	
FGM_Qa		Is there any root which takes different affixes according to the grammatical category (noun, verb, adjective) that realizes it?	
FGM_Qb		Is there any root which takes different affixes/alternations encoding different closed-class interpretable/grammatical properties (tense, aspect, number, gender, gradation, case, etc.)?	
FGM_QSa		Pick the first 10 lexical items appearing in the text of the corpus used. Do they appear as bare roots, with no affix or alternation (Ablaut/consonantal) encoding different closed-class meaning/grammatical properties (grammatical category, tense, aspect, number, gender, gradation, case, etc.)?	YES = -
2	FGA	± grammaticalized Agreement	+FGM
FGA_QA		Is there any feature occurring in an uninterpretable occurrence which must take its value from that of another occurrence of the same feature?	
FGA_Qsa		Pick the first 10 verbs and the first 10 adjectives appearing in the text. Does any of them exhibit an occurrence of a morphological feature which takes two different values depending on those of the same feature on other words of the same sentence?	NO = -
3	FGK	± grammaticalized Case	+FGM
FGK_Qa		Pick a personal or relative pronoun. Does its morphology vary according to its grammatical function/syntactic position in the sentence?	
FGK_Qb		Pick a quantifier, a demonstrative or a definite/indefinite article. Does the morphology of any of them vary ceteris paribus according to the grammatical function/θ of the nominal minimally containing them in its clause?	
FGK_Qc		Pick a noun. Does its morphology vary ceteris paribus according to its grammatical function/θ in its clause?	
FGK_QSa		Is there the same form for the first and second person singular pronouns irrespectively of whether they occur as subjects, direct or indirect objects?	YES = -
4	SPK	± grammaticalized (ultra-)spatial Cases	+FGK
SPK_Qa		Pick a noun. Is there locative Case morphology (see the operational definition at FGK) which is not stative location, direction and source? (e.g. adessive vs. inessive)	
SPK_QSa		Is a (better more than one) locative meaning other than stative, direction, or source expressed by means of adpositions?	YES = -
5	FGP	± grammaticalized person	+FGM
FGP_Qa		Is there agreement in person between a verb and some of its arguments?	
FGP_Qb		Are there overt expletive pronouns in subject function?	
FGP_Qc		Are there overt resumptive pronouns in object function?	

FGP_Qd		Pick a 3rd person pronoun that can occur with no coreferential item within the sentence. Can it also occur as a variable bound by a quantified antecedent like no-one/everyone?	
FGP_Qe	***Precondition:*** In nominal arguments there is the following order pattern: (some/those/the/Ø) poor/young children are waiting outside i.e.[(determiner)+ adjective+noun].	Is there the following pattern in nominal arguments: *we poor/young are waiting outside* i.e. [personal pronoun+adjective]?	
FGP_Qf		Are there nominals that occur bare in non-argument function but in argument function are always found with a morpheme expressing some of the following functional meanings: person, gender, number, definiteness, countability, specificity?	**NEGATIVE EVIDENCE**
FGP_Qg		Are there argument proper names always introduced by a functional morpheme that is not found in some non-argument occurrences?	**NEGATIVE EVIDENCE**
FGP_Qh	***Precondition:*** 1) There is no definite article in the language. 2) Nominal arguments with a cardinal numeral preceding a possessive, an adjective meaning 'other', 'same/even' or 'unique', the noun itself..., do not receive definite interpretation	Do nominal arguments with a cardinal numeral following a possessive, an adjective meaning 'other', 'same/even' or 'unique', or the noun itself receive definite interpretation?	
FGP_Qi		Does the language have person morphemes alternating between a stressed and a clitic form?	
FGP_Qj		Does the language have a functional morpheme that obligatorily marks argument nominals (other than proper names) interpreted as definite (when no other source of definiteness is available, e.g. demonstratives, genitives/possessives), though it is not obligatory in all non-argument functions?	**NEGATIVE EVIDENCE**
FGP_QSa		Is the verb invariable with respect to Person and is the language a null subject language in all clauses, all registers?	**YES = -**
FGP_QSb		Do cardinal numerals EVER occur before demonstratives in nominals not introduced by any other functional morpheme?	**YES = -**
6	**FSP**	**± semantic person**	**¬+FGP**
FSP_Qa		Is there agreement in person between a reflexive and its antecedent?	
FSP_Qb		Is there a system of personal pronouns single-membered per each person (and with some identifiable relatedness between singular and plural)?	
7	**FGN**	**± grammaticalized number**	**+FGP**

FGN_Qa		Do nominal arguments display bound morpheme alternations (on the head noun or a definite article/demonstrative/quantifier/adjective) such that one of the allomorphs can be interpreted as singular and the other as non-singular?	***Additional instruction***: Do not use personal pronouns to answer this question
FGN_Qb		Is there agreement in number between a singular/non-singular nominal argument and the verb?	
FGN_Qc		Is there agreement in number between a 3rd person reflexive and its antecedent?	
FGN_Qd		Is there agreement in number between a singular/non-singular noun (or a definite article/demonstrative/quantifier) and adjectives (within one and the same nominal structure)?	
FGN_QSa		Pick the first 10 nominal arguments appearing in the/a text. Are they formally neutral between a singular/plural interpretation?	**YES = -**
8	**SCO**	**± spread collective number**	**+FGM, ¬+FGN**
SCO_Qa		Is there agreement in collective morphology between an argument collective nominal and its modifiers?	
9	**GDP**	**± grammaticalized distributive plurality**	**+FGM, ¬+FGN**
PLS_Qa		Pick a sentence that contains an argument which is distributed over by a quantifier. Is there a morpheme which functions as a marker of this distributive reading such that it obligatorily requires another plurality morpheme on the nominal functioning as the variable of the distributive quantifier?	
10	**FSN**	**± number spread to N**	**+FGN**
FSN_Qa		Are there nouns that bear variable number morphology?	
FSN_Qb		Can bare nouns occur in (at least some) argument position?	***Additional instruction***: This question does not apply to: (1) bare nouns modified by an adjective; (2) Number-neutral nouns occurring as the complement of atelic verbs; (3) Coordinated nouns
FSN_QSa		Pick the first 10 nouns appearing in the/a text. Are they formally neutral between a singular/plural interpretation?	**YES = -**
11	**FNN**	**± number on N**	**+FSN**
FNN_Qa		Pick at least **five** nouns, chosen randomly. Are number distinctions morphologically visible at least on the majority of them?	
FNN_Qb		Can bare nouns occur in (at least some) argument position?	***Additional instruction***: This question does not apply to: (1) bare nouns modified by an adjective; (2) Number-neutral nouns occurring as the complement of atelic verbs; (3) Coordinated nouns
12	**FGT**	**± grammaticalized temporality**	

FGT_Qa		Do nouns referring to natural kinds (animals, people, plants, …) and material objects take a bound morpheme signalling that the property they denote is not true at the speech time even when a verb or adjective already express the state-changing effect (through time) on the denotatum?	
FGT_QSa		Does a noun denoting a property that is not true at the relevant time appear without any additional morpheme distinguishing it from the noun that denotes the property as holding at the relevant time?	**YES = -**
13	**FGG**	**± grammaticalized gender**	**+FGN**
FGG_Qa	**Define 'GENDER':** *Pick a morphologically or lexically definable noun class, identified according to e.g. sex/animacy or any interpretable/uninterpretable property, except for Number, Person and Case. Let us all such classification 'Gender'.*	Is there agreement in gender between nouns and articles/demonstratives/quantifiers?	
FGG_Qb		Is there agreement in gender between nouns and NP-modifying adjectives?	
14	**FSG**	**± semantic gender**	**+FGN**
FSG_Qa		Is there any overt morphological distinction between 3rd person pronominal forms encoding differences in sex/animacy?	
15	**CGB**	**± unbounded sg N**	
CGB_Qa		Pick a singular count noun in object position adjacent to an atelic, non-episodic predicate. Is it grammatical with an indefinite number-neutral reading?	
CGB_Qb		Pick a bare singular count noun in subject position. Does it have only a definite reading?	**NEGATIVE EVIDENCE**
CGB_QSa		Does a generic nominal introduced by a singular count indefinite determiner have the non-numerical interpretation of English 'a dog has four legs' (rather or in addition to the numerical one of 'one dog has four legs, two dogs have eight….'?	**YES = -**
16	**FPC**	**± grammaticalized perception**	
FPC_Qa		Is there a functional morpheme (other than demonstratives) in an argument headed by a common noun that encodes the speaker's perception of the position or movement of the argument's referent, and does its absence provide an unbounded reading of the nominal?	
FPC_QSa		Does a nominal with definite/specific/bounded reference appear without a functional morpheme that expresses the speaker's perception of the position or movement of the argument's referent?	**YES = -**
17	**DGR**	**± grammaticalized Specified Quantity**	**-FPC, +FGN**

DGR_Qa		Pick a nominal that denotes the maximal amount of entities whose presence is inferred from the previous context. Does such a nominal bear an overt marker different from those present with non-maximal readings?	
DGR_Qb		Pick an argument common noun that denotes a maximal specific entity considered unique by the speaker and the hearer. Does such a nominal bear an overt marker that is absent when such an entity is not considered unique?	
DGR_Qc		Pick a singular count nominal referring to the whole kind named by that noun. Does such a nominal bear an overt marker that is absent in some other instances?	
DGR_Qd		Pick a mass/plural nominal that refers to the whole kind named by that noun. Does such a nominal bear a dedicated marker that is absent in other instances?	
DGR_QSa		Can bare nominal arguments be interpreted as definite?	**YES = -**
DGR_QSb		Pick a bare singular count/plural/mass noun that is the complement of a telic predicate. Can it be interpreted as (non kind-referring) bounded?	**YES = -**
18	**DGP**	**± grammaticalized text anaphora**	**¬+DGR**
DGP_Qa		Pick a noun denoting an entity that has been mentioned in the previous context ('anaphoric reading'). Does such a noun bear a dedicated marker (other than a demonstrative)?	
DGR_QSa		Can bare nominal arguments denote an entity that has been mentioned in the previous context ('anaphoric reading')?	**YES = -**
19	**CGR**	**± weak Specified Quantity**	**-CGB, +DGR**
CGR_Qa		Are bare nouns grammatical in subject position with a singular count reading?	
CGR_Qb	*Precondition:* DP is head-initial	Does a bare nominal argument containing a non-initial (except for being preceded by 'all') definite genitive and no article have a definite interpretation?	
CGR_Qc	*Precondition:* DP is head-initial	Is it possible to find a nominal argument containing a non-initial (except for being preceded by 'all') demonstrative and no article?	
CGR_Qd	*Precondition:* DP is head-initial	Is it possible to find a non-initial noun with a definiteness morpheme affixed to it and no other definite marker?	
CGR_QSa		Does the language have an indefinite singular count free morpheme occurring with a generic reading and a non-numerical (i.e. different from *exactly one*) interpretation?	**YES = -**
CGR_QSb		Does the language have an indefinite singular count free morpheme occurring with an existential non-specific reading and a non-numerical (i.e. different from *exactly one*) interpretation?	**YES = -**
20	**NWD**	**± weak person**	**+FGP, -FSN or +DGR**
NWD_Qa	***Precondition:*** Articles are phrase-initial	Do bare argument proper names occur after an adjective?	

NWD_Qb		Do bare plural/mass argument nouns occur as kind-referring?	
NWD_Qc	**Preconditions:** 1) Articles are phrase-initial. 2) There are indefinite articles	Can a bare nominal argument containing a prenominal genitive have a definite specific interpretation?	
NWD_Qd	**Preconditions:** Articles are phrase-initial	Are there definite affixes on non-initial constituents of bare argument nominals?	
NWD_Qe		Do possessives occur without a determiner in argument phrases with no nominal head?	
NWD_Qf		Are there different inflections of attributive adjectives co-occurring with different choices of the determiner?	
NWD_QSa	**Precondition:** Articles are phrase-initial	Pick an adjective with the meaning 'her/himself' or 'only', or a common noun modifying a proper name. Do argument proper names occur before such an adjective/noun with no determiner?	YES = -
NWD_QSb	**Precondition:** Articles are phrase-final	Pick an adjective with the meaning 'her/himself' or 'only', or a common noun modifying a proper name. Do argument proper names occur after such an adjective/noun with no determiner?	YES = -
NWD_QSc		Does the language have suffixes enclitic on phrase-initial adjectives?	YES = -
21	**FVP**	**± variable person**	**+FGA, -NWD**
FVP_Qa		Does a plural nominal argument non-overtly marked as 1st/2nd person in subject position control non-3rd person verb agreement?	
FVP_Qb		Can a plural nominal non-overtly marked as 1st/2nd person occurring in topic position be resumed by a 1st/2nd person pronoun?	
22	**DGD**	**± grammaticalized distality**	**-FSN or +DGR**
DGD_Qa		Are there two articles marking a distinction of distal vs. proximate (in time or space) along with other article features, but containing no deictic/discourse-anaphoric features (like those contained in demonstratives)?	
DGD_QSa		Is there a nominal with a determiner that encodes at most φ-features and definiteness, but no deictic feature nor expresses the distality/proximity of the referent?	YES = -
23	**DPQ**	**± free null partitive Q**	**+FNN, -CGB**
DPQ_Qa		Are there special Case/adposition alternations with bare nominals in argument position such that one such Case/adposition assigns an partitive indefinite meaning?	
DPQ_Qsa		Does a bare mass/plural nominal occur in the same argument position with the same Case or adposition as the corresponding bounded (definite or indefinite) nominal?	YES = -
24	**DCN**	**± article-checking N**	**-FSN or +DGR**
DCN_Qa	**Define**: Non-phrase-final = suffixed, at least in some cases, to a word which is not the last one of a DP	Is there a non-phrase-final morpheme suffixed to the head noun and functioning as the only marker of the definite reading of the whole DP?	
DCN_Qa		Is there a non-phrase-final morpheme suffixed to an attributive adjective and	

		functioning as the only marker of the definite reading of the whole DP?	
25	**DNN**	**± null-N-licensing art**	**-DCN**
DNN_Qa	*Precondition:* The language has an article that is non-clitic on N or A.	Do articles appear in nominals that contain no overt noun (nor adjective) but a genitive argument of it?	
DNN_Qb	*Precondition:* The language has an article that is non-clitic on N or A.	Do articles appear in nominals that contain no overt noun (nor adjective) but an adpositional argument/adjunct?	
DNN_Qc	*Precondition:* The language has an article that is non-clitic on N or A.	Do articles appear in nominals that contain no overt noun but a relative clause?	
26	**DIN**	**± D-controlled inflection on N**	**+FSN**
DIN_Qa		Does the language exhibit distinct noun morphology depending on the choice of the determiner (beyond φ-feature concord)?	
27	**FGC**	**± grammaticalized classifier**	**¬+FGN**
FGC_Qa		Are there simple [cardinal+count noun] phrases which also contain the expression of a classifier with nouns referring to naturally atomic entities?	
FGC_QSa		Are there [cardinal+count noun] phrases which do not contain the expression of a classifier?	YES = -
28	**FGE**	**± general classifier**	**-FGM, +FGC**
FGE_Qa		Can nominals with an overt classifier in object position (but not accompanied by a numeral) receive a definite interpretation?	
29	**FCN**	**± person spread to predicate nouns**	**+FGP**
FCN_Qa		Do nouns found as the lexical head of predicative phrases agree with their subjects in person morphology?	
30	**HMP**	**± NP-heading modifier**	
HMP_Qa		Do abstract nouns (excluding honorific expressions: e.g. 'his excellence') modified by a genitive argument (including possessive pronouns) denote the referent of the genitive argument (with the property denoted by the abstract head noun interpreted as an attribute of such a referent)?	
30	**ARR**	**± free reduced relatives**	
ARR_Qa		Are there free (truth-functionally synonymous) permutations of the order of the same two or more adjectives? E.g. several of the six orders of: A nice red German car. Or the two orders of: John's naive clever answer retaining the two interpretations distinguished by permutation in English?	
ARR_Qb		Are there adjectives that can occur either to the right or to the left of a cardinal numeral in indefinite nominal phrases?	
ARR_Qc		Are there adjectives that can occur either to the left or also to the right of a post-nominal argument of N?	
31	**GCN**	**± head-marking**	

GCN_Qa		Do (at least some) head nouns change their form (morphophonologically) when with a genitive argument while they don't when not modified by a genitive argument?	***Additional instruction**: please provide two examples which show that the form of the noun changes according to whether it is modified by a genitive or not.*
32	**GFN**	**± Person controlled marking**	**+FGP, +GCN**
GFN_Qa		Is there a morpheme that appears on nouns modified by a genitive argument and whose realization depends on the Person feature encoded on the genitive?	***Additional Instruction**: please provide two examples which show that the form of the noun changes according to whether it is modified by a 3rd person genitive or not.*
33	**GFP**	**± agreement with all pronouns**	**+GFN**
GFP_Qa		Are there different realizations of the morpheme that appears on a noun modified by a genitive argument depending on whether the genitive carries 1st or 2nd person features?	
34	**GP3**	**± agreement with all 3rdPers DPs**	**+GFP**
GP3_Qa		Do non-pronominal genitive arguments agree in Person with the morpheme appearing on the head noun?	
35	**GEI**	**± genitive inversion**	**+GP3**
GEI_Qa		Is the genitive realized postnominally and triggers agreement on the head noun?	
36	**CSE**	**± full c-selection**	
CSE_Qa	**Define***: 'canonical' is to be understood as the position/field where the internal argument is first-merged, as in 'the picture of John'. It is the immediately pre-nominal field in languages with postpositions and the immediately post-nominal one in languages with prepostions*	Can two arguments of the noun (realized as a PP/oblique or genitive, whether or not independently licensed by a linker) cooccur in the canonical position?	
37	**EAL**	**± ergative alignment**	**+FGK, +CSE**
EAL_Qa		Can the internal argument of a noun ever have the same Case realization as the internal argument of a verb?	
38	**CAL**	**± clausal alignment**	**+FGK, +CSE, ¬+GP3,¬+EAL**
CAL_Qa	**Define***: 'internal argument of the noun' and 'external argument of the noun' are shorthand forms for: 'argument of the noun equivalent to the internal argument of a (roughly) corresponding transitive verb in the active voice'* *and* *'argument of the noun equivalent to the external argument of a (roughly) corresponding transitive verb in the active voice'*	Can the internal argument of a noun ever have the same Case realization as the internal argument of a transitive (active) verb?	

39	LKA	± argument linker	
40		Is there a morpheme that introduces genitives and/or oblique arguments of the noun?	
41	LKO	± oblique linker	-LKA
LKO_Qa		Is there a morpheme that introduces oblique arguments of the noun?	
42	LKP	± predicative linker	
LKP_Qa		Is there a morpheme not dependent on definiteness that introduces adjectives?	
LKP_Qb		Is there a morpheme not dependent on definiteness that introduces relative clauses and the latter is different from any complementizer introducing other subordinate clauses?	
43	DMP	± def matching pronominal possessives	+DCN
DMP_Qa	*Precondition:* There are definiteness affixes on N	Is there a string [X with definite affix]+[possessive pronoun] in this order?	
44	DMG	± def matching genitives	+DMP
DMG_Qa	*Precondition:* There are definiteness affixes on N	Is there a string [X with definite affix]+[genitive-inflected Determiner + noun] in this order?	
45	GUN	± uniform genitive	(-GCN or (+GFP, -GP3)), -CAL, -LKA
GUN_Qa		Can a non-prepositional genitive occur with the same type of morphological realization in any of the following positions: to the right of APs, to the left of APs, and either to the left of numerals or to the right of both APs and the head noun?	
GUN_Qb		Can non-prepositional Genitives occur with the same type of morphological realization once one side of the noun, and twice on the other side of the noun?	
GUN_Qc		Is there a nominal phrase in which one and the same non-prepositional realization of Genitive occurs twice to the right of an AP?	
GUN_Qd		Is there a phrase in which two non-prepositional realizations of Genitive occur to the left of AP+N and the same Genitive may also occur after APs?	
GUN_Qe		Is there a nominal phrase in which a non-prepositional realization of genitive occurs three times?	
GUN_QSa		Is there a prepositional genitive?	YES = -
GUN_QSb		Are there different genitive realizations of the same nominal?	YES = -
46	GAD	± free Gen	-LKA, ¬+GUN
GAD_Qa		Is there a prepositional genitive argument?	
GAD_Qb		Is there a Genitive….noun sequence not preceded by an adjective where the Genitive does not play a determiner function and does not agree in features with the noun?	
GAD_Qc		Is there a genitive argument which can be iterated with one and the same realization in pre-adjectival position?	
47	GFL	± GenL	(-GCN or +GFN), ¬+GP3, ¬+EAL, ¬+GUN

GFL_Qa	***Precondition:*** There are no reduced relative clauses in prenominal position	Is there a non-prepositional direct argument occurring after an adjective which has a possessor or agent interpretation?	
GFL_Qb		Is there a non-prepositional genitive occurring after the head noun, which has a possessor or agent interpretation?	
48	**PGL**	**± partial GenL**	**-GFL**
PGL_Qa	***Precondition:*** There are no reduced relative clauses in prenominal position	Is there a non-adpositional genitive occurring after an adjective and the N-Gen relation is any of: kinship/part-whole/container-containee/inalienable possession?	
PGL_Qb		Is there a non-adpositional genitive occurring after the head noun and the latter does not occupy the position of determiners and the N-Gen relation is any of: kinship/part-whole/container-containee/inalienable possession?	
49	**GGH**	**± generalized GenH**	**+FGP, -CGR, +NWD, ¬+GFP, ¬+GUN**
GGH_Qa		Is there a prenominal genitive occurring as a visibly branching phrase headed by a common noun?	
GGH_QSa		Are there two or more non-internal arguments (e.g. Possessor and Agent or two Possessors) cooccurring as genitives of the same head noun (with or without an internal argument)?	**YES = -**
GGH_QSb		Is there an understood agent argument of the noun controlling the understood subject of an infinitival subordinate even if an internal argument functional genitive is present?	**YES = -**
GGH_QSc		Are unaffected internal arguments of a noun realized as functional genitives?	**YES = -**
GGH_QSd		Is there an understood agent argument of the noun binding an anaphoric complement of the same noun even if an internal argument realized as functional genitive is present?	**YES = -**
50	**GSI**	**± grammaticalized inalienability**	
51	**ALP**	**± alienable possession**	**-GSI**
ALP_Qa		Does the language use a special morpheme with possessed nouns, in order to indicate that the object is alien to the speaker?	
52	**GST**	**± grammaticalized Genitive**	**+GSI**
53	**GIT**	**± Genitive-licensing iteration**	
GIT_Qa	***Precondition:*** A functional morpheme beyond gender/number inflection occurs on a head noun modified by a functional genitive.	Is this morpheme also found (free or affixed to another functional item) with the same functional genitive and in the same configuration as when it appears on a head noun?	
54	**UST**	**± unstructured modifiers**	**+ARR**
UST_Qa		Are there freely ordered (interchangeable) adjective sequences occurring in between an indefinite numeral and the head noun?	

UST_Qb		Are there free orders of personal pronouns and numerals (in non-partitive constructions, non-classifier languages)?	
55	**GPC**	**± gender polarity cardinals**	**+FGG**
GPC_Qa		Is there gender mismatch between plural cardinals (higher than two) and the head noun?	
56	**PSC**	**± plural spread from cardinal quantifiers**	**+FSN, ¬+UST, ¬+GPC**
PSC_Qa		Do nouns exhibit plural marking when cardinal numerals are present and function as indefinite quantifiers?	
PSC_Qsa		Are nouns **invariably** singular when cardinal numerals are present and function as indefinite quantifiers?	**NEGATIVE EVIDENCE**
57	**PCA**	**± plural spread through cardinal adjectives**	**-PSC**
PCA_Qa		Do nouns exhibit plural marking in the presence of a plural determiner even in the presence of cardinal numerals?	
PCA_Qsa		Are nouns **invariably** singular in the presence of a plural determiner when modified by a cardinal numeral higher than 1?	**NEGATIVE EVIDENCE**
58	**PMN**	**± personal marking on numerals**	**+GFP**
PMN_Qa		Do cardinal numerals bear a person agreement marker (used in the genitive construction for head marking) to form "personal" numerals ('we three')?	
59	**RHM**	**± head marking on relative clauses**	**+FGP**
RHM_Qa		Does the head noun change its form as a word when it is modified by a relative clause?	
60	**FRC**	**± finite relative clauses**	
FRC_Qa		Does the predicate of relative clauses bear morphology specific to verbs?	
61	**NRC**	**± participial relative clauses**	**+FRC**
NRC_Qa		Are there relative clauses with an overt transitive subject (other than the head of the relative) where the case assigned to the subject is not available to any subjects of root clauses in the same language?	
NRC_Qb		Are there relative clauses with an overt transitive subject (other than the head of the relative) whose predicate clearly bears nominalizing morphology?	
62	**DOR**	**± def on relatives**	**+DGR, +FRC**
DOR_Qa		Do relative pronouns mark the same definiteness value as their antecedent?	
63	**FFP**	**± feature spread to particles**	**+FGN, (+LKA or +LKP or +LKO or +GAD), ¬+GFP**
FFP_Qa		Do particles (genitive adpositions or linkers) exhibit agreement in number with the head noun?	
64	**NUP**	**± NP under non-genitive arguments**	**+FGP, (+CSE or +LKA or +LKO)**
NUP_Qa		Are there non-genitive arguments following their N?	
NUP_Qsa		Are there non-genitive arguments preceding their N?	**YES = -**
65	**PNP**	**± complement under P**	**+FGP, -CSE or -NUP**
PNP_Qa		Are there complements following their head Ps?	

66	NUD	± NP under D	+FGP
NUD_Qa		Does an article occur as the first word or as affixed to the first word in a branching nominal phrase?	
NUD_Qb		Does a cardinal or a numerical adjective ('many', 'few'…) occur as the first word of a nominal phrase in the indefinite reading and follow some other word in a definite reading?	
NUD_QSA		Does an article occur as the last word or as affixed to the last word in a branching nominal phrase?	YES = -
NUD_QSB		Does a cardinal or a numerical adjective ('many', 'few'…) occur as the last word of a nominal phrase in the indefinite reading and precede some other word in a definite reading?	YES = -
67	NUC	± N under cardinals	¬+UST, +PNP, +NUD
NUC_Qa		Are there argument nominal phrases with the order Cardinal-Noun?	
NUC_QSa		Are there argument nominal phrases with the order Noun-Cardinal?	YES = -
68	NM1	± N under M1 As	+NUC
NM1_Qa		Do Manner1 (e.g. size, quality) adjectives precede the noun in discourse-neutral contexts?	
NM1_Qb		Do possessives inflected for numbers and cooccurring with determiners precede the noun in discourse-neutral contexts?	
NM1_QSA		Are there MANNER1 (e.g. size or quality) adjectives occurring in postnominal position (provided the latter is distinguished/distinguishable from that of relative clauses)?	YES = -
69	NM2	± N under M2 As	+NM1
NM2_Qa		Do Manner2 (e.g. shape/color) adjectives precede the noun in discourse-neutral contexts?	
NM2_Qsa		Are there Manner2 (e.g. shape or color) adjectives occurring in postnominal position (provided the latter is distinguished/distinguishable from that of relative clauses)?	YES = -
70	NUA	± N under As	+NM2
NUA_Qa		Do Argument (e.g. origin, nationality) adjectives precede the noun in discourse-neutral contexts?	
NUA_Qsa		Are there thematic adjectives occurring in postnominal position (provided the latter is distinguished/distinguishable from that of relative clauses)?	YES = -
NUA_Qsb		Do nouns with a definite suffix occur before adjectives (provided the latter occurs in a position that is distinguished/distinguishable from that of relative clauses)?	YES = -
71	NGL	± N under GenL	(+FGP, +UST) or +NUA, (+GUN or +GFL or +PGL)
NGL_Qa		Is there a non-prepositional genitive occurring between a structured adjective and a noun?	
72	EAF	± fronted high As	-NM1

EAF_Qa	*Precondition:* M1 adjectives are postnominal in discourse-neutral contexts	Can Manner1 (e.g. size, quality) adjectives be prenominal when emphatic/marked?	
73	**ACM**	**± class MOD**	**-ARR, -NGL**
ACM_Qa	*Precondition:* There are prenominal Argument adjectives	Is there a postnominal Argument adjective occurring between a head noun and a functional genitive?	
74	**DSN**	**± def spread to N**	**+DCN**
DSN_Qa		Is there a definiteness affix on the noun even when a non-affixal article or a demonstrative also occur?	
DSN_Qb		Is there a definiteness affix on the noun even when another definite affix occurs on one or more adjectives preceding it?	
75	**DSA**	**± def spread to ARR**	**+DGR, +ARR**
DSA_Qa		When the whole nominal argument is understood as definite, is there a definite article on adjectives realized as a reduced relative clauses?	
76	**DSS**	**± def spread to structural categories**	**+DGR, (-ARR or +DSA)**
DSS_Qa		When the whole nominal argument is understood as definite, is there a definite article on the noun and its modifiers?	
77	**DOC**	**± def on cardinals**	**-NWD, +DCN, +NUC**
DOC_Qa		Is there a definiteness affix occurring on a cardinal numeral?	
78	**NEX**	**± Proper names in D**	**(-FSN or -CGR), -NWD, ¬+NUA**
NEX_Qa		Are there proper names which occur with no article in argument position?	
NEX_Qsa		Do proper names of cities occur with a visible article?	**YES = -**
79	**PEX**	**± Personal proper names in D**	**+NEX**
PEX_Qa		Are there proper names of person which occur with no article in argument position?	
PEX_QSA		Do proper names of male persons occur with a visible article?	**YES = -**
80	**FEX**	**± Partial personal proper names in D**	**+PEX**
FEX_Qa		Do proper names of women occur with no article in argument position?	
FEX_QSA		Do proper names of women occur with a visible article?	**YES = -**
81	**PDC**	**± D-checking possessives**	**+DGR, (¬-CGR or -NWD), ¬+GFP**
PDC_Qa		Are there sequences *Poss N* (or *N Poss*) in nominal arguments with definite interpretation?	
PDC_Qb		Does the language display differences in the position of possessive items according to the presence of a definite or indefinite determiner in the nominal structure, with no change in the interpretation (apart from definite vs. indefinite)?	
82	**PCL**	**± clitic possessives**	**+FGP, ¬+GFP, ¬+DMP, ¬+UST, (-PDC or ¬+DGR)**

PCL_Qa		Are possessives realized as bound morphemes cliticizing on the head noun or an adjective (without agreeing in ɸ-features with it), with a formal realization distinct from that of genitives?	
PCL_Qb		Are possessives realized as bound morphemes cliticizing on the head noun or an adjective, without agreeing in ɸ-features with it, and do they co-occur with all functional genitives possible in the language?	
83	**APO**	**± adjectival possessives**	**¬+GFP, ¬+UST**
APO_Qa		Do possessives agree in phi-features with the head noun?	
APO_Qb		Do possessives behave distributionally as structured M1 adjectives?	
84	**WAP**	**± Wackernagel possessives**	**¬+DMP, +NUD, -PDC, -APO or (-NM1, +APO)**
WAP_Qa		Are there possessives which do not agree in phi-features with the head noun and occur in the following sequence? *[Art Poss Card N]*	
85	**AGE**	**± adjectival genitive**	**+APO**
AGE_Qa		Is it possible to form argument adjectives from proper and common nouns and use them with the role of internal argument of the head noun?	
AGE_Qb		Can adjectives from proper and common nouns bind non-null personal anaphoric/pronominal expressions, as genitives and possessives do?	
86	**OPK**	**± null possessive licensing article with kinship nouns**	**+DGR, -GSI**
OPK_Qa		Does a definite article occurring with a kinship noun and no visible possessive license a (3rd person) understood pronominal genitive that can be interpreted as bound?	***Additional instruction***: This question does not apply to kinship nouns like 'mum' or 'dad'
87	**TSP**	**± split deictic demonstratives**	**-FSN or +DGR**
TSP_Qa		Are demonstratives which express deictic relations (e.g. information about space, time, position, relationship to a discourse participant, including distance/relative social status) instantiated by two separate words, neither of which is an article or a non-clitic locative adverb?	
TSP_Qb		Does the language have a specialized deictically neutral demonstrative lexically/morphologically different from those which realize deictic relations (e.g. which encode information about space, time, position, relationship to a discourse participant, including distance/relative social status)?	
TSP_Qsa		Are there deictic demonstratives instantiated by one single word?	**YES = -**
TSP_Qsb		Do demonstratives co-occur with articles?	**YES = -**
88	**TDP**	**± split demonstratives**	**+TSP**

TDP_Qa		Are there deictically neutral demonstratives (e.g. not encoding information about space, time, position, relationship to a discourse participant, including distance/relative social status, and used with second mention) instantiated by two separate words, neither of which is an article or a non-clitic locative adverb?	
TDP_Qsa		Are there demonstratives used as deictically neutral instantiated by one single word?	YES = -
89	**TDC**	**± D-checking demonstratives**	**-TSP**
TDC_Qa	*Precondition:* The language is D-initial. There are non-enclitic and phrase-initial articles	Are there *Dem N* sequences in nominal arguments?	
TDC_Qb	*Precondition:* The language is D-final. There are phrase-final articles	Are there *N Dem* sequences in nominal arguments?	
TDC_Qc	*Precondition:* The language is D-initial. There are enclitic articles	Are there *Dem N* sequences in nominal arguments?	
TDC_Qd	*Precondition:* There is a non-enclitic article in D. There is also an enclitic article that does not occur in D and can co-occur with the D-article	Do demonstratives co-occur with the enclitic article in nominal arguments?	
TDC_Qsa	*Precondition:* There are D-articles	Do DP-initial demonstratives co-occur with D-articles?	YES = -
90	**TSA**	**± structured demonstratives (adjectival)**	**¬+UST, ¬+TSP, (+DGR, +NM1) or (-ARR, -NM1) or -NUC**
TSA_Qa	*Precondition:* Structured adjectives are postnominal. There are no unstructured (postnominal) adjectives.	Are there sequences N (Adj) Dem PP/Gen?	
TSA_Qb	*Precondition:* There is an enclitic definite article in D.	Are there sequences X-Art Dem Adj ?	
TSA_Qc	*Precondition:* Structured adjectives can be fronted to the left of D (or numerals): ([Adj (D) Num…] , [(D) Num … Adj …])	Are the following orders both available? [Dem (D) Num], [(D) Num Dem]	
91	**TAR**	**± unstructured demonstratives**	**+ARR, ¬+TSP**
TAR_Qa	*Precondition:* Unstructured adjectives can be fronted	Demonstratives can be fronted	
TAR_Qb	*Precondition:* There are postominal (unordered) non-structured adjectives.	Are both the following orders available? [N Dem Adj], [N Adj Dem]	
TAR_Qc	*Precondition:* Non-structured adjectives occur postnominally and can occur after (postnominal) PPs.	Are there postnominal demonstratives that occur after (postnominal) PPs?	
TAR_Qd	*Precondition:* There are unstructured prenominal adjectives.	Demonstratives and adjectives are freely ordered in prenominal position.	
TAR_Qe	*Precondition*: There are prenominal genitives.	Are the following orders both available? [Gen Dem N], [Dem Gen N]	

TAR_Qf	*Precondition:* There are prenominal relative clauses.	Are the following orders both available? [Dem RC … N], [RC Dem … N]	
TAR_Qg		Are the following orders both available? [ONE Dem N], [Dem ONE N]	
TAR_Qh		Are the following orders both available? [Dem Num], [Num Dem]	
92	**TLC**	**± Dem fronting to Loc**	**¬+TSP, ¬+TDC, (+TSA or (+PNP, +TAR))**
TNL_Qa		Are there DP-initial demonstratives?	
93	**TND**	**± long distance D-checking demonstratives**	**+CGR, (+TSA or +TAR)**
TND_Qa	*Precondition:* DP is head-initial. There is a definite article.	Are there N Dem sequences in nominal arguments?	
TND_Qb	*Precondition:* DP is head-final. There is a definite article.	Are there N Dem sequences in nominal arguments?	
94	**TDA**	**± split def on adjectival demonstratives**	**(+DSS or +DSA), (+TSA or +TAR)**
TDA_Qa		Are there adjectival demonstratives co-occurring with a copy of the definite article that heads the nominal argument?	
TDA_Qsa		Is any of the following sequences available in nominal arguments? [Art N Dem Art Adj], [Art N Art Adj Dem], [Dem Art Adj Art N], [Dem Art N Art Adj]	**YES = -**
95	**TNL**	**± DP under Loc**	**+TSP or +TLC or (¬+TSP, ¬+TDC, ¬+TSA, ¬+TAR)**
TNL_Qa		Are there demonstratives which occur phrase-initially? NOTE: this question also applies to the Loc item of split demonstratives.	
TNL_Qsa		Do demonstratives occur phrase-finally, i.e. after the article (if available) noun, numerals, adjectives, PPs, relative clauses and all other noun modifiers?	**YES = -.** *Additional instruction*: this question also applies to the Loc item of split demonstratives