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Syntactic diversity and language learnability

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Appendix

Part 2: Parameter manifestations (used as questions for parameter setting)

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FGM, ± grammaticalized morphology

Distinguishes languages that have words containing bound morphemes for grammatical meanings (e.g., IE, Uralic, Semitic, Japanese) from languages that do not (e.g., Mandarin, Cantonese)

Manifestations

Is any of the following true in the language?

a) The language has affixes or regular phonological alternations that change the grammatical category of the base

ex: danger-dangerous sing-song

b) There are roots which take different affixes/phonological alternations encoding different closed-class interpretable/grammatical properties (tense, aspect, number, gender, gradation, case, etc.)

ex: cat-cats sing-sang

FGA, ± grammaticalized Agreement

Distinguishes languages that have distinct words agreeing in φ -features with each other (e.g., IE, Uralic, Semitic) from languages that do not (e.g., Mandarin, Cantonese, Japanese)

Manifestations

Is any of the following true in the language?

There is at least one feature occurring on a word which must take its value ("agree with", "concord with") from another occurrence of the same feature on another word

ex: this cat - these/those cats

il.M.S gatto.M.S nero.M.S 'the black (tom)cat' la.F.S gatta.F.S nera.F.S 'the black she-cat' i.M.P gatti.M.P neri.M.P 'the black (tom)cats'

I like - she likes

tu.2S canti
'you sing'
voi.2P cantate.2P
'you-guys/y'all sing'

ITALIAN

ITALIAN

FGK, ± grammaticalized Case

Distinguishes languages that mark nouns, pronouns or determiners for morphological Case (e.g., English, German, Hungarian, Japanese) from languages that do not (e.g., Mandarin, Cantonese, Wolof)

Manifestations

Is any of the following true in the language?

- a) The morphology of personal or relative pronouns varies according to their syntactic role
- ex: I like the teacher the teacher likes me
- b) The morphology of quantifiers, demonstratives, and/or definite/indefinite articles varies according to the syntactic role of the nominal minimally containing them

ex: der König traf die Gäste

'the king met the guests'

Ich habe den König getroffen
'I met the king'

GERMAN

c) The morphology of nouns varies according to their syntactic role

ex: ο βασιλι**ά**ς έφυγε 'the king has left' γνώρισα τον βασιλι**ά** 'I met the king' **GREEK**

HUNGARIAN

SPK, ± grammaticalized (ultra)spatial Cases

Distinguishes languages that mark nouns, pronouns or determiners for morphological Cases encoding spatial meanings in addition to simple Locative/Directional/Ablative (e.g., Hungarian, Finnish, Even, Evenki) from languages that do not (e.g., Russian, Latin, Arabic)

Manifestations

Is any of the following true in the language?

There are spatial Case distinctions in addition to stative location, direction and source (e.g. adessive vs. inessive)

ex: a ház-on
the house.SUPERESSIVE
'on the house'
a ház-ban
the house.INESSIVE
'in the house'

a ház-nálthe house.ADESSIVE'at the house'

FGP, ± grammaticalized Person

Distinguishes languages that express Person distinctions on categories other than pronouns (e.g. German, Hungarian, Hebrew) from languages that do not (e.g., Mandarin, Cantonese, Japanese)

Manifestations

- a) There is agreement in speech-role-designating morphology between a verb and some of its arguments, or an argument is doubled on the verb by a speech-role-sensitive clitic
- ex: I am leaving
 you are leaving
 Mary/she is leaving
- b) There are overt expletive items in subject function
- ex: it is summer
 it is a pity that you have to leave
 it seems that he has been arrested
- c) There are overt resumptive items in (direct or indirect) object function
- ex: a Gianni gli hai regalato un libro ITALIAN to Gianni 3S.M.DAT.CLI have.2S given a.M book.M.S 'You gave a book to Gianni'
- d) There are items that can occur as referentially independent pronouns and can also occur as a variable bound by a quantified antecedent like 'no-one'/'everyone'
- ex: Mary likes him
 everyone(i) believes that Mary loves him(i)
- e) Speech-role-designating items precede adjectives (applies to adjectives and numerals obligatorily preceding nouns)
- ex: some young scholars participated in the project. we young are all influencers now.

krízis aggaszt-ott-a embere-ek-et a magyar a people-P-ACC the crisis made-anxious-PAST.DEF the Hungarian 'the crisis made Hungarian people anxious' krízis aggasztott magyar-ok-at crisis made-anxious-PAST us-ACC Hungarian-P-ACC the 'the crisis made us Hungarians anxious' **HUNGARIAN**

f) There is no article in the language, but nominal arguments with a cardinal numeral following a possessive, an adjective meaning 'other', 'same/even' or 'unique', or the noun itself receive definite interpretation

ex: moje trzy książki
my three books = **only** definite interpretation (Rutkowski 2007)
trzy moje książki
three my books = indefinite interpretation (Rutkowski 2007)

g) There are speech-role-designating morphemes alternating between a stressed and a clitic form

ex: Claudio lo odia

'Claudio hates him'

Claudio odia lui

'Claudio hates him (contrastive)'

- h) Common nouns in non-argument function can occur bare, while the same nouns in argument function require the addition of some overt functional category NEGATIVE EVIDENCE
- ex: Ronald Reagan was President of the United States from 1981 to 1989
 the President of the United States met with survivors of another deadly school shooting
 * president of the United States met with survivors of another deadly school shooting

si finge dottore
self fakes doctor

'He pretends to be [a] doctor'
il/un/quel dottore è scomparso

'The/A/That doctor has disappeared'
* Dottore è scomparso

i) Proper names in non-argument function can occur bare, while the same proper names in subject function require the addition of some overt functional category NEGATIVE EVIDENCE

T.EGITT E E VIBELVEE

si comportano da Juventus 'They act as Juventus'

ITALIAN

ITALIAN

ITALIAN

ex:

la Juventus è insopportabile

- 'Juventus is unbearable'
- *Juventus è insopportabile
- j) Nominal arguments with understood maximality denotation (definiteness) are marked by a dedicated overt category (typically the 'definite article', or some other source of definiteness, e.g. demonstratives, genitives/possessives)

ex: I met a family. The children were very nice. (*Children were very nice.)
I took a taxi. The driver was drunk. (*Driver was drunk)

FSP, ± semantic Person

Distinguishes languages that express Person distinctions on pronouns (personal, reflexives) (e.g., Mandarin, Cantonese) from languages that do not (e.g., Japanese)

MANDARIN

Manifestations

Is any of the following true in the language?

a) There is agreement in speech-role between a reflexive and its antecedent

ex: wo chaoyue-le wo-ziji
I outdo-Perf I-self
I outdid myself'
ni chaoyue-le ni-ziji
you outdo-Perf you-self
'you outdid yourself'
Mali chaoyue-le ta-ziji
Mary outdo-Perf her-self
'Mary outdid herself'

b) There is a system of personal pronouns single-membered per each speech-role, with a formal relation between singular and plural at least for some speech-roles

```
ex: wo, ni, ta MANDARIN

'I, thou, s/he/it'

wo-men, ni-men, ta-men

I.COLL, thou.COLL, s/he/it.COLL

'we, you guys, they'
```

FGN, ± grammaticalized Number

Distinguishes languages that obligatorily express at least singular/plural distinctions in nominal phrases (e.g., English, Finnish, Hebrew) from languages that do not (e.g., Mandarin, Cantonese, Japanese)

Manifestations

Is any of the following true in the language?

a) Nominal arguments display bound morpheme alternations (on the head noun or a definite article/demonstrative/quantifier/adjective) which oppose singular to non-singular interpretation

```
ex: il gatto (miagola)
the.M.S cat.M.S meow.3S
'the cat (meows)'
i gatti (miagolano)
the.M.P cat.M.P meow.3P
'cats (meow)'
```

b) There is agreement in number between a singular/non-singular nominal argument and the verb

```
ex: il gatto miagola
the.M.S cat.M.S meow.3S
'the cat meows'
i gatti miagolano
the.M.P cat.M.P meow.3P
'cats meow'
```

ITALIAN

ITALIAN

c) There is agreement in number between a singular/non-singular noun (or a definite article/demonstrative/quantifier) and adjectives (within one and the same nominal structure)

```
ex: il gatto bianco
the.M.S cat.M.S white.M.S
'the white cat'
i gatti bianchi
the.M.P cat.M.P white.M.P
'the white cats'
```

ITALIAN

- d) There is agreement in number between a 3rd person reflexive and its antecedent
- ex: the boy likes himself the boys like themselves

SCO, ± spread collective Number

Distinguishes languages that have agreeing morphology on nouns and their modifiers that is optionally used to express collective reading (e.g., Kuikuro) from languages that do not (e.g., Japanese)

Manifestations

Is any of the following true in the language?

An argument collective nominal bears an overt marker for 'collective number' on the noun and its modifiers

ex: itão-ko itütü-ko
woman-COLL.P nice-COLL.P
'nice women'
itão-ko hesini-ko
ugly-COLL.P
'ugly women'

KUIKURO

GDP, ± grammaticalized distributive plurality

Distinguishes languages that systematically mark distributive interpretation with a morpheme on both the distributed and the quantified nominal argument (e.g., Korean) from languages that do not (e.g., Japanese)

Manifestations

Is any of the following true in the language?

In sentences containing an argument distributed over by another quantifying argument, there is a morpheme which functions as a marker of this distributive reading occurring both on the quantified and on the quantifying nominal

ex: haksayng-(tul)-i phwungsen hana-lul sa-ss-ta

student-GROUP.MARK-NOM balloon one-ACC buy-PAST-DECL

'the students bought a balloon'

haksayng-tul*-i phwungsen hana-lul-tul** sa-ss-ta

student-GROUP.MARK-NOM balloon one-ACC-PL buy-PAST-DECL

'the students bought a balloon each.'

- *Obligatory as antecedent of the second occurrence.
- **Locally bound (obeys Principle A). Goes after the case morpheme when it is spread.

FSN, \pm number spread to N

Distinguishes languages that exhibit at least some instances of number morphology on nouns and not only on determiners (e.g., French, English, Italian) from languages that do not (e.g., Basque, Wolof)

Manifestations

Is any of the following true in the language?

a) There are nouns that bear variable number morphology

ex: il gatto miagola

ITALIAN

the.M.S cat.M.S meow.3S

'the cat meows'

i gatti miagolano

the.M.P cat.M.P meow.3P

'cats meow'

b) There are bare nouns in (at least some) argument function

ex: ho bevuto acqua

ITALIAN

'I drank water'

ho incontrato **studenti** per tutto il giorno

'I have been meeting students all day long'

FNN, ± number on N

Distinguishes languages that have systematic exponence of number morphology on nouns (e.g., English, Italian) from languages that do not (e.g., French)

Manifestations

Is any of the following true in the language?

a) There is systematic exponence of number morphology distinguishing singular vs. plural number on nouns, not definable as a lexical/phonological idiosyncrasy

ex: cat - cats

gato - gatos

SPANISH

gatto - gatti

ITALIAN

b) There are bare nouns in (at least some) argument function

ex: ho bevuto acqua

ITALIAN

'I drank water'

ho incontrato **studenti** per tutto il giorno

'I have been meeting students all day long'

FGT, ± grammaticalized temporality

Distinguishes languages that systematically express whether the property denoted by a noun holds/no longer holds/does not hold yet at the speech time through a bound morpheme in the nominal (e.g., Kuikuro) from languages that do not (e.g., IE, Uralic, Semitic, Basque)

Manifestations

Nouns referring to natural kinds (animals, people, plants, ...) and material objects take a bound morpheme signaling that the property they denote is not true at the speech time even when a verb or adjective in the sentence already expresses the state-changing effect (through time) on the denotatum

ex: oku-pe atsunkgili-pügü leha
porridge-'ex' spoil-PRF CMPL
'the (rotten) porridge is spoiled'
kagaiha heke kangamuke-pe e-lü
white ERG child-'ex' kill-PNCT
'the white man killed the (dead) child' (Franchetto & Thomas 2016)

FGG, ± grammaticalized gender

Distinguishes languages that exhibit at least some agreement in gender between a noun and a determiner or modifier (e.g., French, Italian, Wolof) from languages that do not (e.g., English, Uralic, Altaic)

Manifestations

Is any of the following true in the language?

a) There is agreement in gender/noun class between nouns and articles/demonstratives/quantifiers

ex: il cucchiaio, questo cucchiaio, un cucchiaio the.M.S spoon.M.S, this.M.S spoon.M.S, a.M spoon.M.S la forchetta, questa forchetta, una forchetta the.F.S fork.F.S, this.F.S fork, a.F.S fork.F.S **ITALIAN**

KUIKURO

b) There is agreement in gender/noun class between nouns and NP-modifying adjectives

ex: il cucchiaio pulito
the.M.S spoon.M.S clean.M.S
'the clean spoon'
la forchetta pulita
the.F.S fork.F.S clean.F.S
'the clean fork'

ITALIAN

FSG, \pm semantic gender

Distinguishes languages that contrast at least two 3rd person pronouns encoding animacy and/or perceived biological sex (e.g., English) from languages that do not (e.g., Finnish, Hungarian, Turkish, Even, Wolof)

Manifestations

There is some overt distinction between 3rd person pronominal forms encoding differences in sex/animacy

ex: everybody likes the king: **he** is really nice everybody likes the queen: **she** is really nice everybody likes this book: **it** is really interesting

CGB, ± unbounded singular nouns

Distinguishes languages that have singular (or number-neutral, in languages without grammaticalized number) count bare nouns with an unbounded reading, i.e. indefinite, scopeless, atelic in incorporated object position (e.g., Hungarian, Turkish, Hindi) from languages that do not (e.g., Russian, Icelandic, Celtic, Hebrew)

Manifestations

Is any of the following true in the language?

a) In a language with grammaticalized number, bare singular count nouns in the object position of an atelic predicate have an indefinite number-neutral reading

```
ex: gyerek-ek alma-t szed-nek HUNGARIAN child-P apple-S-ACC pick-INDEF.3P 'the children are picking apples (=apple-picking)' (Kenesei et al 1998: 330)
```

```
A: John enna velai seigiraan?

John what work does

B: avan seerundhu virkindraan
he car sells

'He sells cars'
```

```
anu puure din cuuhaapakaRtii rahii HINDI
Anu whole day mouse kept-catching
'Anu kept catching mice (different ones) the whole day' (Dayal 2009)
```

b) In a language without grammaticalized number, in subject position bare nouns have a definite reading, while nouns introduced by a further dedicated morpheme occur with an indefinite, non presuppositional (one of the...), non-numeral ('exactly one...') reading

```
MANDARIN
                          maalou
ex:
      gau
             soeng gwo
      dog
             want cross road
      'the dog wants to cross the road'
      (cannot mean: 'A dog wants to cross the road')
                          soeng gwo
                                        maalou
      vou
                   gau
      INDEF
                    dog
                          want cross road
      'a dog/some dogs want(s) to cross the road'
```

c) Bare singular count nouns in subject position have a definite reading, while singular count nouns introduced by a further dedicated morpheme have an indefinite, non-specific, non presuppositional (one of the...), non-numeral ('exactly one...') reading

```
HINDI
puure din
              kamre meN
                           cuuhaaghustaa rahaa
whole day
              room in
                            mouse kept-entering
'the whole day the mouse/a certain mouse (the same one) kept entering the room' (Dayal 2009)
              kamre meN
                                   cuuhaaghustaa rahaa
roj roj
                            ek
                                   mouse kept-entering
daily daily
              room in
                            one
'every day there was a mouse (a potentially different one) that kept entering the room'
```

FPC, ± grammaticalized perception

Distinguishes languages in which all nouns have an unbounded reading (like that of English existential bare plurals) whenever they are not accompanied by a morpheme functioning like English articles but encoding contrasts about the perceived position of the denotatum (e.g., Kadiweu) from languages that do not (e.g., IE, Uralic, Semitic, Japanese, Basque)

Manifestations

Is any of the following true in the language?

The language has a functional morpheme (other than demonstratives) that attaches to arguments and encodes the speaker's perception of the position or movement of a nominal argument's referent, and whose absence results in an unbounded reading of the nominal

```
apolikaGana-Ga
                                                                         KADIWEU
ex:
      João yaa
                   i-jo
             3-buy M-PERC
                                 horse-NOMINALIZER
      João
      'João buys a/the horse' (perceived as moving away from the speaker)
      João vaa
                   i
                          apolikaGana-Ga
             3-buy M
                          horse-NOMINALIZER
      João
      'João buys (one or more) horses'
      i-d:i
                   ninvoGo-di
      M-PERC
                   water-NOMINALIZER
      'a/the (unit of) water' (in a horizontally extended container/layer/vessel)
      (from Sandalo & Michelioudakis 2016: 7-8)
```

DGR, ± grammaticalized Specified Quantity

Distinguishes languages that obligatorily encode whether a nominal argument is definite, i.e. maximal in the domain of discourse, (e.g. English, German, Italian, French, Irish, Welsh, Classical Greek, Standard Greek, Hebrew, Arabic) from languages that do not (e.g., Polish, Russian, Hindi)

Manifestations

a) There is an overt marker for nominal arguments with a definite interpretation (= with maximal reading) denoting entities introduced in the domain of discourse but not directly mentioned, which is absent from those with non-maximal readings

ex: I met a few families. **The** children were well-behaved.

(as opposed to: Some children were well-behaved.

A child was well-behaved.)

I took a taxi. The driver was drunk.

(as opposed to: A driver was drunk.)

b) Argument common nouns denoting a maximal specific entity considered unique by the speaker and the hearer (hence with definite interpretation) bear an overt marker that is different from those present when such an entity is not considered unique

ex: I met the mayor

(as opposed to: at the meeting I interviewed a mayor)

the sun is the center of our solar system

(as opposed to: *I saw a wonderful sun today*)

c) Argument nominals headed by a singular count noun and referring to the whole kind named by that noun bear an overt marker that is different from the one used with nonmaximal readings

ex: the dodo is extinct

(as opposed to: *I saw a dodo*)

d) Argument nominals headed by a mass/plural noun and referring to the whole kind named by that noun bear a dedicated marker that is different from the one used with non-maximal readings

ex: i dinosauri sono estinti

ITALIAN

the.M.P dinosaur.M.P be.3P extinct.M.P

'Dinosaurs are extinct'

(as opposed to:

*Dinosauri sono estinti, *Dei dinosauri sono estinti

Quel pittore dipinge dinosauri

that.M.S painter.S paint.3S dinosaur.M.P

'That painter paints dinosaurs')

l'acqua fa bene

ITALIAN

the.F.S water.F.S do.3S well

'Water is healthy'

(as opposed to:

*Acqua fa bene, *Un'acqua fa bene, *Dell'acqua fa bene

Bere (un'/dell') acqua povera di sodio ti farebbe bene drink a.F. water.F.S poor.F.S of sodium 2S.ACC.CL do.3S well 'It would be healthy for you to drink a water with little sodium'

DGP, ± grammaticalized text anaphora

Distinguishes languages that obligatorily encode a noun's previous mention in the discourse through a dedicated morpheme (probably Gothic, Mauritian Creole, Archi) from languages that do not (e.g., Latin, Russian, Hindi, Mandarin, Japanese)

Manifestations

Is any of the following true in the language?

A noun denoting an entity that has been mentioned in the previous context ('anaphoric reading') bears a dedicated marker (other than a demonstrative)

```
ex:
      χIere i-t:a
                                  χit:a
                                         OS
                                                lo
                                                             e < r > di
                                                                           inʁanak
      Archi.NPL.be-TEMP1
                                  then
                                         one
                                                girl.2S.ABS
                                                             <2.S>BE.PF
                                                                           up.there
      lap
             mu-t:u-r ...
      very be.beautiful-ATTR-2S
                                  marči žihil-til-če-s
      jamu-r lo
                                                                    ı'an
                           χit:a
      that-2S girl.2S.ABS
                                         youth-PL-OBL.PL-DAT
                           then
                                  all
                                                                    want
      de-k-er-ši
                                  e<r>di...
      2S-hear-1PF-1PF-CVB
                                  <2S>BE.PF
      ammo to-r laha-s
                                  jemim marči-me-gli-š
                                                                         lo
                                                                   OS
      but
             that girl.OBL-DAT that.PL all-OBL.PL-INTER-EL
                                                                   one boy.1S.ABS
      L'an-ši
                    i < w > di.
                                 jamu lo-wu
                                                             i < w > di
                                  that.1S lad.1S.ABS-and
      want-CVB
                    <1S>BE.PF
                                                             <1S>BE.PF
      misgin-n-ib
                                  γali-me-n
                                                      10
      BE.poor-ATTR-ATTR.PL
                                  family-OBL.PL-GEN lad.1S.ABS
      'Once there was a beautiful girl living in Archi...All young boys liked the girl...But
      the only boy the girl liked was a boy from a poor family.'
      (from Kibrik et al. 1977)
                                                                           ARCHI
```

CGR, ± weak Specified Quantity

Distinguishes languages that freely admit bare singular count indefinite arguments (e.g., Icelandic, Celtic, Semitic, Classical Greek) from languages that obligatorily mark a singular count indefinite argument through a dedicated morpheme (e.g., Romance, English, German, Mainland Scandinavian, Standard Greek)

Manifestations

Is any of the following true in the language?

a) Bare singular count nouns with an indefinite reading are grammatical in subject position

ex: kelev nashax oti
dog bit ECM-me
'a dog bit me'

HEBREW

b) Bare nominal arguments containing a definite genitive not occurring at their boundary have a definite interpretation

ex: lausn Péturs á vandamálinu ICELANDIC solution Pétur-GEN of problem-the 'Pétur's solution of the problem' (Sigurðsson 2006: §2.4 ex. 7)

disgrifiad cywir y ddamwain WELSH description accurate the accident 'the accurate description of the accident' (adapted from Rouveret 1994)

c) There are bare nominal arguments containing a demonstrative not occurring at their boundary

ex: more ze shel ha-yeled
teacher this of the-boy
'this teacher of the boy'

d) It is possible for a noun with a definiteness morpheme affixed to it to occur in a non-boundary position of an argument nominal that does not contain any other overt definite category at its boundary

ex: rauðu bækur-nar um Napóleon ICELANDIC red books-the about Napoleon 'the red books about Napoleon' (adapted from Sigurðsson 2006)

NWD, ± weak Person

Distinguishes languages in which nominal arguments headed by proper names and kind names can occur bare (e.g., English, German, Wolof) from languages that always fill the determiner position with the proper name itself or an article (e.g., Italian, Spanish, French, Basque)

Manifestations

- a) Bare argument proper names can follow an adjective
- ex: ancient Rome was a powerful city
- b) Bare plural/mass argument nouns can occur as kind-referring:

ex: dinosaurs are extinct

Mme Curie discovered radium

- c) Bare unmodified plural/mass nouns may occur as preverbal subjects with existential interpretation:
- ex: dogs were everywhere water was leaking out
- d) Bare unmodified plural/mass nouns may occur as subjects with generic interpretation:
- ex: dogs are dangerous water is the best thing to drink to stay hydrated
- e) Bare nominal arguments containing a prenominal genitive non-agreeing in phi-features with the head noun can have a definite specific interpretation
- ex: John's bike (\neq a bike of John's)
- f) There are definite affixes on non-initial constituents of bare argument nominals

ex: stóra bók-in ICELANDIC large book-the 'the large book'

- g) Possessives occur without a determiner in argument phrases with no nominal head
- ex: mine is better
- h) There are different inflections of attributive adjectives depending on different choices of the determiner

ex: ein gutes Buch
'a good book'

das gute Buch
'the good book'

FVP, \pm variable person

Distinguishes languages in which nominal phrases with Person-unmarked articles (or demonstratives) can denote first and second person entities (e.g., Spanish, Standard Greek) from languages that cannot, and use a personal pronoun in such cases (e.g., English, Italian)

Manifestations

Is any of the following true in the language?

a) A nominal argument non-overtly marked as 1st/2nd person in subject position can control 1st/2nd person verb agreement

ex: las/algunas mujeres estamos cansadas SPANISH the/some women are-1P tired 'we women/some of us women are tired'

b) A nominal non-overtly marked as 1st/2nd person occurring in topic position can be resumed by a 1st/2nd person pronoun

ex: a los hombres siempre nos gusta exagerar SPANISH to the men always to-us pleases exaggerate 'we men always like to exaggerate'

DGD, ± grammaticalized distality

Distinguishes languages that must always specify whether the definite denotatum of a nominal is regarded as proximate or distal in space and time through different forms of their article (e.g., Wolof, western Basque) from languages that only have a deictically neutral article (e.g., English, German, Spanish)

Manifestations

Is any of the following true in the language?

There are different articles marking a distinction between proximate vs. non-proximate (in time or space), different from determiners encoding deictic/discourse-anaphoric features (e.g. demonstratives)

Gótik yi Rome b-u **WOLOF** ex: vàq nañu jëkk b-a Goths CL.P destroy3P.PERF Rome C-REL ancient CL-DEF.DIST 'the Goths destroyed ancient Rome' Rom-u tev b-i Rome-of today CL-DEF.DIST 'contemporary Rome'

gizon-ak

man-ART.P

'the men'
gizon-ok

man-ART.P.PROX

'we men', 'you men', 'the men here' (from Trask 2003: 122)

DPQ, ± free null partitive Q

Distinguishes languages that, in affirmative sentences, use Case or an adposition to contrast two semantic types of bare complements (singular, plural or mass) - one denoting a subpart (some stages) of the denotatum of the head noun, the other denoting the whole entity - (e.g., Finnish) from languages that have only one form for these two interpretations (e.g., English, Italian)

Manifestations

Is any of the following true in the language?

There are special Case/adposition alternations with bare nominals in argument function such that one such Case/adposition assigns a partitive indefinite meaning

FINNISH ex: lu-i-n kirja**-n** read-PST-1S book-GEN/ACC 'I read the/a book' lu-i-n kirja**-a** read-PST-1S book-PART 'I read a little (=a non-specified amount) of the/a book' lu-i-n kirja**-t** read-PST-1S book-P.NOM/ACC 'I read the books' lu-i-n kirjo-j-a read-PST-1S book-P-PART

DCN, ± article-checking N

Distinguishes languages that have a definite article affixed to the head noun or to the first adjective of the nominal phrase (e.g., Romanian, Bulgarian, Scandinavian) from languages in which the definite article is a free morpheme occurring before or after the whole noun phrase (e.g., the rest of Romance, the rest of Germanic, Celtic, Basque)

Manifestations

Is any of the following true in the language?

'I read (a non-specified amount of) books'

a) There is a non-phrase-final morpheme suffixed to the head noun and functioning as the only marker of the definite reading of the whole nominal phrase

```
ex: pro-chetox kniga-ta za Napoleon BULGARIAN read.1.PAST.PERF book-the about Napoleon 'I read the book on Napoleon'
```

b) there is a non-phrase-final morpheme suffixed to an attributive adjective and functioning as the only marker of the definite reading of the whole nominal phrase

BULGARIAN *pro-chetox* ex: kniga nova**-ta** read.1.PAST.PERF book new-ta 'I read the new book' pro-chetox (edna) nova kniga read.1.PAST.PERF (one/a) new book 'I read a new book'

DNN, ± null-N-licensing art

Distinguishes languages in which a complement or a relative clause depending on an empty head noun can be constructed with an article (e.g., Spanish, Portuguese, Basque, Ancient Greek) from languages in which this function requires a demonstrative (e.g., most other Romance languages, Standard Greek)

Manifestations

Is any of the following true in the language?

a) Articles appear in nominals that contain no overt head noun (nor adjective) but contains a non-pronominal genitive argument of it

ex: el de Juan
the of Juan
'Juan's one'

- b) Articles appear in nominals that contain no overt noun (nor adjective) and an adpositional argument/adjunct
- ex: la exposición "Somos Monegros" se inaugura este viernes dentro de las por el XX aniversario de la Comarca SPANISH the exhibition "Somos Monegros" opens this Friday within the ones for the 20th anniversary of the Comarca (lit: within **the** for the 20th ...)
- c) Articles appear in nominals that contain no overt noun and a relative clause

el**SPANISH** ex: que salió the that went-out 'the one that went out' elconocí que the that met.1S 'the one I met'

DIN, ± D-controlled inflection on N

Distinguishes languages that have a special inflection on the noun depending on the presence/absence/choice/interpretation of the determiner (e.g. nunation in Arabic) from

languages in which head nouns always have the same form with all determiners (e.g., Hebrew)

Manifestations

Is any of the following true in the language?

The language exhibits distinct noun morphology depending on the choice of the determiner (beyond φ-feature concord)

```
ex: samisa l-walad-u ṣawt-a-n yarīb-a-n ARABIC hear.PRF.3S.M DEF-boy-NOM sound-ACC-NUN strange-ACC-NUN 'The boy heard a strange sound' samisa r-rağul-u ṣawt-a walad-i-n hear.PRF.3S.M DEF-man-NOM sound-ACC boy-OBL-NUN 'The man heard a boy's voice'
```

FGC, ± grammaticalized classifier

Distinguishes languages that require a classifier to combine a cardinality expression with a noun (e.g., Mandarin, Cantonese, Japanese) from languages that do not (e.g., Chickasaw)

Manifestations

Is any of the following true in the language?

There are lexically selected classifiers co-occurring with nouns denoting naturally atomic entities combined with numerals

```
MANDARIN
ex:
      san
             ge
                          ren
      three CLASS
                          people
      'three persons'
             zhi
      san
                      bi
      three CLASS
                     pen
      'three pens'
      san
             ben
                          shu
      three CLASS
                          book
      'three books'
                                              (from Cheng and Sybesma 1999, 514)
```

FGE, ± indefinite bare classifier

Distinguishes between two types of classifier languages, both types allowing sequences Cl-N without a numeral ('bare classifiers'). In one type (e.g., Mandarin) bare classifiers can only produce the interpretation of an indefinite quantifier, while a completely bare noun can either have the definite or indefinite reading. In the other type (e.g., Cantonese) bare classifiers have a bounded interpretation, definite or indefinite, while a completely bare noun only has the interpretations of English bare mass/plurals

Manifestations

Is any of the following true in the language?

Bare nominals without an overt classifier in object position can receive a definite specific interpretation

ex: Hufei he-wan-le tang MANDARIN

Hufei drink-finish-LE soup

'Hufei finished the soup' (from Cheng and Sybesma 1999, 510)

FCN, ± person spread to predicate nouns

Distinguishes languages in which predicate nouns are inflected for person, which is controlled by the subject of the predication, (e.g., Dravidian) from languages in which nouns do not inflect for person (e.g., IE, Uralic, Semitic)

Manifestations

Is any of the following true in the language?

Nouns found as the lexical head of predicative phrases agree with their subjects in person morphology

ex: āme manci-di TELUGU

she good-person-3S

'she is a good person'

wāļļu manci-wāļļu

they good-person-3P

'they are good persons'

nuwwu manci-wāḍiwi

you.S good-person-2S

'you are a good person'

HMP, ± NP-heading modifier

Distinguishes languages in which adjectival modification is systematically expressed with the property realized as a head noun and the entity denoted by the nominal appearing as a modifier of the latter (i.e., kindness of woman = kind woman) (e.g., Kadiweu, Kuikuro) from languages in which this construction is lexically exceptional or absent (e.g., Italian, English)

Manifestations

Is any of the following true in the language?

Abstract nouns denoting objective properties such as shape, colors or provenance 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)

ex: w*ëri kawë-no n-ee-ja-n* TIRIYÓ woman high–NOMINALIZER (= tallness) 3-come-PRES.IMPERF-UNCERTAIN 'the tall woman is coming' (from Meira 1999: 525)

ARR, \pm free reduced relatives

Distinguishes languages in which all adjectives can be used as reduced relative clauses (e.g., French, Spanish, Standard Greek) from languages in which reduced relative clauses are restricted to special categories (like verbal participles and branching phrases), or impossible at all (e.g. English, German)

Manifestations

Is any of the following true in the language?

a) There are free (truth-functionally synonymous/interchangeable) permutations of the order of the same two or more adjectives

```
bulo
                                                                          WOLOF
             b-и
                          b-и
                                 bees
                                        b-и
                                               Alman
ex:
      oto
             CL-LK blue
                          CL-LKnew
                                        CL-LK German
      car
      oto b-u bees b-u bulo b-u Alman
      oto b-u Alman b-u bulo b-u bees
      oto b-tu Alman b-u bees b-u bulo
      'a new blue German car'
```

b) There are adjectives that can occur to the left and also to the right of a cardinal numeral in indefinite nominal phrases

```
ex.
       güzel
                              bir
                                     kedi
                                                                                   TURKISH
                      gri
       beautiful
                      grey
                                      cat
       'a beautiful grey cat'
       güzel
                      bir
                                     kedi
                              gri
       beautiful
                                     cat
                              grey
       'a beautiful grey cat'
                                                     (from Bayirli, 2018, 3)
```

c) There are adjectives that can occur to the left and also to the right of a post-nominal argument of N

```
ex. la sorella di Gianni bionda
the sister of Gianni blonde
la sorella bionda di Gianni
the sister blonde of Gianni
```

d) There are argument adjectives occurring before the head noun, and some adjective occurs postnominally

ex:	ενα	γερμανικό	αυτοκίνητο	GREEK
	a	German	car	
	ενα	αυτοκίνητο	πράσινο	
	a	car	green	

GCN, ± head-marking with Genitive

Distinguishes languages in which nouns occurring with a genitive argument are marked as different from the occurrences without a Genitive (e.g., Hungarian, Finnish, Turkish, Yukaghir, Arabic, Hebrew, Wolof) from languages in which nouns do not have this kind of alternation (e.g., Latin, English, Japanese, Basque)

Manifestations

Is any of the following true in the language?

At least some head nouns change their form (through the morphophonology of the root or an affix) when with a genitive argument while they don't when not modified by a genitive argument

```
ex: ha bayit
the house
beyt ha more
house the teacher
'the teacher's house'
```

GFN, ± Person controlled marking

Distinguishes languages in which nouns occurring with a genitive argument are marked through a Person agreement morpheme controlled by the person feature of the genitive (e.g., Hungarian, Finnish, Udmurt, Turkish, Yukaghir) from languages in which the allomorph of a noun constructed with a Genitive is not characterized by an agreement morpheme (e.g., Arabic, Hebrew, Wolof)

Manifestations

Is any of the following true in the language?

There is a morpheme that appears on nouns modified by a genitive argument and whose realization depends on the Person feature encoded on the genitive

```
ex: Vanja-len kniga-jez
Vanya-GEN book-3S
'Vanya's book'
(min-am) kniga-je
I-GEN book-1S
'my book'
kniga
'(a/the) book'
```

GFP, ± agreement with all pronouns

Distinguishes languages in which nouns occurring with a genitive argument are marked through a Person agreement morpheme whatever the Person of the genitive argument (e.g., Hungarian, Finnish, Turkish) from languages in which this marking only appears with 3rd person Genitives (e.g., Yukaghir)

Manifestations

Is any of the following true in the language?

There are 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

FINNISH minu-n vaimoni-**n** voitt-i ex: auto-n I-GEN wife-1.S.POSS win-PST.3.S car-GEN 'my wife won a car' sinu-n veljie**-si** yväskylä-ssä asu-u brother-2.S.POSS live-PRES.3.S Yväskylä-INESS you-GEN 'your brother lives in Yväskylä'

GP3, ± agreement with all 3rdPers DPs

Distinguishes languages in which nouns marked through a Person agreement morpheme controlled by a genitive argument admit any 3rd person genitive nominal as a controller (e.g., Hungarian, Turkish, Yukaghir, Udmurt) from languages in which only possessive pronouns act as controllers (e.g., Finnish, Buryat)

Manifestations

Is any of the following true in the language?

Non-pronominal genitive arguments agree in Person with the morpheme appearing on the head noun

ex: Vanja-len kniga-jez
Vanya-GEN book-3S
'Vanya's book'
(min-am) kniga-je
I-GEN book-1S
'my book'

GEI, ± genitive inversion

Distinguishes languages in which nouns marked through an agreement morpheme controlled by a genitive argument systematically allow the latter to also occur in postnominal position (e.g., Yakut, which provides a clearest example but where the phenomenon is limited to personal pronoun subjects) from languages in which no such Genitive-noun inversion is possible (e.g., Hungarian, Turkish)

Manifestations

Is any of the following true in the language?

The Genitive argument of a head noun is realized either prenominally or postnominally and triggers agreement on the head noun

```
ex: en oloppoh-uŋ YAKUT
you.2S chair-2S
'your chair'
oloppoh-uŋ en
chair-2S you.2S
```

CSE, ± full c-selection

Distinguishes languages in which a head noun can take more than just one argument, like clauses (e.g., IE, Semitic), from languages in which nouns cannot take a second direct argument or an oblique one, the latter occurring embedded in modifiers or extraposed (e.g., Ugric)

Manifestations

Is any of the following true in the language?

Two arguments of the noun (realized as possessive pronoun, non-pronominal genitive or PP/oblique, whether or not independently licensed by a linker) can co-occur, and neither of them is in an extraposed position

```
ex: John's picture of Mary
John's conversation about Napoleon
```

EAL, ± ergative alignment

Distinguishes languages that extend the ergative/absolutive Case system of their clauses to their nominal phrases with multiple arguments (e.g., Archi, Lak) from languages in which clauses are ergative/absolutive while in nominals direct arguments are in the Genitive Case (e.g., Basque)

Manifestations

Is any of the following true in the language?

The internal argument of a noun can have the same Case morphology (e.g. Absolutive) as the internal argument of a verb (applies to languages that have Ergative/Absolutive alignment in clauses)

```
ex: Rasulli tilivizor bušmul ARCHI
Rasul.I.ERG tv.3S.ABS 3S.buy.MASDAR(=NOMINALIZER)
'buying of TV by Rasul' (Polinsky, Radkevich and Chumakina 2017: 60)
```

CAL, ± clausal alignment

Distinguishes languages that extend (at least part of) the accusative Case system of their clauses to nominal phrases with multiple arguments (e.g., Hebrew, Tamil, Telugu) from languages in which clauses are nominative/accusative while in nominals direct arguments are in the Genitive Case (e.g., Latin, Polish, English, Spanish and the rest of IE, Arabic)

Manifestations

Is any of the following true in the language?

When it co-occurs with an external argument, the internal argument of a noun can have the same Case morphology (e.g. Accusative) as the internal argument of a transitive verb, and this Case morphology is different from that found on the external argument (applies to languages that have Nominative/Accusative alignment in clauses)

```
ex:
       ha-harisa
                     šel
                            ha-cava
                                           'et
                                                  ha-'ir
                                                                               HEBREW
                                           ACC the-city
       the-destruction of
                            the-army
       'the army's destruction of the city' (Siloni 1997: 27)
                     haras
                                    'et
                                           ha-'ir
       ha-cava
       the-army
                     destroyed
                                    ACC the-city (Siloni 1997: 27)
       ha-'ir
                     nehersa
                                    'al-vedev
                                                  ha-cava
       the-city
                     was.destroyed by
                                                  the-army (Siloni 1997: 89)
```

LKA, ± argument linker

Distinguishes languages that must use a dedicated marker, different from adpositions, to introduce most direct and oblique arguments of a noun (e.g., Mandarin, Cantonese, Japanese, Wolof) from languages in which no such a marker exists (e.g., Germanic, Romance, Slavic, Semitic)

Manifestations

Is any of the following true in the language?

There is a morpheme that introduces direct and indirect arguments as well as other modifiers of head nouns, and is distinct from case marking, articles and from adpositions introducing arguments of the verb

```
ex: oto (b-)u Maryam
car CL-LKMaryam
'Maryam's car'
oto b-u bees
car CL-LKnew
'a blue car'
```

LKO, ± oblique linker

Distinguishes languages that must use a dedicated marker, different from normal adpositions, to introduce only oblique arguments of a noun (e.g., Yukaghir, Basque) from languages in which no such a marker is required (Germanic, Romance, Slavic, Semitic)

Manifestations

Is any of the following true in the language?

There is a morpheme that introduces oblique arguments of the noun, and is distinct from case marking, articles and from adpositions introducing arguments of the verb

```
zortzi urte-eta-ko
ex:
      Araba-ko
                                         zapone
                                                       one-ko
                                                                     ardo-a
      Alava-ko
                    eight year-LOC-ko flavor
                                                       good-ko
                                                                     wine-ART
       'wine of good flavor (gathered) in eight years in Alava'
                           handi haiek
      mendi-eta-ko
      mountain-LOC-ko
                           big
                                  those
       'those big ones in the mountains' (Trask 1997: 91)
                                                                            BASQUE
```

LKP, \pm predicative linker

Distinguishes languages that must use a dedicated marker to introduce adjectives and relative clauses modifying a noun (e.g., Mandarin, Cantonese, Yukaghir) from languages in which no such a marker is required (e.g., Slavic, Semitic, Japanese)

Manifestations

Is any of the following true in the language?

a) There is a morpheme introducing adjectives that is different from articles

```
téére b-u
                                                                        WOLOF
ex:
      bëgg naa
                         jàng
                                ab
                                                           rafet
      want
            1S.PERF
                          read
                                indef-CL
                                              book CL-LKbeautiful
      'I want to read a beautiful book'
                                       téére
                                              b-u
                                                                 h-i
      bëgg
            naa
                         jàng
                                                    rafet
                                       book CL-LKbeautiful
                                                                 CL-DEF.PROX
      want
            1S.PERF
                          read
      'I want to read the beautiful book (here)'
      bëgg naa
                          jàng
                                téére b-i
                                book CL-DEF.PROX
      want 1S.PERF
                          read
      'I want to read the book (here)'
```

b) There is a morpheme introducing relative clauses that is distinct from articles, wh-fronted elements and any complementizer introducing other subordinate clauses

```
ex: tééré b-u jàng naa b-i WOLOF
book CL-LK read 1S.PERF CL-DEF.PROX
'the book that I read'
```

```
ab téére b-u jàng naa
INDEF+CL book CL-LKread 1S.PERF
'a book that I read'
```

DMP, ± def matching pronominal possessives

Distinguishes languages in which a suffixed article licenses a Genitive Case on personal pronouns immediately following it (e.g., Romanian, Bulgarian, Norwegian, Icelandic) from languages in which a suffixed article does not have this licensing property (e.g., Danish, Faroese)

Manifestations

Is any of the following true in the language?

Nouns or adjectives bearing a definite affix can be immediately followed by a possessive pronoun

ex:	kniga-ta	moja	BULGARIAN
	book-the 'my book'	my	
	bok-en	min	NORWEGIAN
	book-the 'my book'	my	

DMG, \pm def matching genitives

Distinguishes languages in which a suffixed article licenses a Genitive Case on an immediately following full nominal phrase introduced by an overt determiner (e.g., Romanian) from languages in which this licensing is limited to pronouns (e.g., Bulgarian, Norwegian, Icelandic)

Manifestations

Is any of the following true in the language?

a) Nouns or adjectives bearing a definite affix can be immediately followed by a full genitive phrase introduced either by a proper name in determiner position or by an overt determiner

```
Monnalisei
                                                 lui-Leonardo
                                                                      ROMANIAN
ex:
      portret-ul
                                          a-l
                     Monalisa.GEN
                                          AL
                                                 he.GEN-Leonardo
       portrait-the
       'Leonardo's portrait of Mona Lisa'
      portret-ul
                     student-ului
                     student-the.GEN
       portrait-the
       'the student's portrait'
```

b) A morpheme with the same phi-feature morphology as a definite article though not necessarily semantically definite can be immediately followed by a full genitive phrase introduced either by a proper name in determiner position or by an overt determiner

```
Monnalisei
                                                        lui-Leonardo ROMANIAN
       un
             portret al
                                                 a-l
ex:
                                                 AL
                                                        he.GEN-Leonardo
             portraitAL
                            Monalisa.GEN
       'a portrait of Mona Lisa by Leonardo'
             portret
                           a-l
                                   student-ului
             portrait
                            AL
                                   student-the.GEN
       'a portrait of the student'
```

GUN, ± uniform genitive

Distinguishes languages in which there is only one, non-adpositional, form of Genitive Case, which can be iterated and occur in several positions of the nominal phrase (e.g. Latin, Classical Greek, Finnish) from languages in which non-adpositional Genitives only occur in fixed, non-iterable positions (e.g., modern Germanic, Romance, Slavic, Semitic)

Manifestations

Is any of the following true in the language?

a) A non-adpositional Genitive can occur between a prenominal adjective and the head noun and, with the same type of morphological realization, also to the right of the head noun

```
ex:
      alio
             genere Furiarum
                                         (Petr. 1)
                                                                            LATIN
      other kind Fury.GEN.F.P
       'another kind of Furies'
      ingens scolasticorum
                                  turba (Petr. 6)
      large scholar.GEN.MP
                                  crowd
       'a large crowd of students
                                                              (from Hicks 2023)
      repentinam
                                  defensionem
                                                              (Cic. Fam., 1,9)
                    eius
                                                Gabini
                                  defence
      sudden
                    he.GEN
                                                Gabinius.GEN
      'his sudden defence of Gabinius' (from Gianollo 2005: 72)
```

b) Non-adpositonal Genitives can occur with the same type of morphological realization once on one side of the noun, and twice on the other side of the noun

```
Λάχητος
ex:
       \tau \dot{\eta} v
              τοῦ
                                            \tau \tilde{\omega} v
                                                           νεῶν
                                                                          άρχὴν
              the.GEN.S.M Laches.GEN the.GEN.P.F ship.GEN.P.F command
       the
       'Laches' command of the ships'
       (Thuc, 3.115.6, from Guardiano 2011: 130)
       τòν
                      τρόπον
                                     τοῦ
                                                   έπαίνου
       the.ACC.S.M way.ACC.S.Mthe.GEN.S.M praising.GEN.S.M
       'the way of praising' (Plato 199 a 4, from Guardiano 2011: 129)
```

CLASS. GREEK

c) There are nominal phrases in which one and the same non-adpositional realization of Genitive occurs twice to the right of a postnominal adjective

ή $\delta \hat{\varepsilon}$ διαγνώμη αΰτη έκκλησίας CLASS. GREEK ex: $\tau \tilde{\eta} \varsigma$ the PRT decree this the.GEN.S.F assembly.GEN.S.F τὰς σπονδὰς λελύσθαι τοῦ being-dissolved the.GEN.S.N the treaty 'this decree of the assembly that the peace treaty be broken' (Thuc. 1.87.6, from Guardiano 2011: 130)

d) There are nominal phrases in which two non-adpositional realizations of Genitive occur to the left of AP+N (NB: in some phrases the same Genitive may also occur another time after APs)

ex: Leonardo-n Louvre-n maailmankuuluisa (Mona Lisa-n) muotokuva Leonardo-GEN Louvre-GEN famous (Monna Lisa-GEN) portrait 'Leonardo's famous portrait (of Monna Lisa) at the Louvre' FINNISH

e) There are nominal phrases in which a non-adpositional realization of Genitive occurs three times

ex: eorum dierum consuetudine itineris nostri those.GEN day.GEN.PL journey.GEN.S our.GEN.S habit exercitus perspecta LATIN armv.GEN.S well-observed 'having accurately observed our army's method of marching of those days' (Caes. Gal. 2.16, from Gianollo 2005: 76)

Brutuksen Julius Caesarin vuoden 44EKr (häikäilemätön)
Brutus.GEN Julius Caesar.GEN year.GEN 44BC pitiless
murha
assassination

'Brutus' pitiless assassination of J. Caesar in 44 BC' FINNISH

GAD, ± free Gen

Distinguishes languages in which there is an adpositional Genitive Case, which can be iterated, (e.g., English, Italian, Bulgarian, Basque) from languages in which Genitive is non-adpositional and occurs in fixed, non iterable positions (e.g., Standard Greek, Russian, Polish, Turkish)

Manifestations

There are prepositional or postpositional Genitive arguments

ex: le livre de notre ami FRENCH the book of our friend 'our friend's book' artista hor-ren bat-en **BASQUE** pailazo erretratu-a artist that-GEN clown one-GEN portrait-the 'that artist's portrait of a clown'

GFL, ± GenL

Distinguishes languages in which there is a non-adpositional non-iterable Genitive Case that appears to the right of canonically ordered ("structured", see parameter NM1 below) adjectives (e.g., Standard Greek, Russian, Polish and most Slavic languages, Icelandic, German, Irish, Welsh) from languages in which Genitive does not have such properties (e.g, English, most of Romance, Basque)

Manifestations

Is any of the following true in the language?

a) A non-adpositional Genitive expressing an argument or alienable possessor relation to the head noun occurs after an adjective, whether or not the noun intervenes (applies to languages with no reduced relative clauses in prenominal position: otherwise the relevant adjective must follow a numeral in an indefinite nominal argument)

θαυμαστό **GREEK** πορτρέτο κοπέλας ex: το της the beautiful portrait the.GEN girl.GEN 'the girl's beautiful portrait' portread hardd plentyn WELSH ν child portrait beautiful the 'the child's beautiful portrait' (šis) juodas Reginos automobilis LITHUANIAN (this-NOM) black-NOM Regina-GEN car-NOM '(this) black car of Regina's' (from Rutkowski 2008, 222-3)

b) A non-adpositional Genitive expressing an argument or alienable possessor relation to the head noun (except for 'home' as head noun) occurs after the noun

ex. το φόρεμα της κοπέλας GREEK the dress the.GEN girl.GEN 'the girl's dress'

harisat ha-migdal destruction the-tower 'the destruction of the tower'

HEBREW

PGL, ± partial GenL

Distinguishes languages in which the non-adpositional non-iterable Genitive occupying the post-adjectival position (GenL) is restricted to few specified classes of phrases and head nouns (e.g. some Romance dialects of southern Italy, Old Romance) from languages in which it does not occur at all (e.g., English, French, Basque)

Manifestations

Is any of the following true in the language?

There is a non-adpositional Genitive occurring after an adjective and the N-Gen relation is any of: kinship/part-whole/container-containee/inalienable possession/'home' as head noun-possessor

ex: a buttigghja grossa/miricana/lorda u vinu (janku) the bottle big/American/dirty the wine (white) 'the big/American/dirty bottle of (white) wine'

VERBICARO (adapted from Silvestri 2013: 142)

GGH, ± generalized GenH

Distinguishes languages in which all full nominal phrases can occur as non-iterable Genitives in pre-adjectival position (GenH) bearing a phrase-final affix (e.g., English, Mainland Scandinavian) from languages in which this construction is restricted to a class of simple head nouns (mostly proper names) capable of bearing a word-level suffix (e.g., German, Dutch, Afrikaans).

Manifestations

Is any of the following true in the language?

There is a pre-adjectival Genitive occurring as a visibly branching phrase headed by a common noun

ex. the new king's precious crown

GSI, ± Grammaticalized inalienability

Distinguishes languages that require inalienably possessable nouns to always occur with an affix agreeing in person with the possessor, even if the latter is unexpressed and indefinite/arbitrary (e.g., Kadiweu) from languages that do not (e.g., IE, Uralic, Semitic)

Manifestations

Inalienably possessed nouns appear with a morpheme agreeing with the possessor, even when the possessor is unexpressed and/or non-referential/arbitrary

ex: *e-ajike*3.INDEF-face/chin

'somebody's face/chin, the face/chin' (from Sandalo 1996)

ALP, ± alienable possession

Distinguishes languages that require possessed nouns to occur with a special affix, in addition to the normal marking of the genitive relation, if and only if the possession is alienable (e.g., Tungusic) from languages that do not (e.g., IE, Semitic)

Manifestations

Is any of the following true in the language?

There is a special morpheme used with possessed nouns to indicate that the object is alienable from the possessor

ex: dil-i\beta EVENKI
head-1S
'my head'
dil-i-\etai-\beta head-ev-ALIEN.POSS-1S
'the head (of an animal) that belongs to me'

Maša b\overline{o}del-e\eta-en

Maša leg-alien.poss-3S
'a leg that belongs to Masha (not part of Masha)'

Maša b\overline{o}del-en

Maša leg-3S
'Masha's leg'

GIT, ± Genitive-licensing iteration

Distinguishes languages that do not license more than one Genitive Case per head noun and need to resort to an additional nominal head to license a second genitive argument (e.g. the repeated head as in Kadiweu or a noun place-holder as Romanian *al*), from languages that do not use such strategies (e.g., the rest of IE, Uralic, Semitic)

Manifestations

Is any of the following true in the language?

If the noun is modified by two non adpositional Genitive arguments, the second one is licensed through the repetition of the licensing element (the head noun or a nominal proform) that licenses the first one

ex: portret-ul Monnalisei a-l lui-Leonardo ROMANIAN portrait-the Monalisa.GEN AL he.GEN-Leonardo 'Leonardo's portrait of Mona Lisa'

UST, ± unstructured modifiers

Distinguishes languages that do not display linear ordering restrictions on prenominal adjectives to the right of numerals (e.g., Uzbek, some varieties of Turkish) from languages that do so (e.g., IE, Uralic, Semitic, other Altaic languages)

Manifestations

Is any of the following true in the language?

There are freely ordered (truth-functionally synonymous/interchangeable) adjective sequences occurring in between an indefinite numeral and the head noun

bir chiroyli kulrang **UZBEK** ex: katta mushuk beautiful big cat a grey bir katta chiroyli kulrang mushuk bir katta kulrang chiroyli mushuk bir kulrang katta chiroyli mushuk bir kulrang chiroyli katta mushuk 'a beatiful big grey cat'

GPC, ± gender-polarity cardinals

Distinguishes languages that have systematic gender counter-agreement (masculine with feminine and viceversa) between cardinal numerals and nouns (e.g., Semitic) from languages that have gender agreement with the subset of numerals that are inflected (e.g., IE)

Manifestations

Is any of the following true in the language?

There is gender mismatch between cardinal expressions for numbers higher than two and the head noun

ex. talaat-at-u ?awlaad-in jaa?-uu ARABIC three-FEM-NOM boys-GEN came-P 'Three boys came.'

PSC, ± plural spread from cardinal quantifiers

Distinguishes languages that use plural nouns after cardinal numerals occurring as indefinite quantifiers (e.g., most of IE, Tungusic) from languages that use singular ones (e.g., Uralic, Turkic, Farsi, Celtic)

Manifestations

Nouns exhibit overt plural marking when cardinal numerals higher than 'one' are present and function as indefinite quantifiers

```
ex: three boys, four boys one boy
```

PCA, ± plural spread through cardinal adjectives

Distinguishes languages that use plural nouns after numerals occurring as numerical adjectives after a demonstrative or other definite determiner (e.g., Farsi) from languages that use singular ones even in this case (e.g., Uralic, Turkic, Celtic)

Manifestations

Is any of the following true in the language?

Nouns exhibit overt plural marking when modified by a cardinal numeral higher than 'one' cooccurring with a plural determiner

```
FARSI
      do
             ta
                    danešiu
ex:
                    student
      two
             CL
      'two students'
      do
             ta
                    danešju-ha
             CL
                    student-P
      two
      'the two students/*two students'
      un
             do
                    ta
                           mænzel-*(ha)
                    CL
                           house-P
      that
             two
       'those two houses'
```

PMN, ± personal marking on numerals

Distinguishes languages that mark 1st and 2nd Person features on cardinal numerals to express meanings like e.g. English *we three* (e.g., Mari, Udmurt) from languages that never do so (e.g., Hungarian, Finnish)

Manifestations

Is any of the following true in the language?

Cardinal numerals bear a person agreement marker (used in the genitive construction for head marking) to form "personal" numerals ('we three')

```
ex: kuiń-nami UDMURT
three-1P
'we three'
kuiń-nadi
three-2P
'you two'
```

kuiń-nazi
three-3P
'they three'

RHM, ± head marking with relative clause

Distinguishes languages in which nouns modified by a relative clause contain a possessor-marking person affix controlled by the subject of the relative (e.g., Hungarian, Yakut) from languages in which nouns do not have this kind of alternation (e.g., IE, Finnish, Estonian, Turkish).

Manifestations

Is any of the following true in the language?

The head noun modified by a relative clause takes a person agreement affix controlled by an argument within the relative

ex:	a	festelt	polc-o	om	HUNGARIAN
	the	paint.PERF			
	'the s	helf that I pai			
	a	polc			
	the	shelf			
	[ма	лутум]	машина-ем		KHANTY
	Ī	bought	car-1S		
	'the c	ar that I boug			
	bu	Künnej	kömölöh-ör	kyyh -a	YAKUT
	this	Künnej	help-AOR	girl-3S	
	'this	girl whom Kü			

FRC, ± finite relative clause

Distinguishes languages that have relatives as full finite clauses and normal clausal Caseassignment (e.g., IE, Semitic, Finnish, Japanese, Basque) from languages in which relatives only have a verb in the participle (e.g., Turkic, some conservative Uralic varieties)

Manifestations

Is any of the following true in the language?

The predicate of relative clauses bears morphology specific to finite verb forms

ex: the magazine that John bought/buys

NRC, ± participial relative clause

Distinguishes languages in which relatives have a verb in the participle, with a subject expressed through an adnominal Case, like Genitive, (e.g., Finnish, Pashto, Marathi, Japanese, Basque) from languages in which participial relatives only have a null subject controlled by the head nominal (e.g., Hungarian, Estonian, Arabic, Hebrew, most of IE)

Manifestations

Is any of the following true in the language?

a) There are relative clauses constructed with a participle (rather than an inflected verb) and an overt subject which is not the head of the relative

```
bäk'i-ru-li]-s
ex:
      [[nesi-s-tow
                   yway
                                 b-oxi-n
                                                     III-go-PST.PTCP-NMLZ-GEN1
      DEM.I-GEN1 dog.ABS.III III-run-PFV.CVB
      uži]
      boy.ABS.I
      'the boy whose dog has run away' (from Polinsky 2015: 269)
                                                                         TSEZ
                                 pölem
      [Saša-n
                   košt-mo]
                                                                  MEADOW MARI
      Sasha-GEN
                    enter-PRTC
                                 room
      'the room that Sasha walked in'
```

b) There are relative clauses constructed with an overt transitive subject (other than the head of the relative) which is assigned an exclusively adnominal case (typically Genitive)

```
[so-len
                    lydź-ono]
                                                                          UDMURT
ex:
                                 kniga-jez
      he-GEN
                    read-PRT
                                 book-ACC
      'the book which will be read by him'
                                                                   MEADOW MARI
      [Saša-n
                    košt-mo]
                                 pölem
      Sasha-GEN
                    enter-PRT
                                 room
      'the room that Sasha walked in'
                                                                   çiçek TURKISH
      Ali-nin
                    dükkan-dan
                                 al-diğ-ı
                                               bи
                                                     güzel
      Ali-GEN
                    shop-ABL
                                 buy-PRT-3
                                               one
                                                     beautiful
                                                                   flower
      'a beautiful flower that Ali bought in the shop'
```

DOR, ± definiteness on relatives

Distinguishes languages that spread the definiteness marking of the head of a relative clause to an element introducing such relative (e.g., Arabic, Wolof) from languages in which relatives are not marked with respect to the definiteness of the head nominal (e.g., Hebrew, IE)

Manifestations

Is any of the following true in the language?

Relative pronouns agree in (in)definiteness with their antecedent (indefinite if the head is indefinite, definite if the head is definite; *if indefiniteness is Ø-marked in the language, the test only applies effectively if the language has no Ø complementizers*)

ex:	l-yawma		laqii-tu		l-mudarris-a		sh-shaabb-a			lladhii		
	today wasaf-ta-hu		met-1S		the-teacher-ACC Pamsi			the-young-ACC			that	
	described-2S-3S			3S.MSC		yesterday						
	'Today I met the young tea				cher that you described to me yesterday'							
	l-yawma		laqii-t	и	mudarris-an		shaabb-an		n Ø	wasafa	-hu	
	today		met-15	S	teacher-ACC		young-	ACC	that	describ	bed-3S.MSC	
	l-ii	l-ii djuun Pamsi										
	to-me	John	yester	day								
	'Today	y I met a	a young	teacher	r that John described to			me yesterday'			ARABIC	
	xaj	[b-i	ma	jënd]		bi					WOLOF	
	dog	CL-i	I	bought	t	CL-DE	EF					
	'The dog that I bought'											
	u-b		xaj [b-u		та	jënd]	iënd]					
	nondef-CL		dog	CL-u	I bough		-	From Torrence (2013: 1			158-159)	
	'A dog	'A dog that I bought'										

FFP, ± feature spread to particles

Distinguishes languages in which the head noun agrees in phi-features with adpositions or linkers introducing its arguments/modifiers (e.g., Indo-Aryan, Wolof) from languages in which there is no such a feature spread (e.g., the rest of IE, Semitic)

Manifestations

Is any of the following true in the language?

Particles introducing arguments of a head noun (genitive adpositions or linkers) exhibit agreement at least in number with that head noun

```
HINDI
ex:
      Jon-ki
                     patni
       Jon-GEN
                     wife
       'John's wife'
       Jon-ka
                     bhai
       Jon.GEN
                     brother
       'John's brother'
       Jon-ke
                     bhai
       Jon.GEN
                     brothers
       'John's brothers'
```

MARATHI Jŏna-cī bahīna Jon-GEN.F.S sister 'John's sister' Jŏna-cyā bahiṇī Jon-GEN.F.P sisters 'John's sisters' xaal w-u **WOLOF** rév w-i melon CL-LKbig **CL-DEF** 'the big melon' xaal yi-u y-i melon CL-LKbig **CL-DEF**

NUP, \pm NP under non-genitive arguments

'the big melons'

Distinguishes languages in which the head noun surfaces after its non-Genitive complements and adpositional modifiers (e.g., Indo-Aryan, Udmurt, Altaic, Dravidian, Basque, Archi, Lak) from languages in which the noun surfaces before its non-Genitive complements and adpositional modifiers (e.g., the rest of IE, Finnish, Estonian, Semitic, Wolof)

Manifestations

Is any of the following true in the language?

Non-Genitive arguments precede their head N

ex:	oine.z-ko foot.by-KO 'a journey on	•	bat one			BASQUE				
	Tokio.ra-ko	bidaia	bat							
	Tokyo.to-KO	journey	one							
	'a journey to Tokyo'									
	Ali'nin Tokyo'dan Ali.GEN Tokyo-from 'Ali's two beautiful journe		two	<i>güzel</i> beautiful okyo'	yolculuğu journey	TURKISH				
		savirari je arire je	110111 1	- II						
	jon ki	tokyo se	do	achchhi	yaatraen	HINDI				
	Jon.GEN	Tokyo from	two	nice	trips					
	'John's two nice journeys from Tokyo'									
	Napoleon	s'arys'	kniga			UDMURT				
	Napoleon about		book							
	'a book about Napoleon'									

PNP, ± complement under P

Distinguishes prepositional languages, in which the complement of particles (i.e. of an adposition or of a linker) normally surfaces after it (e.g., English, French, Russian, Hebrew, Malagasy) from postpositional ones, in which it normally surfaces before the particle (e.g., Turkish, Japanese, Basque, Mandarin, Hindi)

Manifestations

Is any of the following true in the language?

- a) In PPs, complements follow the head P
- ex. of John, with John, from John
- b) Adpositional Genitive arguments follow their head N
- ex. a picture of John
- c) In linker phrases, complements follow the linker
- ex. bëgg naa jàng a-b téére b-u refet WOLOF want 1S.PRF read indef-CL book CL-LK beautiful 'I want to read a beautiful book.'
- d) Linker phrases follow their head noun
- ex. bëgg naa jàng a-b téére b-u refet WOLOF want 1S.PRF read indef-CL book CL-LK beautiful 'I want to read a beautiful book.'

NUD, ± NP under D

Distinguishes languages in which the noun phrase normally surfaces after its determiner (e.g., IE, Semitic) from languages in which the noun surfaces before its determiner (e.g., Basque, Wolof)

Manifestations

Is any of the following true in the language?

- a) In argument nominal phrases, the article occurs as the first word (except for 'all' and demonstratives), or affixed to the first word and followed by some other overt element (N or some other category)
- ex. il lupo grande di Gianni ITALIAN the wolf big of Gianni 'Gianni's big wolf'

Lup-ul mare al lui Ion ROMANIAN wolf-the big AL he.GEN Ion 'Ion's big wolf'

b) Cardinal or numerical adjectives ('one',''two',...., 'many', 'few'...) occur as the first word of a nominal phrase with an indefinite reading and after a Genitive/possessive with a definite reading

ex: moje trzy książki
my three books
'my three books' (informationally unmarked)
trzy moje książki
'three books of mine' (informationally unmarked) (from Rutkowski 2007)

NUC, ± N under cardinals

Distinguishes languages in which the head noun normally surfaces after cardinal numerals (e.g., IE, Uralic, Altaic) from languages in which the noun surfaces before some or all cardinal (higher than 'one') numerals (e.g., Semitic, Malagasy). As a further typological consequence, in the latter case the noun precedes all structured adjectives (see parameter NM1 below) in the reverse order

Manifestations

Is any of the following true in the language?

Cardinals can precede the noun in definite argument nominal phrases

ex: I saw those three new American cars

NM1, $\pm N$ under M1 As

Distinguishes languages in which, given the crosslinguistically canonical sequence of *structured* adjectives [SPEAKER/SUBJECT-ORIENTED ADJECTIVE + MANNER1 (e.g. *quality/size*) ADJECTIVE + MANNER2 (e.g. *shape/color*) ADJECTIVE + NATIONALITY ADJECTIVE], MANNER1 adjectives can surface to the left of the head noun (e.g., Italian, French, Spanish, Walloon, Germanic, Slavic, Standard Greek) from languages in which they cannot (e.g., Celtic, Farsi, some Romance dialects of Italy, Italiot-Greek)

Manifestations

Is any of the following true in the language?

a) As a general rule, *quality/size* adjectives can precede the noun in discourse-neutral contexts (without being restricted to few selected lexical items)

ex: une merveilleuse table de bois française FRENCH
a wonderful table of wood French
'a wonderful wooden French table'

b) In discourse neutral contexts, possessives can precede the noun and follow a cardinal numeral in nominal arguments with a visible definite article

ex: Gianni ha incontrato i tre suoi amici americani
Gianni has met the three his friends American
'Gianni met his three American friends'

ITALIAN

c) There are sequences of two or more adjectives preceding the noun in discourse-neutral contexts

ITALIAN vecchia amica ex: una cara a.F dear.F.S. old.F.S friend F.S. 'a dear old friend' hel un (blu francese) vestito nuovo nice.M.S new.M.S dress.M.S blue French.S a.M 'a nice new (blue French) dress'

EAF, ± fronted high As

Distinguishes languages in which the head noun surfaces to the left of nearly all adjectives, but a minority of semantically simple SPEAKER-ORIENTED adjectives can be placed before the noun (e.g., Celtic, some Romance dialects of Italy) from languages in which there are no such exceptions (e.g., some Romance dialects of Sicily)

Manifestations

Is any of the following true in the language?

A few lexically selected adjectives (e.g., with the meaning former, present/current, fake, alleged, supposed, amusing/funny, little, additional, strange) can precede the noun

ex: kanuscimmu (a) lu novu sindaku R. CALABRIA meet.1P.PAST DOM the.M.S new.M.S mayor.M.S 'we met the new mayor'

NM2, $\pm N$ under M2 As

Distinguishes languages in which, given the crosslinguistic *structured* sequence of adjectives (see NM1 above), MANNER2 adjectives can surface to the left of the head noun (e.g., Walloon) from languages in which they cannot (e.g., Italian, French, Spanish)

Manifestations

Is any of the following true in the language?

There are *shape/color* adjectives preceding the noun in discourse-neutral contexts

ex: a (nice new) blue (French) dress

one (bèle) bleuve cote (alemande) WALLOON
a nice blue dress German
'a (nice) blue (German) dress'

NUA, $\pm N$ under As

Distinguishes languages in which, given the crosslinguistic *structured* sequence of adjectives see NM1 above), Nationality adjectives can surface to the left of the head noun (e.g., Germanic, Slavic, Standard Greek) from languages in which they cannot (e.g. Walloon)

Manifestations

Is any of the following true in the language?

There are adjectives of *origin/nationality* preceding the noun in discourse-neutral contexts

ex: a (nice new blue) French dress

ένα (ωραίο καινούργιο μπλε) γαλλικό φόρεμα GREEK
 a nice new blue French dress
 'a (nice new blue) French dress'

NGL, ± N under GenL

Distinguishes languages in which the head noun surfaces to the right of a Genitive in the GenL post-adjectival position (e.g., Latin, Classical Greek, Finnish, Lithuanian) from languages in which the noun always surfaces to the left of such a Genitive position (e.g., Standard Greek, Slavic, Celtic, German, Icelandic)

Manifestations

Is any of the following true in the language?

There are non-adpositional genitives occurring between a *structured* adjective and a noun

(šis) Reginos automobilis LITHUANIAN ex: juodas (this-NOM) black-NOM Regina-GEN car-NOM '(this) black car of Regina's' (from Rutkowski 2008, 222-3) **LATIN** ingens scolasticorum turba (Petr. 7) large scholar.GEN.MP crowd 'a large crowd of students' (from Hicks 2023)

jatkuva papereitten tarkastus FINNISH constant.NOMS documents.GENpl examination.NOMS

ACM, ± class MOD

Distinguishes languages in which the head noun surfaces to the right of all structured adjectives except for those which can identify some established natural classes of objects (e.g. Polish) from languages in which it surfaces to the right even of these adjectives (e.g., Slovenian, Serbo-Croatian, Icelandic, German)

Manifestations

Is any of the following true in the language?

a) There are postnominal adjectives denoting an established entity occurring between a head noun and a non-adpositional genitive

ex: Polski bank narodowy tego miasta

Polish Bank National this-GEN city-GEN

'The Polish National Bank of this city'

b) There are postnominal adjectives denoting an established natural kind while the same adjective is regularly qualifying in prenominal position

ex: niedźwiedź biały [classifying]

bear white

'a polar bear' ('an animal which belongs to the species Ursus maritimus')

biały niedźwiedź [qualifying]

white bear

'a white bear' ('a bear that happens to be white') (from Rutkowski and Progovac 2005, 102)

DSN, \pm def spread to N

Distinguishes languages where definite articles affixed on the head noun, under certain conditions, can double an overt free-standing demonstrative/definite article (e.g., Norwegian, Faroese) from languages in which an affixed article on the head noun can never cooccur with an overt determiner (e.g., Danish, Icelandic, Romanian, Bulgarian)

Manifestations

Is any of the following true in the language?

a) There is a definiteness suffix on the noun even when a non-suffixal article also occurs

ex: Jeg møtte den unge lærer-en NORWEGIAN

I met the young teacher-the

'I met the young teacher'

^{&#}x27;a/the constant examination of the documents'

Jeg møtte lærer-en
I met teacher-the
'I met the teacher'

b) There is a definiteness suffix on the noun even when a demonstrative occurs preceding it

ex. Jeg møtte denn lærer-en

I met this teacher-the
'I met the young teacher'

NORWEGIAN

GREEK

DSA, \pm def spread to ARR

Distinguishes languages in which the definite article of a nominal is reduplicated on adjectives occurring as reduced relative clauses (e.g., Classical and Standard Greek) from languages in which free reduced relatives occur without this reduplication (e.g., Romance, Wolof)

Manifestations

Is any of the following true in the language?

When the whole nominal argument is understood as definite, definite articles are replicated on the adjectives realized as reduced relative clauses

ex: διάβασα βιβλίο το ωραίο το read-1S the book the beautiful 'I read the beautiful book' διάβασα το ωραίο βιβλίο read-1S book the beautiful 'I read the beautiful book'

DSS, \pm def spread to structured categories

Distinguishes languages in which the definite article of a nominal is reduplicated on all structured adjectives and on the head noun, if the latter is not already so marked as the first word of the phrase, (e.g., Asia Minor Greek, Semitic) from languages in which no such reduplication occurs (e.g., Germanic, Romance)

Manifestations

Is any of the following true in the language?

When the whole nominal argument is understood as definite, definite articles are replicated on the head noun and its adjectival modifiers, regardless of their position

ex: ta-tría ta-ka ta-peškira PHARASIOT GREEK the-three the-nice the-towels 'the three nice towels'

ra?ay-tu s-sayaarat-a l-?almaaniyat-a z-zarqaa?-a l-jadiidat-a saw-I the-car-ACC the-German-ACC the-blue-ACC the-new-ACC

l-jayyidat-a the-nice-ACC

'I saw the nice new blue German car'

ARABIC

DOC, ± def on cardinals

Distinguishes languages in which an affixed definite article may also be attached to cardinal numerals (e.g., Bulgarian) from languages in which it cannot be attached to cardinals (e.g., Romanian)

Manifestations

Is any of the following true in the language?

There are definiteness suffixes occurring on prenominal cardinal numerals

ex: tri-te knigi BULGARIAN

three-the books

NEX, ± Proper names in D

Distinguishes languages in which some proper names can surface in the position of determiners (e.g., Italian, French, Basque) from languages in which some form of overt determiner is required with all proper names (e.g., Italiot Greek)

Manifestations

Is any of the following true in the language?

There are proper names occurring with no article in argument function

ex: ho incontrato Mario ITALIAN

have met Mario

'I met Mario'

ho visitato Roma have visited Rome

'I visited Rome'

PEX, ± Personal proper names in D

Distinguishes languages in which some personal names can surface in the position of determiners (e.g., Italian, French, Basque) from languages in which some form of overt determiner is required with all personal names (e.g., Salentino Romance)

Manifestations

Is any of the following true in the language?

There are personal names occurring with no article in argument function

Mario **ITALIAN** ex: ho incontrato have.1S met Mario 'I met Mario (male)' ho Maria incontrato have.1S Maria met 'I met Maria (female)'

FEX, ± Partial personal proper names in D

Distinguishes languages in which personal names can surface in the position of determiners (e.g., Italian, French, Basque) from languages in which some form of overt determiner is required with selected classes of personal names, typically feminine (e.g., some Romance varieties)

Manifestations

Is any of the following true in the language?

Female personal names occur with no article in argument function

ex: ho incontrato Maria ITALIAN have.1S met Maria 'I met Maria (female)'

PDC, ± D-checking possessives

Distinguishes languages in which the atomizing and definiteness-assigning functions borne out by definite articles can be played by personal pronouns used as adnominal arguments (henceforth possessives), which then cannot cooccur with a visible determiner (e.g., French mon livre vs. *le mon livre) from languages in which a visible determiner cooccurs with possessives and is actually required in argument function (e.g., Italian; il/un mio libro vs. *mio libro)

Manifestations

Is any of the following true in the language?

a) Possessives occur in nominal arguments with definite interpretation and no visible determiner

ex: mi nuevo libro

my new book

'my new book'

b) Postnominal possessives in nominal arguments with non-definite interpretation can have non-contrastive focus/"neutral" reading (applies to languages with prenominal structured adjectives and prenominal possessives)

```
ex: um livro meu
a book my
'a book of mine'
o meu livro
the my book
'my book'
```

PCL, ± clitic possessives

Distinguishes languages in which possessives are licensed as bound morphemes cliticizing on the head noun, or a stressed modifier of the noun, without agreement in features with it and with a distribution recognizably different from that of full genitive arguments (e.g., Greek, Farsi, Pashto, Wolof) from languages in which this possibility does not arise (e.g., Germanic, Romance)

Manifestations

Is any of the following true in the language?

a) Possessives are realized as immediately attached to a prenominal modifier, do not agree in ϕ -features with the head noun, and can cooccur with non-pronominal non-adpositional genitives

```
ex: \tau o \pi \rho \dot{\sigma} \tau o - \mu o v \pi o \rho \tau \rho \dot{\epsilon} \tau o \tau \eta \varsigma M \alpha \rho \dot{\epsilon} \alpha \varsigma the.N.S first.N.S-1S.GEN portrait.N.S the.F.GEN.S Maria.f.GEN 'My first portrait of Maria' GREEK
```

b) There are possessives realized as immediately adjacent to the head noun, not agreeing in φ -features with it, and with no linker. (*only applies to languages that have argument linkers*, +LKA)

```
ex: sama tééré (bi) WOLOF

1S book (def det)

'My book'

sa tééré (bi)

2S book (def det)

'Your book' (cf. also: tééré-am 3S.POSS = his/her; sunu tééré 1P= our)
```

APO, \pm adjectival possessives

Distinguishes languages in which possessives have the distribution and often the agreement features of adjectives (e.g., Italian, Spanish, Latin, Ancient Greek, Slavic) from languages in which this kind of form/distribution is not found (e.g., English, Romanian)

Manifestations

Is any of the following true in the language?

a) There are postnominal possessives co-occurring with articles/demonstratives/quantifiers (every', 'some')/numerals and introduced/not introduced by the same morpheme(s) as postnominal adjectives

```
ex: a makina nova SICILIAN (RAGUSA) the.F.S car.F.S new.F.S 'the new car' a makina mia the.F.S car.F.S my.F.S 'my car'
```

b) There are prenominal possessives and prenominal adjectives that follow articles/demonstratives/quantifiers (every', 'some')/numerals

ex:	Gianni ha	ince	ontrato	<i>(i)</i>	tre	suoi	amici	amerio	cani
	Gianni have.3	BS met		the	three	his	friends	s Ameri	can
	'Gianni met his three American friends/three American friends of his' ITALIA								
	Gianni ha	ince	incontrato		tre	nuovi	amici	amerio	cani
	Gianni has.35	S met	the	three	new	friends American			
	'Gianni met (the) three new American friends'								
	Но	parlato	con	ogni/q	ogni/qualche		studen	te	
	have.1S	spoken	with	every/	some	ome my		t	
	'I spoke with every/some student of mine'								
	Но	parlato	to con		ogni/qualche		nuovo student		
	have.1S spoke		with	every/some		new student			
	'I spoke with every new student/some new students'								

WAP, ± Wackernagel possessives

Distinguishes languages that exhibit possessives licensed as bound morphemes enclitic on the determiner (essentially as 2^{nd} position clitics) without agreement in features with the noun (e.g., several Romance dialects of Sicily) from languages in which this possibility does not arise (e.g., other Romance and Greek varieties of Italy).

Manifestations

Is any of the following true in the language?

There are prenominal possessives not agreeing in phi-features with the head noun and occurring to the left of cardinal numerals and after a visible determiner

```
libbru /
                                                      kasa
                                                             SICILIAN (RAGUSA)
ex:
                    mo
                                               mo
      11
                           book.M.S
                                        the.F.S my
      the.M.S
                                                      house.F.S
                    my
      'my book' / 'my house'
             mo
                    tri
                           llibbra /
                                               mo
                                                      tri
                                                             kkasi
                    three book.P/
                                        the.P
                                                      three house.P
      the.P my
                                               my
      'my three books' / 'my three houses'
```

AGE, ± adjectival genitive

Distinguishes languages that productively form adjectives from proper and common nouns (like 'John, Mary, president etc.'), with the distribution and binding properties of adjectival possessives (e.g., Slavic languages, except for modern Polish) from languages in which this possibility does not arise (e.g., the rest of IE)

Manifestations

Is any of the following true in the language?

a) Argument adjectives from proper and common nouns can be used with the role of internal argument of the head noun

ex: Van-ino ranenie RUSSIAN
Vanya-ADJ.GEN wounding
'John's wounding'

b) Argument adjectives from proper and common nouns can bind non-null personal anaphoric/pronominal expressions, as genitives and possessives do

ex: Jovan-ovai priča o seb-ii SERBO-CROAT Jovan-POSS.ADJ story about self-LOC 'Jovan's story about himself'

OPK, ± null possessive licensing article with kinship nouns

Distinguishes languages in which a definite article introducing kinship nouns can be understood as a possessive pronoun (e.g., Scandinavian, Italian, Hebrew, Arabic) from languages in which this possibility does not arise (e.g., English, French, Slavic, Hungarian)

Manifestations

Is any of the following true in the language?

A definite article occurring with a kinship noun and no visible possessive can license a (3rd person) understood pronoun that can be interpreted as bound

ex: Gianni è andato a trovare il nipote ITALIAN
Gianni is gone to visit the nephew
'Gianni visited his nephew'

TSP, \pm split deictic demonstratives

Distinguishes languages in which demonstratives appear with two separate parts, one occurring in the position of determiners, and the other, usually encoding deictic contrasts, typically merged in a lower structural position (e.g., French, some Romance dialects of Italy) from languages in which this possibility does not arise (Italian, Standard Greek, English, Hebrew, Basque)

Manifestations

Is any of the following true in the language?

- a) There are deictically neutral demonstratives formally distinct from those which encode deictic relations
- ex: il trouva un champignon et fut étonné car ce champignon était très rare dans la région 'He found a mushroom and was surprised because this/that mushroom was very rare in the region' (Corblin 1985: 386)

```
passez moi ce livre ci/là give me this book here/there 'give me this/that book'
```

b) Deictic demonstratives are realized as two separate words, one a copy of the other (the one at the boundary of the nominal possibly phonologically reduced)

```
ex: ss' omo kwesso / ll' omo kwello TERAMANO
DEM man DEM DEM man DEM
'that man (near you)' / 'that man'
```

c) Deictically neutral demonstratives are realized as two separate words

```
ex:
      kla
                    ka
                                  le
                                         con
                                                      grand gjarden
                                               an
      that.F.S
                    house.F.S
                                  there
                                        with
                                               a.M
                                                      big
                                                             garden
                                  ke
                                         davsen
      3S.CL be.3S here closeby
      'That house with a big garden is closeby'
                                                                    CASALASCO
```

TDP, \pm split demonstratives

Distinguishes languages in which demonstratives appear with two separate parts, one occurring in the position of determiners, and the other typically merged in a lower structural position, even when not encoding deictic meaning, (e.g., some Romance dialects of Northern Italy) from languages in which the demonstrative appears as "split" only when encoding deictic contrasts (e.g., French, Malagasy)

Manifestations

Is any of the following true in the language?

Deictically neutral demonstratives are realized as two separate words

```
kla
                    ka
                                  le
                                                      grand gjarden
ex:
                                        con
                                               an
      that.F.S
                    house.F.S
                                  there
                                        with
                                               a.M
                                                      big
                                                             garden
                                  ke
                                        davsen
      3S.CL be.3S here
                           closeby
      'That house with a big garden is closeby'
                                                                    CASALASCO
```

TDC, ± D-checking demonstratives

Distinguishes languages in which demonstratives can mark definiteness for the whole nominal and thus do not cooccur with definite articles (e.g., Germanic, Romance) from languages in which they always cooccur with a definite article (e.g., Greek, Celtic, Semitic)

Manifestations

Is any of the following true in the language?

There are demonstratives occurring at the boundary of an articleless argument nominal phrase

ex: this book / that book

```
questo libro / quel libro
this book / that book
'this book / that book'
```

ITALIAN

TSA, ± structured demonstratives (adjectival)

Distinguishes languages in which demonstratives can appear phrase-internally, among the positions of structured adjectives, (e.g., Celtic, Bulgarian, Romanian, Semitic) from languages in which demonstratives do not have the distribution of structured adjectives (e.g., Germanic, most of Romance, Greek)

Manifestations

Is any of the following true in the language?

a) There are postnominal demonstratives occurring to the left of non-adpositional Genitives and/or PPs (applies to languages with postnominal adjectives and where adjectives are not realized as postnominal reduced relative clauses)

```
ex: l-mudarris-u hādā li-l-walad-i ARABIC the-teacher-NOM this of-the-boy 'this teacher of the boy'
```

b) Demonstratives can occur either to the right or to the left of articles/numerals (applies to languages with phrase-initial determiners where structured adjectives can be fronted to the left of D)

```
karandaš-a
                                                                               RUSSIAN
ex:
              poterjal-a
                            tri
      ja
       I.NOMlost-F.S
                            three
                                   those.ACC
                                                  pencil-S.GEN
       'I lost those three pencils'
                                           (discourse anaphoric/*deictic)
              poterjal-a
                                           tri
                                                  karandaš-a
      ja
       I.NOMlost-F.S
                            those.ACC
                                           three pencil-S.GEN
       'I lost those three pencils'
                                           (?discourse anaphoric/deictic)
```

c) Demonstratives can occur between an articulated noun and an adjective (applies to languages with phrase-initial determiners and phrase-initial enclitic definite articles)

ex: copil-u-l acest-a frumos ROMANIAN child-EP.V-the.M.S this.M.S-a lovely.M.S 'this lovely child'

kniga-ta onazi chervena(-ta) ne ja xaresax

BULGARIAN

book-the that red(-the) I didn't like

'that red book I didn't like'

TAR, ± unstructured demonstratives

Distinguishes languages in which demonstratives can appear in the position of reduced relative clauses (e.g., Spanish, Latin, Ancient Greek, Standard Greek, Indo-Iranian, Turkic, Mandarin, Cantonese, Japanese) from languages in which demonstratives do not have the distribution of reduced relatives (Germanic, most of Romance, Wolof)

Manifestations

Is any of the following true in the language?

a) Demonstratives and adjectives/Genitives/relative clauses/numerals can be freely ordered

ellivro viejo/nuevo **SPANISH** ex: ese old/new the book that 'that old/new book' ellivro ese viejo/nuevo old/new the book that 'that old/new book' (Battlori and Roca 2000: 246)

b) There are postnominal demonstratives occurring to the right of PPs

ex: el livro (de matematicas) ese/nuevo (de matematicas) SPANISH the book of mathematics hat/new of mathematics 'that/the new math book' (adapted from Bernstein 2001: 15 and 25)

c) Demonstratives can be fronted to the left of D (or numerals) (in languages with phrase-initial determiners where adjectives realized as postnominal reduced relative clauses can also be fronted to the left of D)

πεδί **GREEK** ex: αυτό this.M.S the.M.S kid.M.S 'this kid' ψιλό πεδί το το the.M.S tall.M.S the.M.S kid.M.S 'the tall kid'

TLC, ± demonstratives in Loc

Distinguishes languages in which demonstratives that are not D-checking can appear in a dedicated boundary position to the left of the whole nominal argument (e.g., Ancient Greek, Arabic) from languages in which they cannot, and always occur in a lower adjectival position (e.g., Celtic, Hebrew)

Manifestations

Is any of the following true in the language?

There are phrase-initial demonstratives

ex. hada l-mudarris-u l-hasan-u ARABIC this the-teacher-NOM the-nice-NOM 'this nice teacher'

TND, \pm long distance D-checking demonstratives

Distinguishes languages in which demonstratives that can mark the definiteness of the nominal argument at a distance, i.e. from an internal position rather than surfacing with the distribution of determiners (e.g., Hebrew) from languages in which they surface in the position of determiners (e.g., Arabic, Irish, Welsh)

Manifestations

Is any of the following true in the language?

There are demonstratives not occurring at the boundary of an articleless argument nominal phrase

ex. bayit/more ze shel Dan

house/teacher this of Dan

'this house of Dan's/this teacher of Dan's'

TDA, \pm split def on adjectival demonstratives

Distinguishes languages in which definiteness is spread to adjectival demonstratives, which must accordingly be accompanied by a copy of the definite article, like other adjectives (e.g., Hebrew) from languages in which demonstratives satisfy the doubling requirement through their intrinsic definiteness (e.g., Ancient Greek, Standard Greek, Arabic)

Manifestations

Is any of the following true in the language?

Adjectival demonstratives are introduced by a copy of the definite article of the whole nominal phrase

ha-bayit ha-nexmad ex. ha-ze im shtey ginot **HEBREW** the-nice the-house with the-that two gardens 'that nice house with two gardens'

TNL, ± DP under Loc

Distinguishes languages in which the whole nominal phrase including the article (if present in the language) only follows the demonstrative that marks its boundary (e.g., Hungarian, Finnish, Polish) from languages in which the whole nominal phrase may come to precede (e.g., French, Chickasaw) such demonstratives

Manifestations

Is any of the following true in the language?

There are demonstratives occurring phrase-initially (and co-occurring with definite articles, if any)

FINNISH ex. tama mies this.NOM man.NOM 'this man' * mies tama

HUNGARIAN

kedves öreg ember ezathis the kind old man

'this kind old man'