60. Genitives, Adjectives and Relative Clauses

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1.   Introduction

In English, nouns may be modified in a variety of ways, some of which are illustrated in the following example:

(1)   a.   *John's apple*
       b.   *red apple*
       c.   *apple that John bought*

In (1) above, all three NPs consist of a head noun *apple* plus an attributive expression; however, the attributive expression is of a different semantic type in each example: in (1a) it denotes an alienable possessor *John's,* in (1b) a colour property *red*, and in (1c) an activity *that John bought* with respect to which the head noun has the role of patient.

In English, as evident in (1), these three semantic functions are coded by means of three different morphosyntactic constructions: in (1a) the attributive expression precedes the head and is marked with the possessive enclitic *'s*, in (1b) the attributive expression precedes the head but is unmarked, and in (1c) the attributive expression follows the head and is marked with the complementizer *that*. Based on paradigms such as the above in English and in other languages, grammarians distinguish between three different types of constructions, **genitives**, **adjectives** and **relative clauses**, of which the above are typical examples.

However, not all languages possess dedicated morphosyntactic constructions for each of the above semantic functions. In some languages, two of the above functions, or even all three of them, may be expressed by means of a single more general morphosyntactic construction. In such cases, then,

one may say that genitives, adjectives and relative clauses are not fully differentiated to the extent that they are in languages like English.

Thus, languages vary with respect to the degree to which grammatical encoding distinguishes between different semantic types of attribution. The purpose of this map is to depict this cross-linguistic variation, by showing the extent to which different languages distinguish between genitive, adjective and relative clause constructions.

2.   Feature values

The point of departure for this map is provided by the three semantic types of attribution illustrated in (1) above: (a) alienable possession, generally of a human over an inanimate object such as a food item; (b) colour property, or other property such as size or quality; and (c) activity, typically past and punctual, with respect to which the head noun has the role of patient or undergoer. For each language under consideration, the map compares the various ways in which these three semantic functions are grammatically encoded.

Note that a single semantic function may sometimes be encoded by means of more than one grammatical strategy. For example, in English, (1a) may be paraphrased with a postnominal genitive construction *apple of John's*, while (1c) may be alternatively expressed with a relative pronoun as in *apple which John bought*, or without any overt marker as in *apple John bought*. For the purposes of this map, all alternative coding strategies are taken into account, provided that they are deemed to be natural and not "long-winded". The latter proviso is necessary in order to exclude various alternative constructions such as, for example, *apple that John owns* for (1a), and *apple that is red* for (1b).

In order to measure the extent to which a language distinguishes between genitives, adjectives and relative clauses,

the language's maximally general encoding strategy is taken into consideration, and all other more specific strategies are ignored. This makes it possible to rank languages on a three-valued scale, characterizing their attributive constructions as weakly, moderately, or highly differentiated.

@	1.	Weakly differentiated	15
@	2.	Moderately differentiated, with genitives and adjectives collapsed	8
@	3.	Moderately differentiated, with genitives and relative clauses collapsed	2
@	4.	Moderately differentiated, with adjectives and relative clauses collapsed	33
@	5.	Moderately differentiated; other	3
@	6.	Highly differentiated	77
		total	138

Languages with **weak differentiation** are those in which there exists a common strategy for the encoding of all three semantic functions. Such languages may also have additional, more specific strategies for the encoding of these functions; however, such strategies are ignored here. One example of a language with weak differentiation is Minangkabau (Sundic, Austronesian; Sumatra, Indonesia), in which all three semantic functions may be expressed by bare postnominal modifiers, without any additional grammatical markers:

(2)   Minangkabau (own knowledge)
    a.   *batiak*   *Kairil*
        papaya   Kairil
        'Kairil's papaya'
    b.   *batiak*   *kuniang*
        papaya   yellow

'yellow papaya'

 c. *batiak* *Kairil* *bali*

   papaya Kairil buy

   'papaya that Kairil bought'

Another example of a language with weak differentiation is provided by Cantonese, in which all three semantic functions may be expressed by prenominal modifiers marked by the associative particle *ge33*.

(3) Cantonese (Ho Chee Lick, Lee May San, Cassandra Yue
    Chee Tieng, p.c.)

 a. *a33-faay55* *ge33* *piŋ11-guo35*

   Ah Fai   ASSOC apple

   'Ah Fai's apple'

 b. *hooŋ11* *ge33* *piŋ11-guo35*

   red   ASSOC apple

   'red apple'

 c. *a33-faay55* *maai13 ge33* *piŋ11-guo35*

   Ah Fai   buy ASSOC apple

   'apple that Ah Fai bought'

Both Minangkabau and Cantonese have additional, more specific strategies which are not shown here.

 Languages with **moderate differentiation** are those that do not have a common strategy for the encoding of all three semantic functions. However, such languages do have one or more strategies which encode two of the three functions to the exclusion of the third. Again, in addition such languages may also have dedicated coding strategies for each of the three semantic functions, which are ignored here. For the purposes of the map, such languages are divided into four subtypes.

 In the first subtype, **genitives and adjectives** are collapsed, to the exclusion of relative clauses. An example of such a

language is provided by the Västerbotten dialect of Swedish, in which alienable possessors and colour properties may both be expressed by means of a compound construction in which the modifier precedes the head:

(4) Västerbotten Swedish (Christina Alm-Arvius p.c.)
   a. *Pelle-äpple*
      Pelle-apple
      'Pelle's apple'
   b. *rö-äpple*
      red-apple
      'red apple'

In the second subtype, **genitives and relative clauses** are collapsed, to the exclusion of adjectives. An example of such a language is provided by the Jewish Arbel dialect of Aramaic, in which alienable possessors and activities may both be expressed by means of postnominal modifiers marked with *ʔot*. (Note that while adjectives may also be marked similarly, the adjective also agrees with the noun in number and gender; hence this is considered to be a different construction.)

(5) Jewish Arbel Aramaic (Geoffrey Khan p.c.)
   a. *qarʕa*   *ʔot*   *yosef*
      pumpkin   ASSOC   Joseph
      'Joseph's pumpkin'
   b. *qarʕa*   *ʔot*   *zwinne*   *yosef*
      pumpkin   ASSOC   buy.PST.3SG.M   Joseph
      'pumpkin that Joseph bought'

In the third subtype, **adjectives and relative clauses** are collapsed, to the exclusion of genitives. An example of such a language is provided by Tagalog, in which colour properties and attributive activities may both be expressed by means of modifiers linked to their heads by means of a ligature, which in

the following examples assumes the form of an enclitic *=ng*. (Note that while in (6) the modifiers precede their heads, the order is flexible and they could also follow.)

(6)   Tagalog (own knowledge)
    a.   *pula=ng   mangga*
          red=MOD   mango
          'red mango'
    b.   *b\<in\>ili   ni   Jojo=ng   mangga*
          \<PAT.TOP.PFV\>buy   PERS.GEN   Jojo=MOD   mango
          'mango that Jojo bought'

In a number of languages, there are two or more strategies which employ identical encoding for different pairs of the three semantic functions. The various possible ways in which this may come about are grouped together in the fourth, **other** subtype of languages with moderate differentiation. One example of such a language is provided by Thai. As shown in (7), alienable possessors and colour properties may both be expressed by means of a common strategy involving bare post-nominal modification; in the collapsing of genitives and adjectives Thai thus resembles Västerbotten Swedish. In addition, as indicated in (8), colour properties and activities may both be expressed by means of a common strategy involving post-nominal modification with a classifier plus a relative marker; in the collapsing of colour properties and activities Thai thus resembles Tagalog.

(7)   Thai (Titima Suthiwan, Uri Tadmor p.c.)
    a.   *sôm   kài*
          orange   Kai
          'Kai's orange'
    b.   *sôm   sii   dææŋ*
          orange   colour   red
          'red orange'

(8)   Thai

    a.   *sôm*   *lûuk*   *tʰîi*   *sii*   *dæɛŋ*

         orange CLF   REL   colour   red

         'red orange'

    b.   *sôm*   *lûuk*   *tʰîi*   *kài*   *sɯ́ɯ*   *maa*

         orange CLF   REL   Kai   buy   come

         'orange that Kai bought'

In other languages of this subtype, different combinations of the three semantic functions may be expressed by means of identical strategies.

Finally, languages with **high differentiation** are those in which there are no common strategies for encoding more than one of the three functions; instead, each of the three functions is encoded by distinct grammatical strategies, genitive, adjective and relative clause respectively. One example of such a language, discussed above, is English; another, illustrated below, is Abkhaz. In Abkhaz, possessors occur prenominally with the head noun marked with an agreeing possessive form, colour properties occur postnominally in a compound construction, and activities form prenominal relative clauses in which the verb assumes a special relative form.

(9)   Abkhaz (Irina Borisovna Ankvad p.c.)

    a.   *adgur*   *jə-çᵒa*

         Adgur   3SG.POSS-apple

         'Adgur's apple'

    b.   *a-çᵒa-q́apš*

         DEF-apple-red

         'red apple'

    c.   *adgur*   *jaajə-xᵒa-z*   *a-çᵒa*

         Adgur   3SG.OBJ-buy-PST.REL   DEF-apple

         'apple that Adgur bought'

3.   Geographical distribution

Languages with high differentiation are more common than languages with moderate differentiation, which in turn are more common than languages with low differentiation. And indeed, in most parts of the world, languages with high and moderate differentiation can be found interspersed among each other.

Against this rather homogenous background, two regions stand out as exceptions. First, in a region comprising Europe plus adjacent parts of Asia and Africa, almost all the languages are of high differentiation. Secondly and more strikingly, in a region containing large parts of Southeast Asia, almost all the languages are of low differentiation. In fact, this latter region contains almost all the languages of low differentiation in the present sample; outside Southeast Asia, such languages are very infrequent.

4.   Theoretical issues

Many linguists speak European languages in which genitives, adjectives and relative clauses are highly differentiated. Perhaps because of this, most descriptive and theoretical traditions within current linguistics provide ready-made ways of distinguishing between such constructions. However, such traditions often fail to provide the tools for **not** distinguishing between them, in the case of languages in which genitives, adjectives and relative clauses are not highly differentiated. Often, linguists coming from European languages will posit distinct genitive, adjective and relative clause constructions even in languages which seem not to have them. Indeed, when faced with a new language, it is often easier to recognize the existence of some exotic and unfamiliar category than it is to realize that a commonplace and familiar category is in fact

absent. However, as argued in Gil (2001), linguists must strive to overcome such predispositions.