Making sense of nominal classification systems

Noun classifiers and the grammaticalization variable

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1. Introduction

The purpose of this paper is to address a recent challenge to the establishment of a certain type of classifiers – the noun classifiers – and to frame the debate into a grammaticalization perspective.

A brief overview of noun classification systems, and of the place classifier systems hold among them, will be given first while the main arguments that have been proposed for the establishment of the specific type of noun classifiers under discussion here on the basis of MesoAmerican data, will be given second. The third section will then consider the contribution of data from Australian languages originally used to consolidate the establishment of this distinct type of "noun classifiers," to then recount new arguments being advanced by Wilkins (2000) for not considering some of them as such anymore. The point of this paper is to argue that the cases of these classifying Australian "generics," now argued not to be real noun classifiers, are interesting for the discussion of a typology of classifiers, for two reasons. First, because they provide insights into the origins and possible path of emergence of noun classifier systems through classifier constructions and, second, because they bring into focus the need to adequately address the semantics and discourse pragmatics of classifiers. The view proposed here is one of classifier systems as essentially intermediate lexico-grammatical systems at mid-way in a grammaticalization continuum of nominal classification systems, with a further continuum of grammaticalization nested within each type of classifier system.

2.   A typology of nominal classification systems[1]

The need to take all systems of nominal classification into view before dealing specifically with classifiers stems from the sense that much confusion still persists as to their nature. Classifiers, as shown in (1), are to be conceived of as an intermediate type of classification system, mid-way between more lexical and more grammatical systems to be briefly described below:

(1)   Overview of systems on a grammaticalization continuum

<Lexical..morphosyntactic>

class-terms   "CLASSIFIERS"   *noun classes-gender*
measure terms

Classifiers are intermediate in being clearly of lexical origin, while functioning in a more or less syntacticized or grammaticalized fashion. A list of criteria which help distinguish between classifier systems and more grammaticalized systems such as gender and noun classes is given in (2).[2]

(2)   Classifiers vs. more grammaticalized types of classification systems.

	NOUN CLASSES	CLASSIFIERS
a.	classify all nouns	don't classify all nouns
b.	in a small number of classes	in large(r) number
c.	closed system	open system
d.	fused with other grammatical categories (number, case …)	not fused
e.	can be marked on N	not marked on N itself
f.	in concord/agreement pattern	not part of concord systems
g.	N assigned to one class	can be to assigned to several classes
h.	no speaker variation	possible speaker variation
i.	no register variation	possible formal vs informal use

On the lexical end, the systems that have sometimes been confused with classifier systems include measure terms and class terms. Measure terms appear in constructions expressing quantities and arrangements and exist in all languages of the world (3a, b). In classifier languages with numeral classifier systems, one distinguishes between two kinds of classifiers: the mensural classifiers, which are equivalent to the measure terms of non-classifier languages and the sortal classifiers, taken to be the true classifiers (3c).

(3)   English measure terms
      a.   a glass of water, a pound of sugar, a slice of bread
      b.   a pile of books, a group of children, a line of cars

c.   [*mensural classifier*]   c′.   [*SORTAL classifier*]
     two [bags of] oranges   two [ROUND] oranges
     a [stack of] shirts   a [FLAT.FLEXIBLE] shirt
     three [circles of] children   three [HUMAN] children

The other lexical system, that of class terms, corresponds to a compounding process which is functionally equivalent to derivational processes. Class term systems are more or less productive and are particularly present in two semantic domains: human occupations and the vegetal world (trees and fruits), illustrated with English examples below:[3]

(4)   English class terms
      a.   strawberry, blueberry, raspberry, boysenberry, gooseberry …
      b.   apple tree, banana tree, orange tree, cherry tree …
      c.   mailman, policeman, garbage man …

On the more morphosyntactic side of the continuum of nominal classification systems, classifiers not only represent systems that are less grammaticalized than gender and noun class systems, but they themselves come in different subtypes. The general areal and language family distribution of all the grammaticalized systems of nominal classification to be considered is sketched out below:

(5)   Areal distribution of different types of grammaticalized nominal classification systems:
      a.   gender: *Indo-European (French, German, Russian …)*
      b.   noun classes: *Bantu, Australian (Dyirbal …) Amazonian*
      c.   **noun classifiers: *Meso-American (Jakaltek), Australian (Yidiny)***
      d.   numeral classifiers: *South East Asian (Chinese, Thai, Burmese, …)*
                                 Meso-American (Tzeltal, Tzotzil …)
      e.   genitive classifiers: *Micronesian (Ponapean)*
      f.   verbal classifiers: *North American (Cayuga)*
      g.   others?: (demonstrative, article: Amazonia, Argentina …)

Corbett (1991) and Creissels (1999) argue that a. and b. (gender and noun classes) are one major system, although data from Amazonian languages may challenge this position. It is certain that, in many languages of that region, systems of a clear gender type cooccur with more diversified and complex systems which are either multiple overlapping systems of classifiers or yet unestablished systems of noun classes. g. acknowledges that there may be yet other underdocumented systems, such as some systems of lowland South America (see Aikhenvald 1994, 2000; Aikhenvald and Green 1996 for instance).

The typology of classifier systems (5c. to f.) considered here is morphosyntactically driven in that it names the systems on the basis of the locus of the classifier.

This initial approach to typologizing is dictated by the felt need for a working tool to facilitate collecting comparable descriptions of such systems, as an initial step before eventually developing a more sophisticated functionally driven typology, only possible with extensive and intimate knowledge of the languages. In this morphosyntactic typology the various types of systems are named after the syntactic configuration in which they are used:

(6)   A morphosyntactically driven typology of classifier systems:
[POSS+CL   Numeral+CL   CL+NOUN Adj(+CL) Dem(+CL)]//Verb-CL
genitive   *numeral*   *noun*   *verbal*
classifier   *classifier*   *classifier*   *classifier*

Three major types are distinguished within the noun phrase: noun classifiers, with the noun directly; numeral classifiers, in quantitative constructions; genitive classifiers, in possessive constructions. Numeral classifiers can also appear secondarily on adjectives and demonstratives. Another major type of classifier is found inside the verb form – hence its label of verbal classifier – from where it classifies the nominal arguments of the verb on a semantic basis similar to that of the classifier types found within the noun phrase. Examples in (7) illustrate each kind of classifier:

(7)   a.   Noun classifiers; JAKALTEK (Craig 1986a: 264)
xil   naj   xuwan   no7   lab'a
saw   CL   John   CL   snake
'(man) John saw the (animal) snake'

b.   Numeral classifiers; PONAPEAN (Rehg 1981:130)
pwihk   riemen   'two   pigs'
pig   2+CL:animate

tuhke   rioapwoat   'two   trees'
tree   2+CL:long

c.   Genitive classifiers; PONAPEAN (Rehg, 1981:184)
kene-i   mwenge   'my(edible) food'
CL-GEN.1   food

were-i   pwoht   'my(transport) boat'
CL-GEN.1   boat

d.   Verbal Classifiers; CAYUGA (Mithun 1986:386–388)
ohon'atatke: ak-hon'at-a:k
it-potato-rotten   past.I-CL-eat   'I (potato)ate a rotten potato'
so:wa:s   akh-nahskw-ae'
dog   I-CL-have   'I (domestic.animal)have a dog'

Three types of arguments can be considered to support the existence of different types of classifiers:

(8)   i.   co-occurence of systems
ii.   different semantic profiles
iii. functional difference.[4]

The co-occurence argument (i) is THE argument par excellence. It can be illustrated in the Kanjobalan branch of the Mayan family by the co-occurrence of numeral and noun classifiers (see Craig 1992 and Zavala 2000), or in Micronesian languages with that of numeral and genitive systems (see 7 b. and c. above).

Behind the statement of different semantic profiles for the different types of classifier systems (ii) is the hypothesis of a semantics-morphosyntax correlation outlined in (9) below:

(9)   a.   numeral classifiers = physical categories:
two-ROUND oranges; three-LONG RIGID pencils;
four-FLAT FLEXIBLE blankets
b.   genitive classifiers = functional categories
my-EDIBLE food; his-DRINKABLE potion;
their-TRANSPORT canoe
c.   noun classifiers = material/essence categories
an ANIMAL deer; the ROCK cave; MAN John

This hypothesis held up when tested by Olness (1991) in a pilot study, the overall results being as shown in Table 1 below.[5]

The third line of argumentation (iii), which remains to be fully developed, is to study the functional difference of the different morphosyntactic-semantic types. There is a need for an explanation of the observed correlation between the types of classifier systems established on a morphosyntactic basis and their dominant semantic features. Why, for instance, would noun classifiers come overwhelmingly from generics with semantics of essence or material, while numeral classifiers classify primarily by shape and consistency, and genitive classifiers by functions? And what are the relations between the processes of individuation, quantification,

Table 1. Semantics of classifier systems, from Olness (1991:12) in Grinevald (2000:73)

Semantics	Classifier Types		
	NUMERAL	NOUN	GENITIVE
PHYSICAL	63%	0%	2%
MATERIAL	11%	78%	12%
FUNCTIONAL	26%	22%	86%

and localization discussed in the literature on the function of classifiers and the semantic profiles of the different types of classifiers?

Much remains to be done to sharpen the three lines of argumentation just sketched out, but, in addition, any attempt at typologizing classifier systems will have to incorporate a grammaticalization perspective, which can take one of two forms. Grammaticalization can be taken as a descriptive framework, in order to track classifying items in their morphological, syntactic and pragmatic domains, as done for instance by Dixon (1982, 1986) with a list of variables meant to distinguish classifiers from noun classes (see (2) above). Grammaticalization can also mean focusing on dynamic aspects of such systems, sketching evolutionary scenarios, identifying the lexical origins of classifiers and their likely pathways of evolution. The following evolutionary scenarios involving classifiers have, for instance, been proposed in the literature:

(10) i.   N > class term (class noun) ... > classifier
      ii. N > classifiers > noun classes

The evolution outlined in (10i.) is a phenomenon prevalent in some languages of South East Asia (see deLancey (1986) for the Tai family and Bisang (1993) for Hmong). The one outlined in (10ii.) comes from cases from various continents. It is the hypothesized scenario for Bantu noun classes (with no evidence of classifier systems today but reconstructions of numeral classifiers like semantic motivation in Givón 1970 or Denny and Creider 1986, for instance); for Australia, with documented cases of classifiers becoming noun classes (see the comparative study by Sands 1995); for Amazonia as a potential scenario (through repeaters) for some languages, such as Tariana (see Aikhenvald 1994). In addition to the evolutionary scenarios across nominal classification types mentioned above, one also needs to keep in mind the evolution, within a type, from less grammaticalized incipient systems to more established and prototypical systems, as will be demonstrated later in this paper with Australian data.

A grammaticalization perspective brings with it a reconsideration of the various axes of the typologizing endeavor, those of the semantics and morphosyntax of classifiers, as well as that of the functions of the various systems. The "classic" studies on the semantics of classifiers of Denny (1976) and Allan (1977), as well as the more recent one of Croft (1994), do not address the issue of the variety of systems involved, for instance, nor their process of grammaticalization. The existing studies of the morphosyntax of classifiers do include a grammaticalization perspective (see Dixon 1982, 1986; Craig 1986 or Grinevald 2000), but those of the functions of the various systems are fewer although they represent a promising approach (see Craig 1992; Bisang 1993; and Wilkins 2000 which is to be discussed in Section 3 below).

The dynamic aspect of nominal classification systems to be taken into account for typologizing will also by necessity include such additional variables as the ones given below:

(11) i.   Age:
           as in old (Chinese) vs. new (Kanjobalan) systems
      ii. productivity:
           as in active/open (Thai) vs. frozen (Jakaltek) systems
      iii. life cycle:
           as in emerging (Yidiny) vs. decaying (Bantu) systems
      iv. areal spread:
           as in borrowing of a process, an idea, as in China or Meso-America.

The construction of a typology of classifier systems is therefore a task complicated by two major aspects of these linguistic systems. One of them is their very nature as intermediate systems between lexicon and grammar which is best captured within a grammaticalization perspective. The other is the inherent dynamics of these lexico-grammatical systems which produces great variation down to the dialect level, as these systems emerged from preexisting constructions can be very open and fluid, and elements are very easily borrowed as well as lost.

This overview aimed first at placing classifier systems among the variety of nominal classification systems, and then at putting into its proper context the particular type of classifiers to be focused on now: the noun classifier type.

3.   Noun classifier systems: the evidence from Jakaltek[6]

A number of publications on the Jakaltek system of classifiers over the years have had as a goal to establish the existence of a certain type of classifiers, distinct from the better known numeral classifiers, and labeled "noun classifiers" (Craig 1979, 1986b, 1987, 1990a, 1992).[7] The arguments presented are of a morphological and syntactic, as well as semantic nature, and they all point to the high degree of grammaticalization of such a system.

From a structural point of view, the Jakaltek classifiers are free forms which occur independent of quantifying or possessive contexts. They stand close to the noun, forming with it the core of a referential noun phrase:

(12) a.   *xil   ix malin naj winaj / no' txitam / te' hum*
           saw CL Mary CL John / CL pig   / CL book
           'Mary saw the(MAN)man / the(ANIMAL) pig / the (WOOD) book'
      b.   *ka-k'onh hej   no' txitam baq'ich tu'*
           two-CL   pl.CL CL pig   fat   DEM
           'those two(ANIMAL) (pl ANIMAL) fat (ANIMAL) pigs'

c. *sonlom   naj xuwan*
   musician CL John
   '(MAN)John is a musician (lit: marimba player)'
*c'. *naj sonlom   naj xuwan*
   (MAN)John is a (*MAN)marimba player

As shown in (12b.) those noun classifiers are but one of several classification systems of the language mentioned in (6) above. In addition, these classifiers are omnipresent in Jakaltek clauses, to the extent that they function in the grammar both in a determiner like role (as markers of referentiality, as shown in the contrast of (12c and *c') and in an anaphoric role (resembling the personal pronouns of Indo-European languages, as shown in (13a., c.)). They are also found in possessive constructions, combining with ergative markers to express the possessor (in either determiner or pronominal function, as in (13b., c.)):

(13) a. *xil ix naj/no'/te'*
        saw CL CL/CL/CL
        'she(WOMAN) saw him(MAN) / it(ANIMAL) / it(WOOD)'
     b. *xil ix s-mam   naj pel   /s-yutz   no' txitam*
        saw CL E3-father CL Peter / E3-rear end CL pig
        'she(WOMAN)saw (MAN)Peter's father / the (ANIMAL)pig's rear end'
     c. *xil ix s-mam   naj /s-yutz   no'*
        saw CL E3-father CL / E3-rear end CL
        she(WOMAN) saw his(MAN) father / its(ANIMAL) rear end'

The arguments to support the grammaticalization of the Jakaltek noun classifiers include the fact that morphologically most classifiers are reduced forms of lexical items (*winaj* 'man' vs. *naj* 'classifier'; *noq'* 'animal' vs. *no* 'classifier' etc. ...), with broader semantics (*te'* 'tree, stick' vs. *te'* 'classifier of all plants but corn, and wooden objects'; *ch'en* 'rock' vs. *ch'en* 'classifier for rock, glass and metal objects'). One of the most persuasive features of their grammaticalization is their use in the syntax of the language to track the co-referentiality of arguments, whereby the presence of a classifier in specified contexts specifically notifies non-coreferentiality, while its absence is to be interpreted as marking coreferentiality. This anaphoric process is illustrated below (see Craig 1977 Chapter 5 for ample discussion of this phenomenon, taken up in Craig 1987):

(14) a. *xil ix   s-mam ix*
        CL(i)   CL(j)
        'she(WOMAN) (i) saw her(WOMAN)(j) father'

b. *xil ix   s-mam ——*
   CL(i)   (CL(i))
   'she(WOMAN)(i) saw her(WOMAN)own(i) father'

From a semantic point of view, the closed set of classifiers is striking for the way it appears to carve out a culturally bound world view, which has been frozen in time (as argued in Craig 1979, and particularly 1986b). The total inventory of Jakaltek noun classifiers counts two dozen classifiers, which can be organized into two subsystems on the basis of their different categorization principles:

(15) a. deity M, deity F, respected person, kin-adult-male, non-kin adult male, kin-adult-female, non-kin adult female, non-kin young male, kin-adult-female, non-kin young female, child
     b. animal, DOG, plant, CORN, THREAD, TWINE, CLOTH, soil/dirt, rock, SALT, water, fire.[8]

The list of the dozen classifiers of the first subsystem given in (15a.) corresponds to classifiers of social interaction (following Denny 1976). Limited dynamics of cross-classification producing insult or compliment effects are allowed within that subsystem. The dozen classifiers of the second subsystem organize the physical world with which the speakers primarily interacted:[9] The semantic motivation for this second sub-system was transparent, the classification operating primarily on the basis of inherent qualities of the objects, and secondarily of their function (for the justification of this analysis see Craig 1987b). This semantic motivation is illustrated in (16) with a sample of the classifiers and nouns they classify:

(16) a. nature/essence
        plant   trees, fruits, furniture, house, coffee drink, book;
        animal   animals (except dog), parts of animal, leather or wool artifact (sandals, woolen blanket or poncho), milk;
        water   water, river, lake, rain;
     b. (nature)-function
        thread   hairbands (a young woman's weaving);
        cloth   traditional woven pieces of clothing (married women's weaving);
        twine   rope, bags, nets (men's trade).

A number of nouns of objects of the world remain unclassified. They correspond either to objects only seen but not felt to the touch (cloud, smoke...), or of mixed material (garbage), or of nature or source not known (beer, coca-cola, nylon).

It was on the basis of such morphological, syntactic and semantic arguments that the Jakaltek classifiers were set up as a classifier system distinct from the already known numeral, genitive and verbal classifiers. They could in addition be argued to

represent a classifier system at an advanced stage of grammaticalization, in (i) their functioning as determiner of the nouns and proforms (which ensured their being omnipresent in Jakaltek discourse), (ii) their being a frozen closed system used for referentiality tracking, in addition to (iii) their being morphologically reduced forms of the nouns from which they originated.

Following the description of the Jakaltek system, partly similar systems were described for the Meso-American region. In the Mayan family, and within Guatemala, all the languages of the same Kanjobalan branch seem to have developed similar systems, each with its own specific inventory but large overlap (and maybe similar usage, although that information is not as readily available, see Zavala 2000). In the neighboring Mamean branch of the same family, languages like Mam have developed a smaller system, limited to animates and anaphoric pronoun use (see England 1983). Within the same contact area, languages of Mexico, but of the Mixtec family, were also described as having such systems (see deLeón 1988). Beyond Meso-America, the only other area of the world where apparently similar systems have been reported is Australia, such as the Yidiny system described by Dixon (1977, 1982).

4.   The challenge from the Australian "generics"[10]

The phenomenon of nominal classification seems to be a fairly widespread feature of the languages of the Australian continent, with various types of systems at work, predominantly noun classifier and noun class types, of the Yidiny and the Dyirbal type, respectively (see Dixon 1972, 1977, 1982). The type of classifying system that has been considered as akin to the noun classifier systems of Meso-America is exemplified by the kind of data shown below:

(17)   Yidiny (Dixon 1982:186)

a.   *bamaal   yaburuNgu minya   gangu:l   wawaal*
     person-ERG girl-ERG   animal-ABS wallaby-ABS see-PAST
     'lit: the person girl saw the animal wallaby'

b.   *minya   ganguul   jana-ng   jugi-il   gabuma-la*
     animal-ABS wallaby-ABS stand-PRES tree-LOC   black pine-LOC
     'lit: The animal wallaby is standing by the tree black pine'

(17) illustrates the use of 3 out of 19 such classifiers inventoried in the language, all three classifiers (person, animal, tree) reminiscent of some of the Jakaltek ones. Therefore, on morphosyntactic and semantic grounds the Jakaltek and the Yidiny systems appear similar, although less so at a discourse level. While Craig (1987)

argues that the Jakaltek classifiers are syntacticized, Dixon (1982) describes the use of the Yidiny classifiers as being a matter of "stylistics."

In the literature on Australian languages, the traditional label for such morphemes has been that of "generics." It is a fact that all Australian languages have generic nouns, that most of them have constructions of generic+specific nouns, and that a few appear to have grammaticalized these constructions into noun classifier systems. Out of the 250 languages of the continent Sands (1995) counts 20 languages as having noun classifier systems (and 42 noun class systems). The main criteria she uses for identifying the instances that could qualify as real noun classifier systems is the frequency of use of a generic with a specific noun, and she notes that "it is difficult to determine the difference between languages that have a true system of noun classifiers and those in which generic nouns may precede a more specific noun" (1995:270). Following the identification of noun classifier like generics in Yidiny (Dixon 1982), other Australian languages have been described as having noun classifier systems too, such as the other Northeastern Australian languages Kugu Nganhcara (Johnson 1988) and Yir-Yoront (Alpher 1991).

What follows is a reconsideration of the situation of the Arrernte language of Central Australia originally considered as having a noun classifier system (Wilkins 1989) but now being argued not to (Wilkins 2000). At first view, the similarity between the Arrernte and the Jakaltek system appear strong, on formal and semantic grounds. The morphosyntactic similarity is one of a classifying free morpheme standing next to a bare noun, independent of a quantifying context:

(18)   Arrernte (Wilkins 2000:172)

the   imarte arratye <u>kere aherre-Ø</u>   arlkwe-tye.lhe-me-le.
1ERG   then   truly   game/meat kangaroo-ACC eat-GO&DO-npp-ss
'when I got there I ate some kangaroo meat'

The other reason to compare the Arrernte generics to noun classifiers of the Meso-American type is that their semantics seem close and that they all have a clear nominal origin. The 19 generics first identified and organized by Wilkins (2000:152–154) are said to fall into the subsets of physical, functional and social interactions established for the semantics of classifiers by Denny (1976):

(19)   a.   inherent nature: flying creatures, ants, plants, grasses, seeds, fire, water, rock

       b.   function/use: meat creatures, edible plants, sweet foods and drinks, edible grubs, tobacco, medicine, artifacts

       c.   social status generics: initiated man, woman, child, place

The generics listed in (19) seem indeed to provide a selective view of the surrounding world of their speakers reminiscent of the one provided by the Jakaltek system for its own speakers, shown in (15) and (16) above.

However, Wilkin's most recent claim is that Arrernte does not have noun classifiers, although it can be said to have classifier constructions. This new position is derived from an extensive study of the discourse function of these generics through their deployment in narrative texts showing that, unlike Jakaltek classifiers, the Arrernte generics neither function as markers of referentiality nor as anaphoric pronouns. The three possible instantiations of noun phrases in Arrernte are illustrated in (20):

(20)   a.   Generic-Specific Constructions (Wilkins 2000: 172)
    the   imarte   arratye   <u>kere aherre-Ø</u>
    1ERG   then   truly   game/meat kangaroo-ACC
    arlkwe-tye.lhe-me-le.
    eat-GO&DO-npp-ss
    'when I got there I ate some kangaroo meat'

   b.   Generic nouns as simple head of NP (Wilkins 2000: 172):
    Kenhe   nhakwe-Ø   akenhe unthe-rlane-rlenge anye-ng-ikwe
    BUT   that(dist)-NOM   BUT   hunt.for-CONT-DS father-ABL
    arlke   atye-ng-ikwe   arlke, unthe-rlane-me-le
    3POSS   g.father-ABL-3POSS   TOO   hunt.for-CONT-npp-ss
    <u>*kere-ke,*</u>
    game/meat-DAT
    'That other one (the boy), on the other hand, went hunting with his father and his mother's father, looking for game, …'

   c.   Specific nouns as simple head of NP (Wilkins 2000: 173):
    … anwerne ingke anteme alhe-ke Ayampewerne-atheke.
    … 1plNOM foot   now   go-pc   Yambah-ALL-wards
    Iwerre-ke   anwerne   <u>aherre aruntheØ</u>   areke.
    way/path-DAT 1plERG   kangaroo many-ACC   see-pc
    'Then we (sadly) set out on foot towards Yambah Station. On the way we saw kangaroos'

The quantitative text study focused on the distributions of the particular set of generic and specific noun illustrated above and dealing with the ubiquitous kangaroo: (a) the generic noun *kere* 'game animal/meat', (b) the "classifier construction" *kere aherre* 'red kangaroo (as game)' and (c) the specific noun *aherre* 'red kangaroo' alone.[11]

The study revealed indeed a major difference in the discourse deployment of the classifying elements between Arrernte and Jakaltek, in that the distribution of generics and specifics in Arrernte follows a pattern of complementary attribution of semantic and syntactic roles and of association with specific predicates which is unparalleled in Jakaltek. For instance, all 39 instances of generics (the 22 of generics alone and the 17 of generics+specific nouns) involve patient-like roles case marked ACC-DAT where the kangaroo is a game animal being tracked, hunted and killed, and later cooked and eaten. Meanwhile 7 of the 11 instances of specific nouns alone are case marked ERG or NOM and either deal with inherent properties of the animal (such as living in plains or being herbivore), or take the kangaroo as a human (or demonic) protagonist in traditional stories. The only counterexample to this complementary distribution turns out to demonstrate it further: it is the case of the verb 'to see' with which the use of the generic depends on the intention attributed to the act of seeing, i.e. whether seeing is part of a hunting search (hence the use of the generic for game) or a neutral perception activity (hence the specific noun alone). The use of the generic *kere* is therefore limited to signal that the referent is to be specifically thought of as a hunted game animal, in all the stages of a culturally defined frame of hunting. Such observation on the use of the Australian generics in discourse points indeed to the limitations of a strictly morphosyntactic approach to a typology of classifiers (Craig 1992 and Grinevald 2000). Meanwhile, it would seem to provide an interesting point of observation on the process of the emergence of noun classifier systems.

It is further interesting to connect the limited discourse anaphoric use of the Arrernte system of generics to a specific typological characteristic of the language. While the anaphoric function of the Jakaltek noun classifiers has fully developed in the context of a language which lacked third person independent pronouns, like all Mayan languages do, it is indeed noteworthy that Arrernte does not attribute such function to generics, but that this happens in the context of the language already possessing an independent set of third person pronouns.

It would seem that the Australian generics data in general is a mine for observing the process of the emergence of noun classifier systems. Sands (1995) and Wilkins (in press) concur in recognizing that the languages of Australia which use generic+specific noun constructions can be placed along a continuum from a least grammaticalized discourse phenomenon – that of "classifier constructions" without "noun classifiers" per se (Wilkins 2000) – to most grammaticalized systems akin to the Jakaltek type of noun classifier. In this continuum shown in Table 2 below, (i) Arrernte would represent a potentially incipient system, while (ii) the Yidiny system would already function as an emergent noun classifier system, although not as established as (iii) the more clearly grammaticalized systems of Kugu Nganhcara and Yir-Yoront. Wilkins illustrates those three stages of grammatical-

Table 2. Australian generics continuum of grammaticalization

		GENERIC	CONTEXT of USE
(i)	Arrernte	*yerre* **hunted game**	-discourse determined -general hunting frame
(ii)	Yidiny	*minya* **edible animal**	-independent of role in event -inherent property of referent (old/big enough to be hunted)
(iii)	Kugu Nganhcara	*minha* **(edible)animal**	-one of small set of classifiers -very frequent use (including pro-forms)
	Yir-Yoront	*minh* **wild animal**	-classifies nouns more than referents -reduces to m– in fast speech

ization by considering how the generic which can accompany the specific noun for kangaroo functions semantically.[12]

There is indeed a major difference between the use of generics in languages like Arrernte (i) and in the other ones (ii, iii) in that, in the latter, the use and distribution of the generic+specific construction is identical to the use and distribution of specific nouns, except for stylistic differences not specified. The frequency of use appealed to by Sands in order to distinguish true noun classifiers can therefore be seen as a reflection of the various levels of discourse constraint on the generics and their corresponding levels of semantic specificity shown in Table 2.

While the study of the Australian generics by Wilkins was meant to present a challenge to their being considered as noun classifiers of the same type as the Jakaltek noun classifiers, the position taken here is that the study stands as a reminder of the inherently mixed nature of classifier systems, as intermediate lexico-grammatical systems, and of the importance of always considering the grammaticalization axis in any comprehensive study of the phenomenon of classifiers. For the noun classifier type, the Jakaltek system may end up representing the most developed and syntacticized case of the type documented to date, while the Australian continent shows a continuum of more or less grammaticalized noun classifier systems, with a majority still in a potential or incipient stage. The Arrernte use of generics is therefore valuable as a demonstration of what an incipient system of noun classifiers (i.e. not yet grammaticalized one) may be, revealing in fact a possible origin of such systems of classifiers. It does so by showing the existence of intermediate classifier constructions, discourse driven associations of generics+specific nouns, providing evidence for a likely source construction for noun classifiers.[13]

Notes

1. All of the information summarized in this section was originally presented in Craig (1994) and is more fully developed in Grinevald (1999 and 2000).

2. The list is based largely on the criteria developed by Dixon (1968, 1982, 1986), where every point is illustrated with specific examples not repeated here.

3. The phenomenon of class terms is very widespread both in languages of South East Asia and of Amazonia where it is often confused with that of classifiers.

4. These arguments are presented in more detail in Craig (1992) and Grinevald (2000).

5. The study involved 15 systems of classifiers, five of each major type, in 12 languages, some having more than one classifier system.

6. While the language has been renamed by its speakers in recent years and is now known as POPTI', the main foreign linguist for the language has also changed her name, from Craig to Grinevald.

7. The label of noun classifier may actually need to be rediscussed; it has been suggested to relabel the system "nominal classifiers" with an adjectival form parallel to "numeral" and "verbal" classifiers (Zavala p.c.).

8. CAPs mark unique or very specific classifiers, in contrast to the classifiers which come from superordinate nouns, or "generics" which define larger classes.

9. This second sub-system (15b.) is more set than the first. In the Jacaltenango dialect, it was a frozen system, in that it did not accommodate modern imported materials like plastic or nylon, until recently, unlike the neighboring dialects.

10. This whole section is based on a discussion started in Wilkins (2000). All data on and insights into the Australian languages mentioned in this section are directly taken from this reference, whether specifically indicated at each step of the presentation or not.

11. The counts were done on 26 texts with 12 speakers.

12. The cognate nature of the generics considered for languages in (ii) and (iii) underline the language specificity of the degree of development of the classifier systems.

13. See Craig (1990a) for an attempt at determining the source constructions of Jakaltek noun classifiers, as vocative and epithet constructions of a widespread nature in the Mayan family at large.

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