# Postural categories and the classification of nominal concepts: A case study of Goemai <sup>1</sup>

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This paper addresses the central question of this book – how the ontological status of concepts and categories is reflected in their linguistic coding – from the perspective of nominal classification. It looks at nominal classifiers, i.e., at systems characterized through the presence of a closed class of elements (termed "[nominal] classifiers") that occur in specific morphosyntactic environments where they divide the nominal domain into a number of different classes. Cross-linguistically, these classes tend to be based on a limited and recurrent set of very general semantic domains. As such, classifiers are often said to tap into high-level concepts, thereby making them of interest to any study on ontolinguistics. This paper focuses specifically on one semantic domain – postural semantics – and examines its role in classification. Recent studies have already shown the importance of this domain for the coding of locative relations (see also Brala (this vol.) and Skopeteas (this vol.) for studies on the coding of locative relations through adpositions), but so far there has been only little discussion of its classificatory use.

The paper is structured as follows: Section 1. gives a brief introduction into the topic; Section 2. presents a detailed case study of postural classifiers in the West Chadic language Goemai; and Section 3. concludes this paper.

### 1. Overview

This section gives an overview of attested classifier systems (Section 1.1.) (drawing largely on studies by Aikhenvald 2000; Allan 1977; Craig 1986; Grinevald 2000; Senft 2000), and introduces the topic of postural semantics (Section 1.2.) (see especially Ameka and Levinson submitted; Newman 2002). The interested reader is referred to these studies for details.

#### 1.1. Nominal classifiers

Nominal classifiers are concerned with categorizing the nominal domain:<sup>2</sup> they exhaustively (or near-exhaustively) divide this domain into a set of

classes, and classification takes place in specific morphosyntactic environments only. Based on these environments, the following six types are generally recognized: noun classifiers (that occur with nouns), numeral classifiers (that occur in noun phrases with numerals), possessive classifiers (that occur in possessive noun phrases), locative classifiers (that occur on adpositions), deictic classifiers (that occur on demonstratives or articles), and verbal classifiers (that occur on the verb, but classify one of its arguments).<sup>3</sup> Example (1) below illustrates a numeral classifier (from the Mayan language Yucatec, see Lucy and Gaskins 2001: 260-261) and Example (2) a deictic classifier (from the Chadic language Goemai).4

- kib' ká'a-tz'ût (1) two-cL:long.and.thin wax (numeral classifier) 'two candles'
- n-d'vem-nnoe (2) lu settlement ADVZ-CL:stand(SG)-DEM.PROX (deictic classifier) 'this standing house'

It is generally assumed that each of the six classifier types is associated with specific semantic domains, diachronic origins, grammaticalization patterns, and discourse functions. But despite attested differences, all types draw upon a recurring set of semantic domains: they classify according to animacy (e.g., human vs. non-human), function (e.g., edible vs. non-edible), and physical properties such as extendedness (e.g., one-dimensional vs. twodimensional; long vs. flat), consistency (e.g., flexible vs. rigid), constitution (e.g., liquid vs. solid), material (e.g., wood vs. metal), etc.<sup>5</sup> These classifiers are often termed "sortal", i.e., they set up disjoint classes based on inherent time-stable properties. Additionally, many classifier systems contain further elements that denote non-inherent temporary properties: mensural elements (i.e., quanta such as bunch vs. cluster) and temporary-state elements such as configuration (e.g., looped vs. coiled), distribution (e.g., heaped vs. scattered) and posture (e.g., standing vs. lying).

There is a consensus in the literature that classifier systems are basically sortal.6 Mensural and temporary-state elements, by contrast, are only termed "classifiers" if they occur in constructions that are formally and functionally similar to the constructions of the prototypical sortal classifiers. While this requirement is met by many systems, Section 2. below introduces a system that is – at first sight – based on temporary properties only (i.e., on posture). It is shown there how a language can use temporary properties to set up disjoint time-stable classes, and how such postural information can then complement the information coded in nouns.

#### 1.2. Postural semantics and classification

One semantic domain that is found in different classifier systems is the domain of posture: it plays a role in the verbal classifiers and classificatory verbs of Athapaskan and Papuan languages, in the numeral classifiers of Mayan languages, and in the deictic classifiers of Siouan and Guaykuruan languages. More generally, this domain is not only relevant to classification, but also to spatial semantics (illustrated with data from Goemai in (3a) to (3f) below): all known postural-based classifiers have developed from postural verbs that code the static location of a figure relative to a ground (as t'ong 'sit' in (3a)). According to Stassen (1997: 55-61), a majority of the world's languages employs postural verbs in comparable locative contexts. In such languages, speakers choose a postural from a small set of contrastive verbs. These verbs often constitute a closed form class, and they include verbs that have a human/animate-based origin (such as 'sit', 'stand', 'lie'), but also other verbs (notably, 'hang/be attached' and 'move/be in a natural habitat', and sometimes a semantically general verb 'exist/be located'). Frequently, the same or similar distinctions are coded in transitive verbs of placement (as leng 'hang/move' in (3b)). And in some languages this contrastive set has further grammaticalized into aspectual markers (usually expressing progressive aspect, as lang 'hang/move' in (3c); and sometimes resultative notions, as d'e 'exist' in (3d)), into verbs or copulas having equative, ascriptive or possessive functions (as d'yam 'stand' in (3e)), or into deictic classifiers (as t'o 'lie' in (3f)).

- (3)Wang t'ong k'a pepe. pot sit(SG) HEAD(SG) woven.cover 'The pot sits on the cover.'
  - Tangzem leng lun-k'a muk. wasps hang/move(PL) settlement LOC-head(SG) 3SG.POSS 'Wasps hung up houses (i.e., built their hives) in his hair.'
  - Ko lang b'e? n-su or PROGR:hang/move(SG) PROGR-run(SG) PROGR EMPH 'Or does (it) really move running?'

- d'e nd'ûûn cup. d. Hangoed'e hok b'ang DEF become.red exist INSIDE cup water 'The water is red in the cup (i.e., the water has changed, and now exists in red color).'
- T'eng d'vam tree stand(PL) two 'The trees stand two (i.e., the trees are two).'
- Goe-n-t'o-nnoe NOMZ(SG)-ADVZ-CL:lie(SG)-DEM.PROX INTERR 'What about this lying one?'

The context featuring a deictic classifier (in (3f)) is of particular interest to any study of nominal classification. Such classifiers are attested in only few languages: in Siouan and neighboring languages of North America (Seiler 1986: 87-94), in Guaykuruan languages of South America (Klein 1979), and in some African languages: Khoisan languages (cited in Kuteva 1999: 204-205), Mbay (Keegan 2002), and Goemai (see Section 2.).

While deictic classifiers are considered to be "classifiers", the posturals illustrated in contexts (3a) to (3e) are usually not discussed under the heading of classification - the argument being that they are members of a major word class (i.e., verbs). There is some controversy as to whether verbs can be said to function as classifiers of the nominal domain: while some authors recognize the existence of "classificatory verbs" that classify through their verb stem, others consider them to be "a covert lexical means of nominal classification" that "can be found in any language" (Grinevald 2000: 68).

The term "classificatory verb" has a long tradition in the literature on Athapaskan languages, where nominals are categorized into up to 13 classes on the basis of shape, posture, texture, consistency, animacy and number. Each class is associated with up to four sets of suppletive classificatory verb stems that are used in reference to members of that class being in a position of rest, handled, thrown or in motion. Crucially, they are distinguished from "non-classificatory" and "pseudo-classificatory" verb stems in that they form a consistent paradigmatic subset of the verb lexicon, i.e., the classes contrast with each other in well-defined morphosyntactic environments. For researchers such as Aikhenvald (2000: 153-159), Allan (1977: 287), McGregor (2002), or Seiler (1986: 77-86), the Athapaskan classificatory verbs thereby meet the crucial criterion of any classifier system: the classes are reflected in

grammar. While this criterion excludes lexical means of classification, they do not take it to exclude the possibility of classification through suppletive verb stems.<sup>7</sup>

Despite this controversy in terminology, it is acknowledged that – semantically - there are tendencies for postural verbs to develop "classificatory overtones" (Aikhenvald 2000: 362–363), i.e., to develop characteristics reminiscent of the prototypical sortal classifiers (see Section 1.1.). These tendencies have been especially discussed for postural-based existential verbs in Papuan languages (Aikhenvald 2000: 153-159). Furthermore, Ameka and Levinson (submitted) propose a hypothesis that languages using postural verbs in the locative construction allow for two uses: a "presuppositional" or classificatory use (which pays attention to the canonical position of a figure) and an "assertional" or non-classificatory use (which pays attention to the current position of a figure). For example, an animal canonically moves, i.e., it has the capacity or disposition to move. In their classificatory system, speakers of Goemai therefore place it into the category lang 'hang/move' - even though it may be currently in a stationary position (see Section 2.).8

Section 2. takes up this discussion and illustrates in more detail the sortal nature of postural-based classificatory verbs and deictic classifiers.

# Case study: Classification in Goemai

Goemai is a West Chadic language that is spoken by about 150,000 speakers in Central Nigeria. This language has a system of nominal classification that is based on postural semantics. Table 1 below illustrates the categories, their forms and their referential range. Notice that aside from four specific posturals, the table also contains one unspecific postural: d'e 'exist'. This element covers entities that cannot assume a physical position (i.e., all abstract concepts), entities that do not have a default or canonical position (e.g., a hole in a piece of cloth), and novel entities that cannot easily be placed into the existing system (e.g., attached objects that do not dangle or project away from the ground, such as a band-aid or a ring). Together, they exhaustively and disjointly divide up the nominal domain, i.e., each nominal concept is assigned to exactly one of the five categories. To a large extent, this assignment is semantically predictable, and there are only very few seemingly arbitrary assignments.

Table 1. The postural categories

category	fo	rms	nominals that occur	typical referents	
	singular	plural	in this category		
'hang/ move'	lang	leng	nominals whose referents move	living beings, inanimate forces, dangling objects (e.g., fruits)	
'sit'	t'ong	t'wot	nominals whose referents project away from the ground and maintain a stable position by their own means	containers that support themselves through their base, chairs that support themselves through their legs	
'stand'	d'yem	d'yam	nominals whose referents project away from the ground and maintain a stable position with the help of the ground	trees and houses that are supported through being buried in the ground; caves that are 'inserted' into hills; ladders that lean against the ground	
'lie'	t'o	t'oerep	nominals whose referents do not project away from the ground	pieces of cloth or ropes that mould their entire position onto the ground	
'exist'	ć	l'e	remainder category, containing all nominals that cannot be placed into one of the more specific postural categories	abstract concepts	

The forms constitute a contrastive set in that Goemai speakers are required to choose one of them in each of the following morphosyntactic contexts: as intransitive verbs occurring in the locative/existential construction (see (3a) above), the progressive construction (see (3c)), different subtypes of resultative serial verb constructions (see (3d)), and the ascriptive construction (see (3e)); as transitive verbs of placement (see (3b)); and as classifiers within the demonstrative word (see (3f)). Their basic use is as intransitive verbs in the locative construction, and all other uses are derived (see Hellwig 2003 for details). Within the verb lexicon, these five intransitive verbs constitute a single form class: in contrast to most other verbs in the language, they are unambiguously stative (including lang 'hang/move'); furthermore, they occur with an obligatory semantic participant that denotes the ground.

In a way, Goemai has a fairly typical postural system: the forms constitute a closed class, and similar categories are found in many other languages. However, Goemai is of particular interest because the posturals have spread to such a large variety of morphosyntactic contexts. In all these contexts, speakers can either choose the default, classificatory, postural (illustrated in Table 1; see Section 2.1.), or they can shift away from this default to either a different specific postural (see Section 2.2.) or to the existential in a more general use (see Section 2.3.).

# 2.1. Use of the default (specific or general) postural

In Goemai, each nominal concept is placed into one of the five classes, i.e., each of them has a default postural assigned to it, which can be used regardless of the current position of its referent. The criteria that determine their assignment are summarized – in a very simplified way – in Table 1 above. These assignments are based on canonical or typical positions. For example, in its canonical position, a container is upright, and it is in this position that it matches the criteria for t'ong 'sit'. Containers are therefore assigned to the class of 'sitting' objects, and t'ong is the default element to be used with containers.

Speakers resort to this default element whenever they focus on the existence of a referent at a location. This includes negative existence (as in (4)) - notice that this sentence is not about the current position, and cannot mean "there is a bottle on the table, but it is not sitting." Furthermore, it includes the existence of non-canonically located referents, e.g., an upside-down pot in (5). This example is taken from a longer conversation between two speakers about upside-down pots in different locations (on the ground, on a table, in a tree). The speaker in (5) cannot identify the wang 'pot' that his interlocutor has mentioned in the preceding discourse, and thus asks for clarification. He ventures the guess that it is the pot located on the ground, using the default verb t'ong. That is, this speaker ignores the current position of the pot and instead focuses on its existence at a location.

- Kwalba t'ong k'a tebul ba. (4)bottle sit(SG) HEAD(SG) table NEG 'There sits no bottle on the table.' (i.e., there is no bottle)
- Wang goenang nd'ûûn? ... T'ong n-vil (5) pot which(SG) INSIDE sit(SG) LOC-ground INTERJ 'Which pot among (them)? ... Does (it) sit on the ground?'

In (4) and (5) above, the default element gives information about the class of the object. It is this phenomenon that makes the Goemai system similar to the prototypical sortal classifiers introduced in Section 1.1.: the elements set up disjoint classes that are independent of the current state of the referent.

The interesting difference to prototypical sortal classifiers is that the Goemai classes are not based on inherent characteristics, but on postural information. Although this information is not inherent to figures, it has to be kept in mind that Goemai assigns classes on the basis of canonical positions. Like prototypical sortal classifiers, canonical positions do set up time-stable categories (see also Merlan, Roberts, and Rumsey 1997 for a report on similar developments in the Papuan language Imonda).

Furthermore, it is sometimes argued that posturals code inherent shape properties, often combined with axial properties. For example, Aikhenvald (2000: 271-306) suggests that referents tend to 'sit' when they are threedimensional or non-extended, 'lie' when they are two-dimensional or horizontally extended, and 'stand' when they are one-dimensional or vertically extended. In Goemai, these features play only a secondary role. As illustrated in Table 2, figures of all dimensions and extensions occur in almost all of the postural categories. (Lang 'hang/move' and d'e 'exist' are excluded from the table because verbs of this type do not play a role in the literature; nevertheless, they can occur with figures of all types.)

Table 2. Posturals and abstract shapes

	t'ong 'sit'	d'yem 'stand'	t'o 'lie'
3D	pot	house	stone
2D	pepe 'woven cover'9	wall	cloth
1D	-	tree	rope
non-extended	pot	house	stone
horizontal	pepe 'woven cover'	hook/nail	cloth
vertical	bottle	tree	bark of tree

The table illustrates that, in Goemai, there is only an incomplete overlap between an inherent shape and a postural category. Nevertheless, positions imply certain shapes: e.g., a self-supported 'sitting' figure is preferably three-dimensional, while a 'lying' figure that is supported fully by the ground tends to be horizontally-oriented and not three-dimensional. It is thus conceivable that classifiers based on inherent properties develop from classifiers based on posture. In present-day Goemai, however, their semantics are clearly not based on such inherent properties. There are indications that other languages follow a similar type of semantics in their postural-based elements (see Ameka and Levinson submitted).

The parallels between Goemai and better-studied nominal classifier systems extend further to the interaction between classifier and noun semantics. Regardless of the semantic domain(s) coded in a given classifier system, there is a general agreement in the literature that classifiers do not mirror noun semantics but add semantic content to the utterance (e.g., Aikhenvald 2000: 317-333; Broschart 2000; Denny 1986; Lucy and Gaskins 2001; Seiler 1986: 94–110). With regard to numeral classifier languages, it is frequently argued that they are characterized through a large number of nouns denoting substances. Classifiers are then used to create individual, bounded and contoured, units of that substance. For example, in order to count a noun like kib' 'wax' in the numeral classifier language Yucatec Maya, speakers have to add a classifier that specifies its shape, e.g., ká'a-tz'íit kib' 'two candles' (lit., 'two-CL:long.and.thin wax') (see Example (1) above). This line of argumentation is further corroborated by psycholinguistic research (Lucy and Gaskins 2001), showing that speakers of Yucatec Maya attend more to the material of objects, while speakers of the non-classifier language English attend more to their shape.

Numeral classifiers are only one type of classifier – in many languages, classifiers do not occur in enumeration contexts at all. For these languages, the available information suggests that nouns are semantically general in that they tend not to differentiate between, e.g., a natural source and its natural or man-made produce, or between an individual and its collective (Broschart 2000; Merlan, Roberts, and Rumsey 1997: 82; Seiler 1986: 105–106; Wilkins 2000: 179-186). Classifiers are then considered to be one means to restrict the reference of such semantically general nouns. For example, in the Goemai utterances (6a) and (6b) below, the posturals leng 'hang/move' and t'o 'lie' are used to differentiate between a natural source ('bees') and its produce ('honey') – the noun nshi 'bee/honey' is compatible with both entities.

- (6)nshi n-leng-nnoe bee/honey ADVZ-CL:hang/move(PL)-DEM.PROX 'these moving bees'
  - nshi n-t'o-nnoe bee/honey ADVZ-CL:lie(SG)-DEM.PROX 'this lying honey'

Classifiers thereby highlight certain aspects of the meaning potential of a noun. In doing this, they create either bound units out of substances (e.g., in numeral classifier languages), or restrict the reference of general nouns (e.g., in Goemai). In both cases, they add semantic information that enables a listener to successfully identify or track a referent.

# 2.2. Shift to a different specific postural

Speakers have the option to shift away from the default, classificatory, element (see Section 2.1.), and use a different specific postural instead. They resort to this alternative option whenever they focus on the current position of the referent. This includes all contrastive situations (as in (7)), and it includes the introduction of new referents into discourse (as in (8)). In both cases, the speakers use a postural that best matches the current non-canonical position. By drawing attention to its current position, they enable the hearer to correctly identify the intended referent. 10

- (7) Goe-nnoe t'ong k'a tebul, NOMZ(SG)-LOC.ANAPH sit(SG) HEAD(SG) table k'at'o tebul. goe-nnoe NOMZ(SG)-LOC.ANAPH lie(SG) HEAD(SG) table 'This one (referent: upright bottle) sits on the table, this one (referent: bottle on its side) lies on the table.'
- Kwalba na n-t'o! bottle PRES PRES-lie(SG) 'Look, a bottle lies (there)!' (referent: bottle on its side)

This shift is not classificatory by itself: it simply asserts a current position. This means that speakers can use the postural system in both a classificatory (focusing on the class of the figure) and a non-classificatory way (focusing on the current position of the figure). However, the two uses differ in terms of their markedness, and hearers interpret defaults differently from non-defaults. This difference is illustrated in the following paragraphs.

Whenever speakers use the default, hearers do not pay attention to the current position of a referent. For example, in (9) and (10) below, two speakers - who could not see each other - were asked to compare pictures. These pictures were nearly identical, but differed in a few crucial items, e.g., in the position of referents. (The referents discussed in (9) and (10) are illustrated in Figure 1.) In Example (9), speaker A. introduces a canonically positioned (upright) bottle by means of its default t'ong 'sit' in a presentative construction. The picture of speaker N., however, contains an upside-down bottle. Nevertheless, he accepts and produces the default as an appropriate characterization of his upside-down bottle. But now consider the reverse situation. In Example (10), speaker A. introduces a non-canonically positioned (upside-down) calabash, using the non-default d'yem 'stand'. Upon hearing the non-default, speaker N. pays close attention to the current position of his calabash, which happens to be upright. As a consequence, he rejects d'yem, and shifts first to d'e 'exist' (to confirm the existence of the calabash), and then uses t'ong 'sit' in a morphologically marked way to stress the current 'sitting' position.

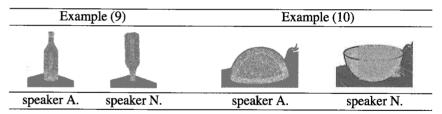


Figure 1. Referents discussed in Examples (9) and (10)

- (9)A: Goe na kwalba n-t'ong k'akwati. (...) 2SG.M see bottle PRES-sit(SG) HEAD(SG) box 'Look, see a bottle sitting on the box.' (...) (referent: upright)
  - N: Ni t'ong d'i k'a. 3SG sit(SG) LOC.ANAPH HEAD(SG) 'It sits there on top (of the box).' (referent: upside down)
- (10)n-d'yem A: *D'a* k'ak'aram. calabash PRES-stand(SG) HEAD(SG) mat 'Look, a calabash stands on the mat.' (referent: upside down)

N: D'a-. d'ana n-**d'e** d'i (...). calabash calabash PRES PRES-exist LOC.ANAPH t'ong n-t'ong. M-maan NOMZ-1SG.POSS sit(SG) ADVZ-sit(SG) 'The calabash-, look, there is a calabash (...). (But) mine sits sitting.' (referent: upright)

Similar differences in interpretation are found in all comparable situations, suggesting that the two uses have a different status. This difference can be captured with the help of pragmatic implicatures, in particular, with Generalized Conversational Implicatures. Levinson (2000) suggests two complementary principles (M- and I-principles) that explain the distribution of marked and unmarked forms. The M-principle is based on two of Grice's (1975) submaxims of Manner (i.e., "avoid obscurity of expression", "avoid unnecessary prolixity"), while the I-principle is based on his second Maxim of Quantity (i.e., "do not make your contribution more informative than is required"). These two principles can be applied to the Goemai postural system in the following ways: the non-default element is the marked - unexpected - expression, while the default is unmarked and expected. To use the marked (non-default) expression in a context where the unmarked (default) expression could have been used draws attention to a marked situation (e.g., the referent is non-canonically positioned). Following the M-principle, the use of the non-default would therefore induce the hearer to closely monitor the current situation, looking for some marked property. As a consequence, speaker N. does not accept the non-default because it does not match the current position (in (10)). Following the I-principle, by contrast, the use of the default would not force the hearer to pay attention to the current situation. Instead, he takes the default to describe the class of the referent (e.g., of objects that 'sit' by default). As a consequence, speaker N. accepts the default, even though it does not match the current position (in (9)).

This discussion shows that the use of non-defaults is an integral part of the whole classificatory system: they can only receive their marked interpretation because there is an unmarked default or classificatory element available that the speaker could have used. But instead of using it, the speaker chose to place the referent temporarily into a different class. Similar phenomena are also observed to occur in better-known classifier systems, where speakers shift to different classifiers as a means to highlight different aspects of the referent in context (e.g., McGregor 2002: 8-13; Wilkins 2000).

#### 2.3. Shift to the general existential

Aside from the four specific posturals, the form class introduced in Table 1 above also includes an unspecific postural: the existential. This existential shares the same formal properties, but differs semantically in that it is more general, being in a superordinate / hyponym relationship with the posturals. The specific posturals code existence at a location in a specific canonical or presupposed position (see Section 2.1.), and speakers can shift to different specific posturals to highlight other temporary positions (see Section 2.2.). The existential, by contrast, does not give postural information by itself: it simply codes existence at a location, and picks up its postural information from its opposition to the specific posturals. In its classificatory use, it is therefore the default element for all concepts that cannot be subsumed under any of the more specific postural categories (see Section 2.1.). But in addition to its classificatory use, speakers can use it in a more general way: they can shift away from the default postural to the existential. In fact, given its general semantics, it could - in principle - replace all specific posturals in all their occurrences. However, its actual distribution is more restricted, and can be predicted on the basis of pragmatic principles.

Speakers shift to the existential in two contexts. First, they shift when the focus is on the current posture, which happens to be unknown – if the current posture was known, this context would trigger the shift to a non-default specific postural (see Section 2.2.); and if the focus was not on the posture, the default element would be used (see Section 2.1.). Example (11) illustrates such a context with the help of a "where" question: the speaker focuses on the current referent (a calabash that he has misplaced), and uses the existential to explicitly seek locative information - part of this information is how the referent is positioned relative to the ground. By using the existential, he does not presuppose anything about its current posture, and invites the addressee to fill in this gap in his knowledge.

Yin, d'a (11)hok **d'e** nnang? say calabash DEF exist where '(He) said, where is the calabash?'

Second, speakers shift to the existential when they introduce or keep track of referents that can be identified by means of non-postural information (in presentative and demonstrative constructions only). This includes the second mention of previously-identified referents (as in (12)); and it includes referents that are non-canonically positioned, and thus identifiable through their marked non-stereotypical position (as in (13) below).

Goe-n-d'yem-nnoe lemu. (12)NOMZ(SG)-ADVZ-CL:stand(SG)-DEM.PROX FOC orange Lemu n-d'e-nnoe=hoe (...). orange ADVZ-CL:exist-DEM.PROX=exactly 'This standing one is an orange (tree). This existing orange (tree) (...).

The contexts illustrated under (11), (12), and (13) are the only contexts when speakers shift to the existential. In fact, whenever such a shift occurs, the hearer assumes that one of the above conditions applies. This assumption is illustrated in (13) below. It is taken from a matching game, in which two speakers (who could not see each other) were asked to compare pictures. Each speaker had an identical set of pictures, containing - among others - three bottles in different positions (upright, on its side, upside down, as shown in Figure 2). Speaker A. was asked to pick a picture and describe it to speaker N., who had to find the matching picture from his set. In this example, speaker A. picks one of the bottles, and introduces it with the existential predicate in the presentative construction. Semantically, his description could apply to any of the three bottles. Speaker N. thus asks for clarification - but notice that he only mentions the two non-canonically positioned bottles (the 'lying' and the 'standing', i.e., upside-down, bottles). For him, the shift to the existential implicated a non-canonical position.

# Possible referents

Figure 2. Referents discussed in Example (13)

kwalba hok na n-d'e zak-yit. A: Nde (13)one/other bottle DEF PRES PRES-exist again 'Look, (there) is again a bottle.'

N: Goenang nd'ûûn? which(SG) INSIDE Goe-t'o n-t'o nnoe NOMZ(SG)-lie(SG) ADVZ-lie(SG) LOC.ANAPH INTERR goe-d'yem n-d'yem? maybe NOMZ(SG)-stand(SG) ADVZ-stand(SG) 'Which among (them)? (Is it) this one that lies lying, or the one that stands standing?'

Similar differences in interpretation are found whenever the existential is used in place of specific posturals. Again, its interpretation can be captured with the help of pragmatic implicatures, more specifically with Levinson's (2000) Q-principle, which is based on Grice's (1975) first Maxim of Quantity (i.e., "make your contribution as informative as is required"). This principle captures the distribution of elements that are in a privative opposition: the general semantics of the existential ("existence at a location") are entailed by the specific semantics of the posturals ("existence at a location in a position"). In this case, the use of the less informative term (i.e., the existential) implicates that the more informative term (i.e., the postural) is not applicable – if it were applicable the speaker would have used the more informative term in the first place. This means, the use of the superordinate term d'e 'exist' is not always pragmatically appropriate: speakers only use it under the specified conditions – precisely because its use carries the implicature that a specific postural is not applicable (see also Skopeteas (this vol.) who uses this framework to explain the distribution of adpositions).

# Summary and discussion

This paper has discussed the coding of postural information in nominal classifier systems, focusing on a system that is based on postural semantics. The following two findings are of particular relevance to the topic of this book:

First, it was shown that Goemai uses postural semantics to set up disjoint classes. Given our knowledge of established classifier systems, such a semantic basis is unexpected: while postural information plays a role in different systems, the system as a whole is usually based on inherent properties.

However, a semantic analysis has shown that the Goemai system is not fundamentally different from other classifier systems: it is based on canonical – and hence time-stable - positions. As such, its deictic classifiers are comparable to established classifier types. Furthermore, identical semantic classes are not only coded in deictic classifiers, but also in verbs. This finding has an even wider implication: after all, only few languages have deictic classifiers, but very many languages have postural verbs. Its semantic basis offers an interesting perspective on the topic of ontolinguistics: Goemai forces its speakers to conceptualize the nominal domain in terms of its postural characteristics, since - in many different morphosyntactic contexts - it requires its speakers to select one element from amongst the closed set of postural elements.

Second, although each nominal concept is assigned to one class, speakers still have the possibility to override this default assignment and to temporarily assign a concept to a different class. It was argued that this possibility does not undermine the classificatory basis of the Goemai system. Instead, the distribution of default elements, non-default elements and the general existential is governed by pragmatic implicatures. These implicatures arise because speakers and hearers maintain expectations about normal language behavior and because they are aware of alternative expressions that a speaker could have used but did not. As such, the use of a marked alternative specific postural or of the semantically more general superordinate existential carries certain implicatures that the speaker may wish to avoid. The discussion has shown the important contribution of pragmatics to the understanding of the overall classificatory system.

#### **Notes**

- 1. This research was funded by the Max Planck Institute for Psycholinguistics (Netherlands) and the Endangered Languages Documentation Programme (UK). I am grateful to Friederike Lüpke, Andrea Schalley, Eva Schultze-Berndt, and Dietmar Zaefferer, who have given valuable comments on earlier drafts of this paper. All remaining mistakes are my own.
- 2. This paper does not discuss the categorization of the verbal domain (see McGregor 2002; Schultze-Berndt 2000), and it does not address noun class and gender systems (see Aikhenvald 2000: 19-80). It focuses on nouns denoting concrete physical concepts, but will also comment on the position of abstract concepts.
- 3. Another, less frequently discussed, possibility is the existence of classifier constructions without classifiers (see Wilkins 2000; Gaby in prep.).

4. The following abbreviations are used in the interlinear glosses:

ADVZ	adverbializer	FOC	focus	PL	plural
ANAPH	anaphor	INTERR	interrogative	POSS	possessive
CL	classifier	LOC	locative	PRES	presentative
DEF	definite article	M	masculine	PROGR	progressive
DEM	demonstrative	NEG	negation	PROX	proximal
<b>EMPH</b>	emphasis	NOMZ	nominalizer	SG	singular

- 5. Some domains are more important in some types than in others, e.g., physical properties are frequently found in numeral, locative, deictic and verbal classifiers, but only rarely in noun and possessive classifiers.
- 6. But see McGregor (2002) who argues against this assumption.
- 7. It is a matter of debate whether or not one would want to actually label such suppletive verb stems "classifiers". From a typological perspective, it may be more appropriate to use the label "classificatory verbs", and to restrict the label "classifier" to a distinct part of speech.

8. Notice that they distinguish postural-type systems from other types of systems that use superficially similar verbs, but that do not have classificatory uses. The present paper only discusses their postural type.

9. A pepe is a round mat that is used to cover food vessels. Its woven structure gives it a certain asymmetry, and the same side is consistently placed in contact with the food. I assume that this asymmetry is responsible for the occurrence of pepe in the category t'ong 'sit'.

10. The possibility of such a shift is limited by the disambiguating function of the posturals (discussed in Section 2.1.): only if the referential context is unambiguous, is it possible to, e.g., use lang 'hang/move' and t'o 'lie' to contrast a moving bee with a lying dead bee.

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