

The universality of taxonomic categorization and the indispensability of the concept 'kind'

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The role of taxonomic categorization in human interpretation of the world has for a long time been a subject of intense controversy, and, in the author's view, it has often been misunderstood. Some scholars have grossly underestimated this role, and went so far as to suggest that some human cultures have hardly any taxonomic categorization at all; others have exaggerated the role of taxonomic categorization and misinterpreted various other types of categories (such as functional and collective ones) taking them for taxonomies. It is important that both these errors be corrected, and the place of taxonomies in the human interpretation of the world be properly understood.

In a number of earlier publications (Wierzbicka 1984, 1985, 1992a, 1992b) the author has argued that the nature of human categorization can be assessed (inter alia) on the basis of linguistic evidence, and proposed ways of correcting a number of common misconceptions in this area on the basis of linguistic tests. In particular in the 1984 paper the author tried to show that the taxonomic categorization of the contents of the world reflected in the English language is more restricted than it had been previously assumed.

The present paper focusses on the other side of the coin: while the extent of taxonomic categorization reflected in English should not be exaggerated, the presence of this kind of categorization in all other languages (including the so-called 'primitive' ones) should be properly acknowledged. The paper argues that the universality of a lexically embodied concept 'kind of', which the author has tried to document here, provides important linguistic evidence on this point.

1. Introduction.

If a language had no words for concepts such as 'all', 'if', or 'because', would this affect speakers' cognitive potential? It depends. If instead of words the language had suffixes encoding the same concepts then the absence of the corresponding words wouldn't matter.

Suppose, however, that a language has only one word, or suffix, for 'because' and 'after', and that the two senses cannot be in any way distinguished from one another - so much so that in fact there would be

no grounds for speaking of two (separate) senses, but only of one undifferentiated sense.

Many would say that it didn't matter, because 'all people are equal and have the same cognitive potential, so if they don't have a word for some particular concept, they must be able to manage somehow or other and the absence of a word wouldn't disadvantage them in any serious way'. But to stop there is to hide behind a rhetorical slogan and to refuse to dispassionately examine the evidence. Acting in this way one actually provides grist to the mill of the defenders of the notion of 'primitive mentality'.

I believe that all people do indeed have the same cognitive potential, but I think that this rests on the availability of language, and on the fact that all human languages do have, in principle, the same expressive power. I say 'in principle', because certain thoughts are of course easier to express in some languages than in others. But if a language really had no way of expressing the idea of 'all', 'if', or 'because', its expressive power would indeed be limited.

Consider, for example, the following conversation:

- (1) a. Why are you crying? Did someone hit you?
- b. My brother hit me because I lost the money. I'm not crying because he hit me. I'm crying because of the money.

I think a language which had no word (or morpheme, or phrase) for 'because' couldn't render the contents of this dialogue.

But why should the presence of certain words be so important? Can't people have a concept without a word for it? Are there no covert categories in language?

Covert categories undoubtedly exist and concepts may be present even if there are no words for them. But firstly, a word provides direct evidence for the existence of a concept, whereas without a word (a separate lexical item) the evidence is at best circumstantial. Secondly, in human communication it is not enough to 'have' a concept, it is also important to have means to convey it to other people (even assuming that one COULD 'have' a concept without being able to communicate it to other people). For some concepts, this can be done by means of some circumlocution or paraphrase; for others, however, it is necessary to have a direct lexical exponent.

This last point requires some elaboration and illustration.

Many Australian Aboriginal languages have a word which means 'don't know'. English doesn't have such a word. But this fact does not cause problems in communication between Anglo-Australians and Aborigines who speak these languages because the concept in question can be easily 'built' in English by combining two other concepts, for which English does have words: 'know' and negation. Suppose, however,

that a language doesn't have a word for 'know'. Could this concept be equally easily built out of other concepts? In my view it could not.

If the language in question had a word for 'don't know', one could of course try using double negation:

- (2) a. He knows where she is. =>
- b. It is not the case (or: it is not true) that he doesn't know where she is.

But this would not work - if only because many languages don't have a word for 'true', let alone 'case' (cf. Hill 1987). But even if a word for 'true' were available, the supposed paraphrase still wouldn't work. For example, the sentence (3a) (cf. Wierzbicka 1989:316) could hardly be paraphrased as (3b):

- (3) a. This dog knows that there is meat in that bag (because he can smell it).
- b. It is not true that this dog doesn't know that there is meat in this bag (because he can smell it).

Double negation is argumentative, and it rejects a denial, whereas a simple 'He knows' sentence doesn't presuppose an earlier rejection of a statement.

Perhaps the clearest example of an indispensable concept is provided by negation itself: If a language had no word (or morpheme) for saying 'No!' nothing could make up for it, because there is clearly no way to build this concept out of other concepts (as one can build the concept of 'don't know' out of 'no' and 'know').

Thus, while some concepts can be constructed out of other concepts, others have to be lexically embodied. In a sense, this proposition seems obvious. As Leibniz noted, if all concepts were to be constructed out of other concepts, this would lead to a regressus ad infinitum (cf. Leibniz MS/1903:430). If, however, there are certain conceptual primitives which can be conceived directly (not via other concepts), then these primitives could provide a firm foundation for all other concepts: an infinite number of new concepts could be built out of a small number of conceptual primitives. As Leibniz put it:

Tamesti infinita sint quae concipiuntur, possibile tamen est pauca esse quae per se concipiuntur. Nam, per paucorum combinationem infinita componi possunt. Imo id non tantum possibile sed et credibile seu probabile est, nam natura solet quam maxima efficere quam paucissimis assumtis, id est operari simplicissimo modo. (Leibniz MS/1903:430)

'Although infinitely many concepts can be understood it is possible that only a few can be understood in themselves. For an infinite number can be constructed by combining a few elements. Indeed, it is not only possible but probable, because nature usually achieves as much as possible with as few elements as

possible, that is to say it usually operates in the simplest possible way.' [my translation]

The possibility of successful cross-cultural communication hinges on the universality of the underlying set of conceptual primitives out of which every language can build a practically infinite number of more or less 'idiosyncratic' (culture-specific) concepts (by combining the primitives into different configurations). The existence of such a shared set of primitives would explain the 'psychic unity of mankind' (Boas 1938) while the hypothesis that the lexicons of different languages embody different configurations of the (shared) primitives would account for the culture-specific aspects of language and cognition.

I have tried to show (in Wierzbicka 1992a and in numerous other books and articles) that this is precisely what happens: there is a set of conceptual primitives co-extensive with a set of lexical universals, and this set of primitives-cum-universals underlies human communication and cognition; and the language-specific configurations of these primitives reflect the diversity of cultures. I think Leibniz was right in suggesting that the universal set of primitives can only be determined by trial and error, and by research in cross-cultural semantics. More than two decades of intensive search by myself and colleagues have unearthed some four dozen concepts apparently lexically embodied in all languages of the world, which can be seen as the conceptual primitives out of which all other concepts are built. This list includes, among others, meta-predicates such as 'if', 'because', 'all' and 'no', and mental predicates such as 'know' and 'think', which various writings on 'primitive thought' have alleged to be absent from this or that 'primitive language'. It also includes the concept of 'kind' - the basis of all taxonomic categorization.

2. *The universality of taxonomic categorization.*

It has often been claimed that in traditional non-Western societies ethnobiological classification is predominantly non-taxonomic - unlike the Western scientific classification, which is based on a hierarchy of kinds. In a classic statement of this position Lévy-Bruhl (1923:176) wrote:

In spite of appearances, then, these minds, which evidently have no idea of genera, have none of species, families, or varieties either, although they are able to delineate them in their language.

To illustrate this claim, Lévy-Bruhl repeated with approval remarks made by a traveller, Eyre (1845:392-3) about Australian Aboriginal languages:

He [Eyre] states that generic terms such as tree, fish, bird etc. were lacking, although specific terms were applied to every variety of tree, fish or bird. (...) The Tasmanians had no words to represent abstract ideas, and though they could denote every variety of gum-tree or bush, by name, they had no word for tree. (Lévy-Bruhl 1923:170).

Similarly, of American Indians Lévy-Bruhl says the following (again quoting, with approval, travellers' reports):

[...] almost every species has its particular Indian name. But it would be in vain to seek among them words for the abstract ideas of plant, animal, and the abstract notions colour, tone, sex, species, etc. ... In California, there are no genera, no species: every oak, pine, or grass has its separate name.' (Lévy-Bruhl 1923:171).

Have ideas such as these stood the test of time?

Some of them have. Trustworthy recent investigations by anthropologists and linguists have shown that general terms such as 'tree', 'bird' or 'fish', not to mention 'animal' and 'plant', may indeed be scant in a language while more specific words for creatures and plants may be present in abundance (cf. e.g., Brown 1984; Berlin 1990). But it is true that the idea of a hierarchy of kinds is either absent from, or marginal to, folk-biological classifications?

Some recent writers believe so. For example, Hallpike (1979:203) writes:

Rather than employing taxonomic categories, we find that primitives tend to classify their universe into 'realms' such as 'things of the forest', 'things of the village', 'things of the sea', and so on, which are not ordered hierarchically.

In addition to classifications based on the notion of 'realm', Hallpike stresses also the importance of the notion 'like' in ethnobiological classifications. He refers on this point to a well-known study by Bright and Bright (1969:70-1):

[...] Yurok informants, asked to identify a plant or animal for which they know no name, often say that it is 'like such-and-such', rather than assigning it to a class; thus several flowering bushes were described as *saksip segon* 'like wild lilac', although they bore little resemblance to the wild lilac from a white man's point of view ... When generic terms exist, they may also refer to a specific member of the class.

Ellen (1979, 1986), too, doubts the validity and the universality of the taxonomic model of classifications, 'handed down [from Aristotle, A.W.] through the Stoics, Porphyry, and the Greek commentators to Linnaeus, from whom it passed into modern biological usage.' (1979:13). He comments:

The taxonomic approach gained such wide currency that a great many ethnographers assumed that it must also necessarily order the folk classifications they were beginning to describe and analyse.

In a similar vein, Ellen (1986:88) charges that taxonomies seemingly extracted by the ethnographer or linguist from the data

[...] may do no more than reflect an artifact created by common techniques of extraction and representation. (...) Informants, unprompted, rarely in the course of their ordinary lives will use expressions such as 'is X a kind of Y?', or 'how many kinds of Y are there?' Culturally inappropriate questions, assumptions as to the existence of unitary correct representations, are commonplace.

When one reads detailed accounts of ethnobiological classifications such as the one due to the Kalam speaker Ian Saem Majnep reproduced in outline below, one must agree that principles other than the taxonomic one can play a very considerable role in ethnobiology. Majnep's account of 'Birds of my Kalam country' divides Kalam birds into 18 classes, as follows (cf. Majnep & Bulmer 1977):

1. 'Birds which men's souls can turn into.'
2. 'Birds in which women show themselves'
3. 'Birds that feed at flowering trees.'
4. 'The families of birds that feed on *gwɔ* Pipturus fruit.'
5. 'The families of birds that come to places where there are stones that they can break up small and swallow.'
6. 'Birds of the inner foliage.'
7. 'Terrestrial birds.'
8. 'Birds of the open country.'
9. 'Those birds that perch high in the lopped trees.'
10. 'The kinds of birds that just fly constantly around.'
11. 'Birds that fly above the water.'
12. 'Birds of darkness.'
13. 'Those kinds of birds that constitute the family which vomits up the foods that they have eaten.' (The bats.)
14. 'When this bird comes, we say that the season of the sun has arrived.'
15. 'Birds of the warm lowlands.'
16. 'The Yellow and the Red Birds of Paradise are birds that are different from all the others.'
17. 'The families of birds which variously take furred animals, birds, snakes, lizzards, and carrion.'
18. 'The Cassowary.'

On the other hand, other scholars (in particular, Brent Berlin and his associates; see Berlin 1992) have presented impressive evidence supporting the universal validity of taxonomies in ethnobiological classification.

From the present point of view, a crucial role must be attributed to linguistic evidence; and linguistic evidence supports, in my view, Berlin's position.

First, the apparently universal presence of at least some hierarchical categorization reflected in the lexicon (e.g., 'tree' - 'oak'; or 'bird' - 'cuckoo') does support the view that taxonomies play an important role in the conceptualization of living kinds, despite Hallpike's (1973:202) unsupported assertion to the contrary:

The existence of general and particular terms, such as 'tree' and 'oak', in the lexicon of a natural language, does not necessarily mean that the people themselves actually conceive these terms as denoting classes standing in a relation of class inclusion.

The semantic relation between terms such as 'tree' and 'oak' can be verified by a variety of linguistic tests, and wherever such tests have been applied they support the view that class inclusion is indeed involved. (cf. Wierzbicka, 1992b).

Second, as pointed out by Berlin (1992:52-53), in every known language there is a set of words regarded as the 'real names' of certain classes of living things.

When asked 'What is this called?' informants might reply with a folk generic term, with a 'horizontal extension' of such a term (e.g., 'It is like lilac'), or might say 'I don't know', but they will not say, for example, 'It is called a bird', or 'It is called a bush'. The presence of such 'real names' establishes beyond any reasonable doubt the psychological reality of the notion of biological species (or 'folk genera').

Third, and most importantly (from the present point of view), linguistic evidence suggests that the concept of 'kind' (or 'kinds') is a lexical universal. Ellen mocks the idea that informants may in the course of their ordinary lives use sentences such as 'is X a kind of Y?' or 'how many kinds of Y are there?', but in fact sentences referring to 'kinds' of living things are widely attested in traditional non-Western languages. This point will be addressed in some detail in the following section.

3. A Survey of languages

In a sample of languages of the world investigated in the collaborative research on semantic and lexical universals (Goddard & Wierzbicka, eds., 1994) ALL the languages studied had a clearly identifiable word (sometimes words) for 'kind', and all made a clear distinction between 'kind' and 'like'.

In what follows, I will illustrate this conclusion with some data from the articles included in the volume in question. I will start with the 'large' languages of Asia and Africa included in the sample (Chinese, Japanese, Thai, and Ewe), and then I will move on to 'smaller' and 'very small' languages such as Acehnese of Indonesia, Misumalpan languages of Nicaragua, Kalam and Mangap-Mbula of Papua New Guinea, Samoan and Longgu languages of Oceania, and Yankunyjajajara, Kayardild, and Arrernte of Australia.

As we shall see, in many languages, the identification of the lexical exponent of 'kind' is entirely straightforward and the distinction between the notions 'kind' and 'like' crystal clear. In others, the word for 'kind' may be involved in polysemies (so that the word for 'kind' may also mean, for example, 'eye', 'colour', 'name', or 'what').

But whether monosemous or polysemous, in each language a word for 'kind' can be clearly identified, and if it has another sense or senses, these senses are demonstrably discrete (so that there can be no question of vagueness rather than polysemy).

In Chinese (Chappell, 1994), the word for 'kind' is *zhong*, and the word for 'like', *xiang*.

- (4) a. Zhèxiē this:CL tree shù dōu all shì be tóng same yīge one:CL zhǒnglèi kind
 bù NEG shì liǎng zhǒng bù NEG tóng same
 NEG be two CL:kind NEG same NOM
 'These trees are the same kind, not two different kinds.'
- b. Zhège xiàng dīngxiāng dān bù shì dīngxiāng
 this:CL resemble lilac dān but NEG be lilac
 'This is like lilac, but it's not lilac.'
- c. Xiǎo Méi hěn xiàng tā bàba
 Xiao Mei very resemble 3SG father
 'Xiao Mei's very much like her father.'

In Japanese (Onishi 1994) the word for 'kind' is *syurui* (of Chinese origin), with a shorter variant *syu*:

- (5) a. Ki ni wa syurui ga takusan anu.
 tree LOC-DAT TOP kind NOM many exist
 'There are many kinds of trees.' (Literally, 'To trees many kinds exists.)
- b. Matu wa ki no is-syu da.
 pine TOP tree GEN one-kind COP
 'The pine is a kind of tree.'

The word for 'like' is *yoo*:

- (6) a. bara no yoo na hana
 rose GEN like COP:ATTR flower
 'a flower like a rose'
- b. Kono hana wa bara no yoo da ga bara
 this flower TOP rose GEN like COP but rose
 de-wa nai.
 COP-TOP not
 'This flower is like a rose, but it's not a rose.'

In Thai, (Diller, 1994), 'kind' is rendered as *chanít*, which can function syntactically either as a common noun or as a classifier:

- (7) a. raw dǎy du: sàt tǎ:ng-tǎ:ng lǎ:y chanít
 IPL accomplish watch animal different many kind
 'We saw many different kinds of animals.'
- b. tǎn-máy phúak ní: khu: tǎn chanít diaw-kan
 tree group like be CLF kind/CLF same
 mǎy chǎy sǎ'ng chanít
 not so two kind/CLF
 'These trees are the same kind, not two different kinds.'

'Like' is expressed in Thai by *khǎ:lǎ:y*, which optionally takes preposition *káp*:

- (8) ní: khǎ:lǎ:y (káp) kulǎ:p tǎe mǎy chǎy kulǎ:p
 this like with rose but not so rose
 'This is like a rose but it is not a rose.'

In the Niger-Congo language Ewe (Ameke, 1994), the word for 'kind' is *fomeví* whereas the word for 'like' is *abé* (éné):

- (9) a. Me- kpó lā fomeví vovovo- wó
 1SG see animal kind different PL
 'I saw different kinds of animals'
- b. É:- zə- na abé álési fofó- a zə- kna ené
 3SG walk HAB like how father DEF walk HAB like
 'S/he walks like the father does.'
- c. É:- fo- a nu abé ako
 3SG strike HAB mouth like parrot
 'S/he talks like a parrot.'

In the Misumalpan languages of Nicaragua (Hale, 1994), the notion of 'kind' is expressed by the English borrowing *sat* 'kind, sort'. As Hale notes, this term, which has replaced earlier Misumalpan words, is used with great frequency by those compiling the new Miskitu dictionary, as in the following examples:

- (10) a. lakatan ba siksə sarka kum sa
 'the lakatan is a kind of siksə (banana)'
- b. rumatis- siknis sarka kum uplava alki be
 'a kind of illness that attacks people' (rheumatism)

The concept of 'like' is expressed in Misumalpan languages by postpositional elements *baku/kaput/yapa*:

- (11) Twaina ba inska nani wala baku apia sa,
 Twaina kidi inska uk balna kaput awas ki,
 Nangkirit ya bilam balna wak yapa-sa,
 sawfish the fish PL other like-NEG3,
 sa kum bri sa.
 saa as du-w-i.
 kirit as watah ka.
 saw one have PRES3
 'The sawfish is like no other fish, it has a saw.'

In Acehnese, the Austronesian language of Indonesia, (Durie *et al.* 1994), the word for 'kind' is *macam*, although in certain contexts the word *peue*, 'what', can also be used in the sense 'kind' (and thus is presumably polysemous):

- (12) a. Na lhèc *macam* musang.
 BE three kind civet:cat
 'There are three kinds of civet cat.'
- b. Na lhèc *macam* bak mamplam lam lampòh nyoe.
 BE three kind tree mango in garden this
 'There are three kinds of mangoes in this garden.'
- c. Na lhèc *peue* musang.
 BE three what civet:cat
 'There are three kinds of civet cat.'

The concept 'like' is expressed by either *ban* or *lagèe*

- (13) Nyan *ban/lagèe* rimueng, tapi kön rimueng
 that manner tiger but not tiger
 'It is like a tiger, but is not a tiger'

In the Austronesian languages Longgu of the Solomon Islands (Hill 1994), the word for 'kind' is *vata*, and the word for 'like', *livá'a-na*:

- (14) a. ami bere-ngi-a mola vata ni i'a-i
 1PL:EX see-TRS-3SG just kind LIG fish-SG
 'we just saw (different) kinds of fish'
- b. ara goni-a pilu-i livá'a-na pilu ni boo-i
 3PL do-3SG fence-SG like-3SG fence LIG pig
 'they built (lit.do) a fence like a pig fence'

In Samoan (another Austronesian language) (Mosel, 1994), the words for 'kind' and 'like' are, respectively, *itu'áiga* and *pei*:

- (15) a. *itu'áiga* i'a 'ese'ese
 the kinds fish different
 'different kinds of fish'

- b. 'Ua *pei* 'o le masina oso atu le tino o le
 PERF *like* PRES the moon rise thither the body of
 the
 teine lea.
 girl that.
 'The girl's body was *like* the rising moon.'

In the Austronesian language Mangap Mbula spoken in New Guinea (Bugenhagen 1994), the word for 'kind' is *mataana*, a form homophonous with the third singular form of the noun mata- 'eye'. This same form also means 'color'.

- (16) Mbia mataana tel: songol, mbiagap, mi mun'esqes.
 but kind three songol, mbiagap, and mun'esqes
 'There are three kinds of bats: songol, mbiagap, and mun'esqes.'

'Like' is expressed by the phrases *ke(mbeji ta/ta ke(mbeji)*.

- (17) a. Puulu i-tooro ma i-we *kei ta* siŋ.
 moon 3S-change and 3S-become *like* SPE blood
 'The moon (its color) changed becoming *like* blood.'

- b. Zoŋ *kembej ta* puulu mi mata-ana
 sun *like* SPEC moon and eye/color-3S:GEN
 i-siŋsiŋ *kei ta* you
 3SG-red *like* SPEC fire
 'The sun (was big) *like* the moon and its color was red *like* fire.'

In the Papuan language Kalam (Pawley 1994), 'kind' is expressed by *kāŋ* and *wagn* and 'like' by *tek*:

- (18) a. Kimn sgaw ak *kāŋ*, almpal lak,
 game.mammal wallaby the *kind* two it.forms
 tap kub *wagn* ak, skol *wagn* ak.
 thing big *kind* the small *kind* the
 'There are two *kinds* of wallaby, one somewhat larger than the other.'
 (KHT, 1:4)
- b. Skol *wagn* ak lak mey madaw yb ak lak *tek* ak...
 small *kind* the it.forms that madaw true the it.forms *like* the
 'The small *kind* is like the common (larger) madaw (ground possum) ...'

- c. ... koslam ŋu-day tek ak pyowl tanl
 difficult needle *like* that having-searched having climbed
 pakpal
 they-kill
 '... climbing the trees in search of game mammals is *like* hunting for needles.'

In the Australian language Yankunytjatjara (Goddard 1994) there is a common expression meaning 'different kinds of', namely *kutjupa-kutjupa tjuta* (formally: other-other many) used as a modifier, as in *pinu kutjupa-kutjupa tjuta* 'different kinds of tree'. As Goddard points out, an expression like this was drawn upon by the Bible translators to deal with the story of Noah, who had to select some of each kind of animal to take aboard the Ark. God's instruction to Noah [Genesis 7:2] is rendered as in (97).

- (19) Munu kuka panya palya *kutjupa-kutjupa*
 and animal that good 'other-other'
 uwankaraguru tjara kutju manijira tjarpajura ...
 all:ABL part one get:SERIAL put.in:IMP
 'And from all the *kinds* of good (i.e. ritually clean) animal, put one group aboard ...'

To refer to 'kind' in the singular, the word *ini* is used, which can also mean 'name'. Goddard comments on this as follows: To say that '*kaazka* is a kind of bird' one says (to give a calque rendition) '*kaazka* is a bird name'; but this is surely a different sense of 'name' than that used in relation to a person or a place. I would suggest in fact that *ini* is a precise exponent of (A) KIND OF. This is illustrated with the following example:

- (20) a. Wiya, kuka *kutjupa* palajja!
 no animal other that
 Kuka ini *kutjupa*. Wai wayuta!
 animal 'name' other not at all possum
 'No, that's a different animal. An animal (of) another *kind* (name).
 No way is it a possum!'
- b. Kuka nyanga kutjara ini kutjuŋu
 animal this two 'name' oneEMPH
 kutjupa wiya
 other no
 'These two animals are of the one kind, not of different kinds.'

The word for 'like' is *purunyapa*:

- (21) a. Papa *purunyapa*
 dog *like*
 'Like a dog.'
- b. Ngayulu mutuka nyanga *purunyapa* kanyimma.
 I car this *like* have: POT
 'Would I had a car like this.'

In the Australian language Arrernte (Aranda; Harkins & Wilkins, 1994), the word for 'kinds' is *Arrpenhe-ante-arrpenhe*, formed by reduplication of 'other' and the insertion of *ante* (discussed in Wilkins 1989:350-1).

- (22) Thihe *arrpenhe-ante-arrpenhe* nthakentye unte are-ke
 bird other-ONLY-other how.many 2SG:A see-PC
 Darwin zoo-ke are-tyeke alhe-me-le?
 Darwin zoo-DAT see-PURP go-NPP-SS
 'How many (different) kinds of bird did you see when you went to the zoo in Darwin?'

'Like' is usually expressed by *-arteke* 'Semblative' (Wilkins 1989:347-8):

- (23) a. Urreye nhenge-le mpware-ke artwe-le-arteke.
 boy REMEMB-ERG make/do-PC man-ERG-like
 'The boy behaved just like a man (does).'
- b. Lyete-ulkere ampe mape ne-tyeke arrenge
 now-MORE child PL (GRP) be-PURP grandfather(FF)
 ine-kenhe ne-tyert-arteke.
 3PL-POSS be-REMP: HAB-like
 'Nowadays kids should be like their grandfathers used to be.'

Finally, in the Australian language Kayardild (Evans, 1994), the word for 'kind' is *miny*, a word which can also mean 'colour' (cf. a similar polysemy in Mangap Mbula). For example, Evans mentions that in discussing the pair of elephants in Noah's Ark, the following was offered:

- (24) dathin-a kiyarrng-k.. warngid-a *miny* dali-jarrma-th.
 that-NOM two-NOM one-NOM kind-NOM come-CAUS-ACT
 'Those two .. he brought one kind (of them on board).'

To refer to 'different kinds of' a reduplication of the so-called proprietive form of the word *miny* is used: *minyiwuru minyiwuru*, literally 'kind-having kind-having'. The concept 'like' is rendered in Kayardild by the word *maraka*, for example:

- (25) a. kirrmaku, *maraka* maku
 'he is effeminate, like a woman/as if he were a woman'
- b. danda kunawuna jungarr, *maraka* niwanda kanthathu mankar
 'this child is big, he is sturdy like his father'

Conclusion

The role of taxonomic categorization in human interpretation of the world has for a long time been a subject of intense controversy, and, in my view, it has often been misunderstood. Some scholars have grossly underestimated this role, and went so far as to suggest that some human cultures have hardly any taxonomic categorization at all; others have exaggerated the role of taxonomic categorization and misinterpreted various other types of categories (such as functional and collective ones) taking them for taxonomies. It is important that both these errors be corrected, and the place of taxonomies in the human interpretation of the world be properly understood.

In a number of earlier publications (Wierzbicka 1984, 1985, 1992b) I have argued that the nature of human categorization can be assessed (inter alia) on the basis of linguistic evidence, and I proposed ways of correcting a number of common misconceptions in this area on the basis of linguistic tests. In particular, my 1984 article on the subject concluded as follows:

I submit that taxonomic classifications play a lesser role in human thinking than has been assumed, especially outside the area of biological kinds. In particular, numerous 'taxonomies' discussed by Rosch and her associates turn out not to be taxonomies at all. Admittedly, our principal categorization of the world does seem to be taxonomic, both in the areas of biological kinds and of 'manufactured' environment: we identify the components of our environment as kinds of things, be they parrots, roses, horses, bottles, tricycles, or cars. But, above this basic level of categorization, it is only with respect to the biological environment that we group kinds of things into superkinds (i.e., into higher-level taxonomic concepts). With respect to the manufactured environment, we proceed differently - we group kinds of things into

supercategories on a different basis. We no longer ask, What kind of thing is it?, rather, we ask, What is it for? How can one use it? Where does it come from? Why is it there? In other words, we view such things largely in terms of our human interests, rather than in terms of the more disinterested question, What kind of thing is it? And when we view nature from the perspective of our human interests, we also create nontaxonomic concepts of various kinds, such as *fruit*, *vegetables*, *pets*, or *weeds*.

As this brief summary indicates, in (Wierzbicka 1984) I tried to show that the taxonomic categorization of the contents of the world reflected in the English language is more restricted than it had been previously assumed.

The present paper focusses on the other side of the coin: while the extent of taxonomic categorization reflected in English should not be exaggerated, the presence of this kind of categorization in all other languages (including the so-called 'primitive' ones) should be properly acknowledged. The paper argues that the universality of a lexically embodied concept 'kind of', which I have tried to document here, provides important linguistic evidence on this point.

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