

The Vietnamese classifiers ‘*CON*’, ‘*CÁP*’ and the Natural Semantic Metalanguage (NSM) approach: A preliminary study

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Abstract. This preliminary study is the first-ever attempt to analyse the lexical semantics of the two most commonly used classifiers in the Vietnamese language, ‘*con*’ and ‘*cá*’, using the Natural Semantic Metalanguage (NSM) approach (Wierzbicka 1996; Goddard & Wierzbicka 2002; Goddard 2009). The study originates from an experience in teaching Vietnamese as a foreign language in Australia, where students’ difficulty in learning/acquiring the usage of the Vietnamese classifiers and the classifier noun phrases was observed. The ultimate aim of this pilot study is to use the semantic analysis of the classifiers achieved through NSM to enhance teaching and learning Vietnamese as a foreign language, and to advance the understanding of one of the world’s most extensive and elaborate classifier systems. If this aim is achieved then the study will further support the claim that NSM is an effective tool in the explanation of lexical semantics and language-specific grammatical categories and constructions (Goddard 2011:336).

Keywords. classifiers, semantics, Vietnamese, Natural Semantic Metalanguage, foreign language acquisition

1. The Vietnamese language: an overview¹

Vietnamese is the official language of Vietnam. It is spoken by almost 90 million people within the country (including many ethnic minorities of Vietnam), and by approximately 3 million people in over 100 countries outside Vietnam². Vietnamese is among the top twenty most spoken languages in the world. In Australia, Vietnamese is one of the top ten foreign languages studied by students in schools (Liddicoat, Scarino, Curnow, Kohler, Scrimgeour & Morgan 2007).

Genealogically, Vietnamese is a Mon-Khmer language of the Austroasiatic language family. It is a tonal, isolating, non-inflectional language, and has subject-verb-object (SVO) word order. There are four main mutually intelligible dialectal regions with the following respective main cities: Northern (Hanoi), North Central (Vinh, Nghệ An Province), Central (Huế, Thừa Thiên Province) and Southern (Hồ Chí Minh City or Saigon).

Vietnamese has six lexical tones, outlined in Table 1; however, in the Southern dialect, the high-broken (*ngã*) and low-rising (*hỏi*) tones are pronounced the same as the low-rising tone (*hỏi*). Despite this pronunciation difference, the southern and northern dialects are still mutually intelligible.

Tone name	Description	Tone diacritic	Examples
<i>Ngang</i>	Mid-level	(no mark)	<i>ma</i> (ghost)
<i>Sắc</i>	High-rising	´	<i>má</i> (cheek)
<i>Huyền</i>	Low-falling	`	<i>mà</i> (but)
<i>Ngã</i>	High-broken	˜	<i>mã</i> (horse)
<i>Hỏi</i>	Low-rising	ˇ	<i>mả</i> (grave)
<i>Nặng</i>	Low-broken	˘	<i>mạ</i> (rice seedling)

Table 1. Vietnamese tones (adapted from Phan 1996).

For most of its history, the Vietnamese writing system used classical Chinese characters. In the 13th century, the *Chữ Nôm* system was invented based on Chinese characters. The current alphabet system, called *Quốc Ngữ* (national

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² <http://www.nationsencyclopedia.com/Asia-and-Oceania/Vietnam.html> (retrieved 12 Feb 2012).

language/script) has been romanised, and has replaced *Chữ Nôm*, under French colonialism.

Other distinctive characteristics of Vietnamese include serial verb constructions and an extensive classifier system. The latter will be discussed next.

2. The Vietnamese classifier system

A classifier system is defined as “a grammatical system of noun categorisation device(s) in a particular language” (Aikhenvald 2003:vii). Classifiers are also described as “grammatical devices which, in certain contexts, oblige speakers to categorise a referent along specific semantic dimensions” (Goddard 2011:346). Classifier systems exist in many languages in all parts of the world (see Allen 1977). Apart from its size, a classifier system is, according to Goddard (2011:347-348), “always predominantly, if not exclusively, semantic”, and is “not normally involved in grammatical agreement processes”. Classifiers are closely attached or related to the head nouns that they refer to. The Vietnamese noun phrase and its structure will therefore be examined next.

2.1 *The Vietnamese Noun Phrase (NP)*

The Vietnamese noun phrase (NP) has the same word order type as that in Bengali, Chinese, and Semitic and Amerindian languages. This word order is Q C N, where Q stands for ‘quantifier’, C ‘classifier’ and N ‘noun’ (Allan 1977:288). Furthermore, as seen in table 2 below, the head of a Vietnamese NP also has post-nominal modifying components:

Quantifier	(Focus marker?)	Classifier (CL)	Head noun	Adjective	Demonstrative
		<i>con</i>	<i>dao</i> (knife)		
		<i>cái</i>	<i>bàn</i> (table)		
		<i>cuốn</i>	<i>sách</i> (book)		
		<i>trái</i>	<i>táo</i> (apple)		
<i>một</i> (one)	** <i>cái</i>	* <i>xe</i> <i>chiếc / cái</i>	<i>đạp</i> / * <i>xe đạp</i> (bicycle) * <i>xe xích-lô</i> (cycle)		<i>này</i> (this)
<i>hai</i> (two)	** <i>cái</i>	* <i>máy</i> <i>cái</i>	<i>vi-tính</i> / * <i>máy vi-tính</i> (computer) * <i>máy bay</i> (aeroplane)		<i>ấy</i> (that)
		Ø	<i>lơ phã</i> (<i>la phở</i>) (nonsense syllable + real word)		
<i>những</i> (some of)	** <i>cái</i>	<i>con</i>	<i>ngựa</i> (horse)	<i>đen</i> (black)	<i>đó</i> (those)

Table 2. The Vietnamese classifiers and noun phrases (adapted from Nguyen HT 2004).

Note that the demonstrative is always in the final position of the Vietnamese NP. In this table, * denotes an unclear situation where the words involved (*xe*, *máy*) need further in-depth study to determine if they are classifiers or part of compound nouns. For instance, apart from the two listed examples of ‘cycle’ and ‘bicycle’, *xe* goes with many other transport means: *xe đò* (coach), *xe buýt* (bus), *xe hon-đa* (Honda), etc. Similarly, the word *máy* goes with automated or electronic devices, big or small, ranging from ‘aeroplane’ to ‘computer’. This confusion is well-documented in Vietnamese linguistics, as noted by Thompson (1965:127), “In Vietnamese, it is notoriously difficult to distinguish between phrases and compounds, as word order is identical in both cases, namely, ‘head–modifier’: Compounds are perhaps the least understood elements of Vietnamese grammar”.

The “second” element of the Vietnamese NP (Nguyen VU 2008:8) *cái*, marked with a double asterisk ** in column two of the above table, presents an interesting structure. This structure looks like “a double classifier construction”, which is “unique and apparently least understood in the Vietnamese classifier structure” (Tran 2011:41).

Nguyen TC (1975) and Nguyen HT (2004) posit that this second *cái*, which precedes the classifiers *con* in example (1) and *cuốn* in example (2), marks definiteness or acts as the focus marker of the NP, along with the conditional

presence of the demonstratives ‘*đó*’ and ‘*này*’. This second ‘*cái*’ does not form a double classifier structure, as the sequence of *CL-CL is ungrammatical in Vietnamese.

- (1) *những cái con ngựa đen đó*
 some.of cái CL horse black those
 ‘Some of THOSE black horses’
- (2) *cái cuốn sách này*
 cái CL book this
 ‘THIS book’

2.2 The number of classifiers in the Vietnamese language

There has been no definite answer to the question of exactly how many classifiers there are in the Vietnamese language. This number has been estimated to be as little as 40 (Ly 1998), up to as many as 221 (Truong 1883). Tran (2011:52) posits that the reason for this high number is because linguists who work particularly on numeral classifiers consider any element that comes between the numeral and the noun to be a classifier. These linguists (such as Tran, Bui & Pham 1960; Le 1972; Nguyen KT 1963; Li & Thompson 1981) take into account words that occupy this position as both “true” classifiers and measure nouns. The latter is used to denote “units of measurement or ‘contents’” (Nguyen DH 1957:128), similar to the English phrases used before mass nouns such as ‘three glasses of water’, ‘five kilos of meat’, etc. Tran (2011:21) defined “true classifiers” as those that “qualify the noun based on some intrinsic features and inherent properties of the noun’s referent (shape, animacy, function, etc.)” The two examples below illustrate this distinction:

- (3) *ba cái bát*
 three CL bowl
 ‘three bowls’
- (4) *ba bát cơm*
 three bowl [noun (measure)] rice
 ‘three bowls of rice’ (after Nguyen DH 1957)

Based on the different lists of classifiers and measure nouns provided by the above-mentioned linguists, Tran (2011) has put together a list of 160 “true” classifiers (see table 3), of which ‘*con*’ and ‘*cái*’ are two of the most commonly used. From this point on, the term “classifier” or “classifiers” is used to refer to the “true” classifiers.

2.3 Conventional semantic categorisation of Vietnamese classifiers

Most studies on classifiers to date are generally concerned with the description of the entire classifier system of a particular language, or with a general analysis of the semantic organisation of classifier systems (Goddard 2011:353). For example, based on his observation of more than fifty classifier languages, Allan (1977:297) identified seven categories of classification, of which “the first five occur only in classifier languages”. These categories are: (a) material, (b) shape, (c) consistency, (d) size, (e) location, (f) arrangement, and (g) quanta.

The following examples show some of the semantic categorisations in a selection of classifier systems discussed in Goddard (2011:348-355):

- Jacalteco, a language spoken in Guatemala (Craig 1986), has 24 classifiers and they are classified into two distinct groups: social world (people, spiritual beings), and inanimate world (natural and manufactured things):

- a. *Xil naj Pel hune7 bin no7 txitam tu7.*
saw CL:MAN Pedro one my CL:ANIMAL pig that
‘Pedro saw that one pig of mine.’
- b. *Xil naj no7.*
saw CL:MAN CL:ANIMAL
‘He saw it (an animal).’

- Matthews & Yip (1994) studied Cantonese and grouped the classifiers according to the physical properties (shape, orientation, size, etc.) of the nouns:

lāp for round, small things

fūk for thin, flat things

ga for vehicles, or large machines with moving parts

This universal prominence in the semantic organisation of the world classifier systems has also been applied to the Vietnamese classifier system, in which animacy and shape are also the two major semantic categories that most Vietnamese scholars have observed (Tran 2011:57). These two semantic categories have been identified according to the four major groups of nouns that denote (a) humans, (b) animals, (c) plants and (d) objects, things, natural phenomena and abstract notions (Tran 2011:53). This method of categorisation is widely accepted among Vietnamese linguists such as Hoang (1996), Le N (2008), Le VL (1972), and Nguyen TC (1975). Table 3 below is adapted from Tran (2011) and lists 160 classifiers and their semantic categorisation. Tran (2011) derives this composite list from various descriptions of the semantic categorisation of the Vietnamese classifiers by such authors as Bisang (1999), Emeneau (1951), Hoang (1996), Hui (2003), Le N (2008), Ly (1998 2005), Nguyen DH (1957), Nguyen PP (2002), Nguyen HT (2004), and Thompson (1965).

Semantic category	Primary features	Secondary features	Classifiers
Animacy			<i>cái, con, chiếc</i>
	(Parts) 1-D(imensional)	long	<i>cây, sợi/ cọng, tia, làn, hợn, dợn, đũa, đoạn, khúc, thẻo, rẻo</i>
		flat, square + width	<i>bức, tấm, tờ, lá, manh</i>
	(Parts) 2-D	flat, square + length	<i>thanh, thỏi, thẻo</i>
		flat, round	<i>khoanh, văng</i>
flat, even		<i>mảnh, thừa, mảng, lát, khoáng/ khoảnh, khoanh</i>	
Shape	(Parts) 3-D	round, cubic, cylindrical	<i>hòn, viên, cục, hạt/ hột, quả/ trái, giọt, tảng, khối, phiến, súc, khối</i>
		cone shape	<i>nắm, ngọn, đỉnh</i>
		small size/bite	<i>miếng, mẩu</i>
	(Collectives) 3-D	forming rectangular shape, vertical direction	<i>mảnh/ thép, tập/ tệp, xếp/ xếp/ đệp, chồng</i>
		forming pyramid shape	<i>đụn, đống</i>
forming cylindrical or round shape		<i>vác, búi/ búi/ lọn, bó, nắm/ vắt</i>	
(Collectives) 1-D	dynamic	<i>dòng, luồng, đoàn, lớp</i>	
	stationary	<i>chân, dãy, hàng, rặng, dải</i>	
(Collectives) gathered + clustered		<i>nải, quây, buồng, cụm, nhóm, chùm, chòm, đám, đàn, bầy</i>	
(Collectives) shapeless		<i>bộ, mớ, múi, mẻ, nhả, trà, xâu, tràng, xóc, thang</i>	

Function	Transportation	land, air, water	<i>chiếc</i>
	Cultural, social, literary/artistic works	oral	<i>bài, vở</i>
		written	<i>quyển/cuốn, cuốn, bản, bài, pho, thiên, áng, đạo</i>
	Buildings		<i>túp, căn/gian, ngôi, tòa</i>
	Events		<i>đám</i>
Arrangement	Single		<i>chiếc</i>
	Paired		<i>đôi, cặp</i>
Limited use			<i>cỗ, kiện, đồng/nặng/trụ, quán, vì</i>
Miscellaneous			<i>bãi, bàn, bậc/bực, bụi, cánh, ngón, mái, điều, phong, món, mũ, ổ</i>
'Event'	Action, state, process		<i>chuyến, cơn, cú, cuộc, giá, khoa, kỳ, lần, lời, lượt, mẻ, mối, nét, nền, nguồn, nhát, niêm, nổi, nước, sự, trận, ván, vế, vụ</i>

Table 3. Semantic categorisation of Vietnamese classifiers (adapted from Tran 2011:452).

Tran (2011:47) argues that on one hand, “the meaning of a classifier can not be specified if it stands alone” (example 5), but on the other hand “classifiers are not completely meaningless” either. This is because, firstly, many specific classifiers bear the meaning of the nouns that they relate to (example 6), and secondly, many specific nouns can be used with different classifiers (example 7).

- (5) *Tôi gặp một cái Ø giữa đường.*
 I meet one CL Ø in.the.middle street
 ‘I encountered a CL Ø in the middle of the street.’ (after Hoang 1996:25)

- (6) Classifiers Noun Categorisation
lá leaf for leaf-like objects
cây tree, plant for trees and 1-D, long, rigid objects
trái fruit for fruits and 3-D big, round objects
 cục lump, clot, piece for 3-D lumpy objects
 (after Tran 2011:48)

- (7) *con* *dao*
 CL knife ([+animate], active knife)
cái *dao*
 CL knife ([-animate], usually big knife)
cây *dao*
 CL knife ([±animate], long, tapered/slender, small knife)
 (after Le N 2008:79)

There exists no comprehensive and systematic semantic analysis of the Vietnamese classifier system. The semantic and cognitive foundations of classifier systems, which allow speakers or researchers to categorise them, are “rather subtle, complicated and have fuzzy boundaries even for native speakers” (Ly 1998:71); at the same time, like “so many semantic phenomena, the key to developing a clear picture [of the exhaustive uses of classifiers] is to work patiently through the language-specific facts” (Goddard 2011:353). Therefore, this preliminary study attempts to find whether the meaning of a classifier can be specified through NSM. The results of this study, if confirmed, will encourage further studies of classifier systems cross-linguistically.

3. The present study

3.1 The NSM approach

Founded by Wierzbicka in 1972, the NSM has since been refined and the number of universal semantic primes has grown through a large body of work on at least 20 languages (see Goddard 2009). The NSM approach is convinced that “meaning is the key to insightful and explanatory descriptions of most linguistic phenomena, phonetics and phonology excepted”, and “... is also the bridge between language and cognition, and between language and culture.” (Goddard 2009:459)

The NSM approach utilises “semantic explication” or “reductive paraphrase” to represent meaning of words or utterances “in the simplest possible terms”. These terms form the set of “semantically minimal ‘cores’” or “semantic primitives” (Goddard 2011:65), which in turn cannot be defined any further. Wierzbicka (1972) originally proposed only 14 items, but has been persistently expanding the set of semantic primitives to 63. This set of semantic primitives is seen as a “mini-language with the same expressive power as a full natural language” (Goddard 2011:69).

NSM researchers also identify a set of non-primitive words which are often seen in semantic explications, but, like the semantic primitives, are equally difficult to define. These are called semantic molecules, labeled in explication as [m].

With various schemes of categorising classifiers (as mentioned in section 2.3), and the body of semantic analysis of the non-primitive terms by NSM, it is suggested that although “classifiers are often presented in the secondary literature as exotic and mystifying, there is no reason to think that they are any less amenable to reductive paraphrase analysis than words of other kinds” (Goddard 2011:355).

3.2 Data sources for the Vietnamese classifiers ‘con’ and ‘cái’

This study uses data from the Corpora of Vietnamese Texts (CVT) by Pham, Kohnert & Carney (2008), the first language corpus in Vietnamese available electronically. The CVT consists of over one million Vietnamese words from newspaper articles and children’s literature, published between 1981 and 2006 (including some with unknown publication dates). A wide range of topics/genres are covered.

The entire corpus has 1,055,617 total words. ‘*Con*’ and ‘*cái*’ are among the 150 most frequent words in the entire CVT: 17th (4,857 occurrences) and 118th (1,627 occurrences), respectively. The present study only examines the occurrence and use of the two classifiers as “true” classifiers. As a result, the proportion of examples with ‘*con*’ used as a “true” classifier is 36.52% (1,774 out of 4857 total occurrences), or 0.17% of the entire corpus; and that of ‘*cái*’ is 81% (1,381 out of 1,627 total occurrences), or 0.13% of the entire corpus.

3.3 ‘CON’: examples and semantic analysis

According to Nguyen VU (2008:3), both ‘*con*’ and ‘*cái*’ “have a range of kin words from various constituent languages, or neighbouring languages.” The classifier ‘*con*’ is said to originally have an “identical phoneme in [kon] of the Thai language, meaning ‘person’ or ‘human being’ ..., and kinword [kon] in the Mon-Khmer languages, customarily denoting ‘child’ or ‘children’” (Nguyen VU 2008:1). As discussed earlier in section 2.3, ‘*con*’ can appear with multiple nouns. Below are examples of the possible occurrences of ‘*con*’ and its semantic analysis.

People:

- (8) *con người*
CL human

Living things:

- (9) *con kiến*
CL ant
- (10) *con voi*
CL elephant

Someone (derogatory):

- (11) *con ma*
CL ghost
- (12) *con quái/ quỷ*
CL monster
- (13) *con điếm*
CL prostitute
- (14) *con buôn*
CL trafficker
- (15) *con bạc*
CL gambler
- (16) *con ăn mày*
CL beggar

Small parts of someone's body:

- (17) *con mắt*
CL eyes
- (18) *con ngươi*
CL pupil (of the eye)
- (19) *con tim*
CL heart

Places:

- (20) *con* *sông*
 CL river
- (21) *con* *đường*
 CL road

Things (small):

- (22) *con* *thuyền*
 CL boat
- (23) *con* *tem*
 CL stamp
- (24) *con* *diều*
 CL kite
- (25) *con* *cờ*
 CL chess piece
- (26) *con* *dao*
 CL knife

Explication: In this step, the draft paraphrase is used “to find the optimal set of semantic components and to frame them in terms of correct NSM.” (Goddard 2011:95). Below is the proposed explication for ‘*con*’:

‘**CON**’: This word says something of many kinds:

CON1: People

CON2: Living things

CON3: Someone

 this someone does something bad (to someone else)

CON4: Small parts of someone’s body

 these parts move

CON5: Long [m] places

CON6: Something of one kind

things of this kind are small

people can do something with things of this kind with their

hands [m]

3.4 ‘CÁI’: examples and semantic analysis

‘Cái’ is said to originally bear “strong resemblance to [Camay] in the Chamic language, ... used to denote ‘Mother’, ‘Sister’ or ‘Female’ in general” (Nguyen VU (2008:6). It can also appear with multiple nouns. Below are examples of the possible occurrences of ‘cái’ and its semantic analysis.

Things (big or small, that people can see and do something with):

- (27) *cái* *ly/ cốc*
 CL glass
- (28) *cái* *bàn/ghế*
 CL table/chair
- (29) *cái* *bằng (cấp)*
 CL (certificate)
- (30) *cái* *quán (ăn)*
 CL restaurant
- (31) *cái* *gói*
 CL parcel
- (32) *cái* *Tivi*
 CL television
- (33) *cái* *balô*
 CL backpack

Things (that people can't see or touch):

- (34) *cái quyền*
CL right
- (35) *cái chết*
CL death
- (36) *cái đẹp*
CL beauty
- (37) *cái tinh thần*
CL spirit
- (38) *cái đói*
CL hunger
- (39) *cái quan trọng*
CL important
- (40) *cái sợ*
CL fear

Parts of someone's body:

- (41) *cái chân/tay*
CL leg(s)/hand(s)
- (42) *cái bụng*
CL abdomen

Explication:

‘**CÁI**’: This word says something of other kinds:

CÁI: Something of one kind

things of this kind are not living things

things of this kind can be big

things of this kind can be small

people can see things of this kind

people can touch things of this kind

people can do something with things of this kind

CÁI₂: Something of another kind

things of this kind are not living things

people can't see things of this kind

people can't touch things of this kind

people can think of things of this kind

CÁI₃: Other parts of someone's body

Note that, in these explications, the differences between **CON₆** and **CÁI** rest on the semantic molecules for sizes and on the notion of 'handling' (Goddard 2011:355).

3.5 Referents which can occur with either 'con' or 'cái'

Either of these two classifiers can occur with a number of nouns, to denote slightly different meanings or connotations depending on the circumstances that affect the speakers' choice of referents. The below examples illustrate this point:

- | | | | | | |
|------|------------|------------------------------|---|------------|-----------------------|
| (43) | <i>con</i> | <i>dao</i> | # | <i>cái</i> | <i>dao</i> |
| | CL | knife | | CL | knife |
| | | (a knife being used) | | | (usually a big knife) |
| (44) | <i>con</i> | <i>mắ</i> | # | <i>cái</i> | <i>mắ</i> |
| | CL | eye[s] | | CL | eye[s] |
| | | (having animacy connotation) | | | (in general) |

The ability to have a choice of classifiers for the same noun is, as Goddard (2011:347) explained, because “classifiers ... do not classify nouns but the referents of nouns—the actual things in the world which the speaker ‘picks out’ to say something about on a particular occasion.” This explanation is confirmed by other researchers such as Ly (2005:219), whose definition of the meaning of classifiers helps bring the universal grammar concept and the NSM approach to

the present study: “Classifiers have a meaning in the preconceptual sense, a meaning that stops at the level of perceptive ‘representation’ or ‘image’, that is, ‘thought through feeling’ about the object.”

4. Concluding remarks

This preliminary study attempts to respond to the idea by Goddard (2011:355) that it is possible to apply the reductive paraphrase analysis or NSM approach to explicate the meanings of classifiers. With further resources, the preliminary proposed explications can certainly be expanded comprehensively if (a) an exhaustive study of all occurrences of the classifiers under examination is achieved; (b) more semantic molecules are used to improve the well-formedness, coherence and substitutability; and (c) the explications are tested with native speakers to satisfy their intuitions about the meanings in context.

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