2. NOMINAL LEXEMES

The analysis of repetitive nominal lexemes in the languages contained in the corpus will be given in terms of form and meaning interspersed with comments on individual items.

The term 'meaning' is interpreted as consisting of three types, denotative, connotative and compositional, specifically applied in the analysis of Sinitic nominal data. The first term refers to the relationship between lexical items and the things, events and states of affairs in the objective world external to language, while the second emphasizes the emotional associations suggested to a speaker by lexical items; compositional meaning refers to lexemes whose meaning has been achieved through the combination of a formally consecutive repetitive constituent with a formally non-repetitive one. Thus the concept of 'compositional meaning' differs from the other two in one important respect: it is entirely language-internal in its scope, i.e. it deals exclusively with the semantic relationship between linguistic items as such. It is also obvious that if an entity is to be analysed as semantically compositional, it must contain semantically at least one sufficiently transparent constituent.

Though the term 'compositional' logically overlaps with the first two – which are not mutually exclusive either – in that a semantically compositional lexeme is both denotative and possibly also connotative in meaning in the senses defined above, it will, in like manner with the other two, serve as a title of a separate chapter below. Redundancy in the exemplification of each meaning type will be avoided, i.e. a lexeme can appear only once as a token of a meaning type.

Formally intact constituents in a repetitive string are consistently marked with capital letters in the study, the furthest left being symbolized by A, with the following constituents to the right complying with alphabetical order. These variables represent a syllable which often stands for a monosyllabic morpheme in the languages concerned. Formally versatile constituents in a repetitive string need a few additional symbols to express the regular changes affecting the internal structure of syllables; fluctuation in syllable form characterizes repetitive lexemes in Old Chinese and especially the Mon-Khmer languages of the corpus. Consequently, the following additional symbols will be used:

(i) A slash followed by a small letter (/x) after a capital letter refers to a change in the rhyme of a syllable of an output form in comparison with the structure of the same syllable in the input form; e.g. A/x.

(ii) A hyphen (-) after a capital letter is a sign of a change in the tone of an output form in comparison with the structure of the same syllable in the input form; e.g. A-.

(iii) A small letter followed by a slash (x/) before a capital letter refers to a change in the onset (= syllable initial consonant) of an output form in comparison with the structure of the same syllable in the input form; e.g. x/A.

Constitutive syllables clearly functioning as affixes according to the sources used are usually ignored in determining the structure of an item in terms of the letter system, unless they are either instrumental in the formation of a repeated form or are repeated themselves. Such an unrepeated affixal constituent, apparently forming an unalienable part of an item in the data, is placed in parentheses. Sub-syllabic affixes, when recognized, are parenthesized under similar conditions as syllabic ones.

The repetitive forms in the data that comply with the following definitions, constitute the corpus of nominal lexemes in this chapter:

(i) Lexemes referred to as repetitive ('reduplicative') in a source written in English or called by an equivalent term in a non-English source.

(ii) Lexemes treated as outputs of a productive repetitive process in the sources or complying in structure with an output of a generally acknowledged repetitive process according to the sources.

(iii) Lexemes analysable as being composed of two constituents: a consecutive repetitive constituent and another constituent. Semantic transparency is expected, total or partial.

(iv) Opaque lexemes that contain a consecutive repetitive element and a non-repetitive element which presumably are historically similar to the kind of lexemes defined in (iii), the only difference being that they have become non-compositional, i.e. they have completed the lexicalisation process.[4]

These definitions are considered decisive in identifying the set of repetitive lexical forms constituting the corpora in chapters 3, 4 and 5.

4 It is important to emphasize a distinction between a native speaker's understanding of the transparency of lexemes and a non-native speaker's notion of the same. It is evident that the kind of knowledge applied in this respect to the compound items in this study is definitely of the latter kind, i.e. a compound lexeme is transparent to the extent that its putative constituents appear as independent entries in a dictionary or other source. Naturally, dialectal proximity, the same sub-group for example, is here proposed as a means of deciding on the degree of the transparency of an item.

2.1. THE SINITIC GROUP

The classification of Sinitic speech forms followed here is based on Yuan (1989). The set of Sinitic languages which have furnished the items to the nominal corpus includes representatives from almost all major dialect groups within this classification, with the exception of Gan and Hakka.

2.1.1. Denotative meaning

2.1.1.1. Kinship terms

Kinship terms are a category accounting for a large number of AA repetitive nouns. This reflects the importance of the extended family system within traditional Chinese society. The following presentation from various speech forms attempts to offer as comprehensive a selection as possible[5]. E.g.:

a) *Standard Chinese*:

gū gu	'father's sister, aunt'
gōng gong	'father-in-law'

(Chao 1970: 200)

b) *Northern Mandarin*:

pa$^{51/45}$ pa	'father'
t'ai$^{51/21}$ t'ai	'(paternal) great-grandmother'

(Mancheng, Hebei) (Chen 1988: 109)

ma$^{213/21}$ ma	'mother'
me^{51} me	'younger sister'

(Xuzhou, Jiangsu) (Su & Lü 1994: 187, 189)

ta^{412} tɐ(ɯ)^{412}	'father's younger brother, uncle'
p'ɐ(ɯ)^{31} p'ɐ(ɯ)$^{31/33}$	'husband's mother, mother-in-law'[6]

(Luoyang, Henan) (He 1984b: 293)

c) *North-western Mandarin*:

tɕiɛ$^{313/42}$ tɕiɛ^{313}	'elder sister'
tɕiəu^{53} tɕiəu$^{53/31}$	'mother's brother, uncle'

(Xinzhou, Shanxi) (Wen & Zhang 1994: 3)

---

5 Except for Standard and Old Chinese forms, as well as those from Taiwanese and Cantonese, forms from other Sinitic speech forms have a specification of the place of their origin, complemented by the name of the respective province, throughout the work.

6 As the [ɯ] at the end of syllables in items from Luoyang is a suffixal element (see He 1984b: 280), it is placed in parentheses.

iɤ$^{51/44}$ iɤ 'paternal grandfather'
nai$^{51/13}$ nai '(paternal) grandmother'
(Wulumuqi/Ürümqi, Xinjiang) (Zhou 1994: 242)

pɑ^{53} pɑ '(paternal) grandfather'
nɑ^{24} nɑ '(paternal) grandmother'[7]
(Xi'an, Shaanxi) (Wang 1995: 82)

iɑ^{24} iɑ 'wife of father's younger brother, aunt'
lɔ$^{53/35}$ lɔ '(maternal) grandmother'[8]
(Yinchuan, Ningxia) (Li & Zhang 1995: 96)

d) *South-western Mandarin*:
祖祖 '(paternal) great-grandfather'
(Chengdu, Sichuan) (Liang 1987: 113)

e) *Xiang dialects*:
man^{41} man 'father's younger brother, uncle'
sən^{41} sən 'father's younger brother's wife'
pə^{24} pə 'father's elder brother'
tie^{33} tie 'father'
tia^{33} tia 'paternal grandfather'
ti^{55} ti 'younger brother'
(Changsha, Hunan) (ChaFYCD[9] 1993: 158, 188, 74, 82, 52, 8)

f) *Wu dialects*:
sɔ^{34} sɔ^{34} 'elder brother's wife, sister-in-law'
ɲiaŋ^{53} ɲiaŋ^{53} 'father's married sister, aunt'
so?^{5} so?^{5} 'father's younger brother, uncle'
(Shanghai, Jiangsu) (Min et al. 1986: 319, 256, 169)

da^{13} da^{13} 'paternal grandfather'[10]
(Jiaxing, Zhejiang) (Min et al. 1986: 11)

tu$^{55/424}$ tu^{55} 'father's married sister, aunt'
(Chongming, Jiangsu) (ChoFYCD[11] 1993: 18)

---

7 Used by Xi'an's Muslim population. Non-Muslim Chinese use monosyllabic forms (Wang 1995: 82).

8 Used by younger speakers in Yinchuan (Li & Zhang 1995: 96).

9 Abbreviation for Changsha fangyan cidian.

10 This term is also used in Songjiang and Qingpu within greater Shanghai (Min et al. 1986: 11).

11 Abbreviation for Chongming fangyan cidian.

mo^{13} mo$^{13/33}$ 'father's married sister, aunt'
t'ɑ$^{513/55}$ t'ɑ$^{513/21}$ '(paternal) great-grandmother'
(Suzhou, Jiangsu) (SFYCD[12] 1993: 100, 32)

g) *Min dialects*:
ma2 ma2 'mother of one's husband, father's younger sister'
mu2 mu2 'elder brother's wife'
ma3 ma3 'paternal grandmother'
pu2 pu2 'maternal grandmother'
(Jianyang, Fuzhou) (Norman 1992: 100, 103, 101, 112)

h) *Yue dialects*:
go^{21} go^{55} 'elder brother'
mui^{21} mui^{35} 'younger sister'
(Cantonese) (Cheung 1990: 8)

It is interesting that the Jianyang dialect (northern Min[13]) possesses repetitive terms with reference to relatives. In so doing it goes against the general trend of marking kinship with a prefix in southern Chinese dialects; compare the Southern Min (Xiamen) *a$^{55/11}$ so^{53}* 'elder brother's wife' (XFYCD[14] 1993: 33) with *mu2 mu2*, a Jianyang lexeme of the same meaning.

Since lexemes exemplifying compositional meaning are treated in the relevant chapter, kinship terms of more complex structure in the data eligible for presentation here are obviously of type (iv). Structurally the following items represent the categories ABB and ABCC. E.g.:

a) *South-western Mandarin*:
老天天 '(paternal) great-grandparent'
(Dafang, Guizhou) (Li 1987: 201)

b) *Wu dialects*:
niã^{13} fii$^{13/33}$ mɛ^{55} mɛ$^{55/21}$ 'mother's elder sister'
(Suzhou, Jiangsu) (SFYCD 1993: 186)

A form homophonic with *niã^{13} fii^{13}* in the Suzhou form appears as an independent entry in SFYCD (1993: 186), but its meaning is 'maidservant'. The other constituent in the Suzhou item is even more opaque as it neither makes an entry in

12 Abbreviation for Suzhou fangyan cidian.

13 According to the internal subgrouping of Min in Yuan (1989: 234), Jianyang is one of the northern Min dialects.

14 Abbreviation for Xiamen fangyan cidian.

the dictionary as a disyllabic unit nor does it seem to be a repetitive form of a monosyllabic lexeme which would have a meaning compatible with 'mother's elder sister'. The meaning of the repetitive part in the Dafang lexeme 老天天 is so far removed from the usual meaning inferrable from the corresponding repetitive form in other Mandarin dialects ('every day') that, even though we know that 老 in a compound kinship term refers to the siblings of the grandparents' generation, the item in question deserves to be considered opaque.

2.1.1.2. Terms referring to people and parts of the body

Lexemes denoting relatives do not constitute the only category of repetitive nominal terms related to human beings in Sinitic speech forms, as proved by the following sets of disyllabic (AA) items:

a) *Standard Chinese*:

yuán yuán	'common people'
wá wa	'baby'
tóu tou(r)	'leader'
chóu chóu	'enemy, foe'

(Wei et al. 1995: 1258, 1032, 1016, 32)

b) *Northern Mandarin*:

suaŋ^{51} suaŋ (ŋər)	'twins'[15]

(Mancheng, Hebei) (Chen 1988: 109)

c) *North-western Mandarin*:

tsɥ^{53} tsɥ^{13}	'owner of property'
nzɥ^{53} nzɥ^{13}	'girl'

(Pingyao, Shanxi) (Hou 1980: 14)

d) *South-western Mandarin*:

pai^{55} pai	'lame person, paralytic'
nai^{213} nai	'one who lisps'
ts'uei^{55} ts'uei	'one who likes to boast'

(Wuhan, Hubei) (Zhu 1987: 23-24)

According to Zhu (1987: 24), both *nai^{213} nai* and *ts'uei^{55} ts'uei* above are derived from verbs, the former from 'to press from both sides, place in between', while the latter has the verb 'to boast, brag' as its base.

15 *-ŋər* is a suffix.

惨惨	'pauper, poor wretch'
么么	'baby, infant'
扯扯	'witty person'
九九	'ninth child (in the family)'

(Dafang, Guizhou) (Li 1987: 200-201)

Li (1987: 201) refers to 惨惨 as being a deadjectival nominal, while 九九 represents another productive derivative process in which the base belongs to the class of numerals.

e) *Xiang dialects*:

ŋa^{55} ŋa	'person who harasses others with endless demands'
tɕi^{33} tɕi	'newborn babe'
tiau^{41} tiau	'newborn babe'
kən^{11} kən	'newborn babe'

(Changsha, Hunan) (ChaFYCD 1993: 51, 12, 189)

The first of the Changsha set of items above, *ŋa^{55} ŋa*, is presumably derived from a verbal base ('to bite') (ChaFYCD 1993: 51).

f) *Wu dialects*:

nø^{53} nø^{53}	'child'

(Shanghai, Jiangsu) (Min et al. 1986: 96)

sɛ^{55} sɛ$^{55/21}$	'prostitute'
sɑ^{55} sɑ$^{55/33}$ (tsɨ)	'twins'

(Suzhou, Jiangsu) (SFYCD 1993: 84, 200)

ʔmu^{55} ʔmu^{55}	'nun'

(Chongming, Jiangsu) (ChoFYCD 1993: 17)

g) *Min dialects*:

nu2 nu2	'child'

(Jianyang, Fujian) (Norman 1992: 107)

The set of AA nominals includes names of body parts where in some cases there is a temptation to explain the use of repetition as the consequence of the plurality of the objects referred to[16]. E.g.:

16 This is not restricted to names of parts of the body. See the form for 'twins' in the Suzhou dialect above.

a) *North-western Mandarin*:

pʌʔ^{53} pʌʔ^{13} 'neck'
(Pingyao, Shanxi) (Hou 1980: 14)

b) *South-western Mandarin*:

ua^{55} ua 'groin'
(Wuhan, Hubei) (Zhu 1987: 24)

胯胯 'thigh'
(Dafang, Guizhou) (Li 1987: 201)

齒齒 'tooth'
爪爪 'claw'
嘴嘴 'mouth'
掌掌 'palm'
(Guiyang, Guizhou) (Tu 1987: 203)

c) *Wu dialects*:

səu^{55} səu$^{55/21}$ 'beard'
nɑ^{55} nɑ$^{55/33}$ 'breast'
(Suzhou, Jiangsu) (SFYCD 1993: 164,34)

Lexemes which represent more complex structural patterns and which, according to our knowledge, seem to be too opaque for the purpose of being classified under compositional meaning, include the following patterned as ABA, ABB and AAB:

a) *Standard Chinese*:

dà jiě dà 'woman with power, boss'
dà gē dà 'popular name for mobile phone, man with power, boss'
yí tài tai 'concubine'
(Wei et al. 1995: 184, 183, 1204)

b) *Wu dialects*:

niaŋ^{13} niaŋ^{13} ka^{53} 'young married woman'
(Shanghai, Jiangsu) (Min et al. 1986: 256)

tɕyoʔ^{5} tɕyoʔ^{5} diɔ$^{24/55}$ 'person who is subject to changing moods'
(ChoFYCD 1993: 214)

ɕiŋ^{53} niaŋ^{13} niaŋ^{13} 'bride'
ɕyəʔ^{5} p'æ^{55} p'æ^{55} 'baby'
(Suzhou, Jiangsu) (Min et al. 1986: 337; ChoFYCD 1993: 293)

c) *Xiang dialects*:

lau^{31} tian^{55} tian 'fellow'

ŋa^{55} ŋa tɕin^{55} 'person who harrasses others with endless demands'

(Changsha, Hunan) (ChaFYCD 1993: 113, 51)

Although ABA is a possible repetitive structural pattern in Sinitic speech forms, it is not a generalisation of an identically structured set of nominal lexemes, but rather belongs in the sphere of another word class. The Standard Chinese exponents of the ABA pattern are the only ones of their kind in 漢英詞典 (1995), which makes them even more exceptional. Was there possibly a nominal element after the second *dà* in the original structure? In any case, what justifies their inclusion under denotative meaning in our scheme is that they are semantically opaque – one cannot compute the meaning of the whole lexeme from the meaning of their parts ('big' + 'elder sister' + 'big' and 'big' + 'elder brother' + 'big').

Both the Shanghai expression for 'young married woman' and the Suzhou lexeme for 'bride' above contain a formally and semantically similar constituent, *niaŋ^{13} niaŋ^{13}*. There is a slight semantic difference, however, between the two dialects in relation to this disyllabic form, as in Suzhou the term refers to the father's younger sister (SFYCD 1993: 186), while Shanghai stays on a more general level in defining it as simply referring to the father's sister without any consideration of her age (Min et al. 1986: 256). Such a Suzhou lexeme as *niã^{13} kɑ^{55}*, corresponding to *niaŋ^{13} ka^{53}* in Shanghai, does not help in making the Shanghai expression more transparent, since it refers to the childhood home of a married woman (SFYCD 1993: 186). So it seems that the two lexemes, *niaŋ^{13} niaŋ^{13} ka^{53}* 'young married woman' and *ɕiŋ^{53} niaŋ^{13} niaŋ^{13}* 'bride', are too opaque to be classified under compositional meaning.

The remaining two Wu lexemes, *tɕyo?^{5} tɕyo?^{5} diɔ$^{24/55}$* (Chongming) and *ɕyə?^{53} p'æ^{55} p'æ^{55}* (Suzhou), resemble one another in that in both it is the non-repetitive element which acts as an independent lexeme, while the repetitive part does not. Since *diɔ^{24}* refers to a certain kind of thing or functions as a measure word (ChoFYCD 1993: 106), and as *ɕyə?^{5}* means 'blood' (SFYCD 1993: 293) one cannot but consider the larger structures non-compositional.

In *lau^{31} tian^{55} tian*, the first syllable morpheme has the default reading 'old', while *tian^{55}* is formally identical with a verbal entry which means 'to throw, hurl' (ChaFYCD 1993: 173) and is consequently incompatible with the semantics of the complex lexeme with the result that *lau^{31} tian^{55} tian* has to be considered non-compositional. The other Changsha item consists of two formally different syllables both of which are meaningful: *ŋa^{55}* signifies 'to bite' and it can be inferred from various plurisyllabic entries that *tɕin^{55}* refers to 'tendon, sinew' (ChaFYCD 1993: 51, 195). So *ŋa^{55} ŋa tɕin^{55}* is a metaphorical expression whose meaning cannot be computed from the meaning of its parts.

2.1.1.3. Animals and plants

The AA structural pattern is not a rare phenomenon in nominal lexemes referring to animals and plants in modern Sinitic speech forms. Old Chinese, a language spoken about two thousand years ago, differs from modern Sinitic speech forms in having partial duplicates (A A/x).

The disyllabic exponents below provide names for mammals, birds, reptiles, fish and molluscs, and insects:

a) *Standard Chinese*:

zhū zhu	'spider'
xīng xing	'orangutan'
fèi fei	'baboon'

(Wei et al 1995: 1342, 1134, 282)

b) *Old Chinese*:

*srjit-srjut	'cricket'
*ʔjij-ʔjuj	'sowbug'

(Baxter & Sagart 1998: 66)

c) *Northern Mandarin*:

iəu^{31} iəu$^{31/33}$	'female cricket'

(Luoyang, Henan) (He 1984b: 278)

d) *North-western Mandarin*:

牛牛	'insect (in general)'[17]

(Suide, Shaanxi) (Liu 1988: 265)

tɕ'y^{44} tɕ'y(ər)	'cricket'

(Yinchuan, Ningxia) (Li & Zhang 1995: 95)

e) *South-western Mandarin*:

tin^{55} tin	'dragonfly'
tiau^{35} tiau	'rice weevil'
p'a^{213} p'a	'tortoise'
koŋ^{35} koŋ	'maggot'

(Wuhan, Hubei) (Zhu 1987: 23-24)

Analogically with *nai^{213} nai* and *ts'uei^{55} ts'uei* (p. 9), *tiau^{35} tiau*, *p'a^{213} p'a* and *koŋ^{35} koŋ* are deverbal nominal lexemes (Zhu 1987: 24), based on 'to hang, suspend', 'to crawl, creep' and 'to push with the shoulders or head', respectively.

17 This lexeme is obviously different from the majority of nominal lexemes as it does not refer to a particular species but is a superordinate term with reference to which the more specific terms indicating insects can be defined.

蚊蚊(兒) 'mosquito'
(Renshou, Sichuan) (Liu 1987: 114)

f) *Wu dialects*:
pæ^{51} pæ$^{51/33}$ 'silk worm'
(Suzhou, Jiangsu) (SFYCD 1993: 43)

g) *Min dialects*:
kó··kó· 'grunt, pomadasid'
hong-hong 'big-eye snapper'
hiau-hiau 'short-eared owl'
(Taiwanese) (Embree 1973: 141, 98, 85)

Plants or something connected with plants are also referred to by repetitive lexemes in Sinitic speech forms:

a) *North-western Mandarin*:
ts'ɔ^{53} ts'ɔ^{13} 'grass'
(Pingyao; Shanxi) (Hou 1980: 13)

mæ^{33} mæ 'potato'
(Shenmu, Shaanxi) (Liu 1988: 263)

b) *South-western Mandarin*:
枝枝 'tree branch'
椿椿 'tree stump, stump'
(Dafang, Guizhou) (Li 1987: 200)

米米 'kernel'
(Kunming, Yunnan) (Zhang Ning 1987: 26)

Zhang Ning (1987: 26) argues that 米米 exemplifies semantic specialisation concomitant with the repetitive process. Regrettably, the meaning in the Kunming dialect of the non-repetitive base is not explicitly given in the source, and since there is always a danger in dialect studies that a character is used for its phonetic value alone, one cannot be sure that the meaning of a character is suitable in a specific dialectal context. The meaning of 米 as a character is '(husked) rice, shelled or husked seed' (Wei et al. 1995: 675), and if this is taken as the meaning of an assumed Kunming base form, the shift from '(husked) rice, shelled or husked seed' to 'kernel' is undoubtedly an example of specialisation.

菌菌(兒) 'mushroom'
蔥蔥(兒) 'onion, scallion'
(Renshou, Sichuan) (Liu 1987: 114)

芽芽 'bud, sprout, shoot'
(Guiyang, Guizhou) (Tu 1987: 203)

Lexemes pertaining to the joint category of animals and plants also contain structurally more complex repetitive items, organizable under AAB, ABB and ABCC:

a) *Standard Chinese*:
là la gǔ 'mole cricket'
shuǐ gū gū '(popular name for) wood pigeon'
(Wei et al. 1995: 578, 943)

b) *Northern Mandarin*:
paŋ^{35} paŋ^{35} iou^{35} 'long-legged insect (that walks on water)'
(Mancheng, Hubei) (Chen 1988: 111)

ku^{33} ku^{33} miɐ(ɯ)^{33} 'owl'[18]
(Luoyang, Henan) (He 1984b: 295)

c) *Xiang dialects*:
ian^{13} mi^{33} mi 'dragon-fly'
(ChaFYCD 1993: 176)

d) *Wu dialects*:
麥麥丁(兒)[19] 'red bean'
蜆蜆(兒) 'a species of small clam living in fresh water'
鱄鱄(兒) 'little yellow croaker'
(Wenzhou, Zhejiang) (Zhengzhang 1979: 222)

tɕiæ$^{513/55}$ kəu^{55} kəu^{55} 'long-horned grasshopper'
(Suzhou, Jiangsu) (SFYCD 1993: 70)

fiŋ^{313} dən$^{24/33}$ dən$^{24/55}$ 'species of edible wild herb'
fɑ^{424} tsəʔ^{5} niã$^{24/313}$ niã$^{24/55}$ 'long-horned grasshopper'
(Chongming, Jiangsu) (ChoFYCD 1993: 174, 158)

---

18 Actually, the left half of the parentheses should be put right in the middle of the preceding vowel, because the *-ɯ* -suffix causes changes in a number of syllable rhymes and the result is a uniform *-ɐɯ* (*-a*, *-ə*, *-æ*, *-ɔ*, *-an*, *-aŋ* + *-ɯ* —> *-ɐɯ*) (He 1984b: 280-281).

19 The suffix written as 兒 in Chinese characters is pronounced either as [n] (older generation) or as [ŋ] (younger generation) in Wenzhou (Zhengzhang 1981: 50).

e) *Min dialects*:

bé-bé-si	'ferns, grass, a plant of the lettuce family'
hêng-hêng-chú	'eastern great reed warbler'
chhiok-chhiok-chhùi	'black-capped kingfisher'
ho··put-put/soa^{n}-kó··kó·	'dark hoopoe, eastern hoopoe, Tibetan hoopoe'
Tâi-oân-oân	'Formosan rock-monkey'

(Taiwanese) (Embree 1973: 9, 82, 57, 89/243, 251)

What all the lexemes above naturally share is repetitive structure and semantic opacity. In most cases, the possible independence of a mono- or disyllabic constituent in the set of items above can be checked except for *paŋ^{35} paŋ^{35} iou^{35}*, *ku^{33} ku^{33} miɐ(ɯ)^{33}* and 麥麥丁(兒). With the first two of the three, the principle of dialectal proximity can be used to verify the degree of opacity. Since Mancheng is situated within the northern Mandarin dialectal area, the meaningful use of characters is more probable than in transcribing more southern Sinitic varieties, as the probability of lexical deviation in the etymological sense is smaller. So if *paŋ^{35} paŋ^{35} iou^{35}* were compositional in meaning, other characters instead of 梆 'watchman's clapper; *onom.* rat-tat, rat-a-tat' (Wei et al. 1995: 29) and 油 'oil, fat, grease; oily, greasy' (Wei et al. 1995: 1237) would have been used to transcribe it. Thus in the light of the information available to us, the item in question must be considered opaque.

The Luoyang lexeme, *ku^{33} ku^{33} miɐ(ɯ)^{33}*, for its part, seems to have been originally onomatopoeic in nature, later lexicalized to mean 'owl'. The use of the onomatopoeic characters 咕 'the clucking of a hen, the cooing of a pigeon' (Wei et al. 1995: 344) and 喵 'to mew, miaow' (Wei et al. 1995: 680), is suggested as being an indication of this.

The more southern origin of the Wenzhou dialect means that we are perhaps even more in need of information that would tell us whether the sublexical forms transcribed phonetically by characters meaning 'wheat' and 'man etc.' (Wei et al. 1995: 656, 227) in 麥麥丁(兒) represent morphemes in Wenzhou in order to make a correct judgment as to the degree of transparency of the item in question. But as such information is not available, we must regard it as opaque.

Finally, the Taiwanese lexeme referring to the 'Formosan rock-monkey' is interesting as it seems to be based on the name of the island itself. It is totally opaque as confirmed by the meanings offered by Embree (1973: 251, 191) for the putative constituent morphemes in this item. If this lexeme is based on the proper name, which seems very likely, why could it not simply have been converted into a common noun in its non-repetitive form?

2.1.1.4. Necessities and natural phenomena

Concepts connected with the essentials of daily life, such as food, clothing, housing, tools etc. and the man-made environment in general, as well as natural phenomena, are often lexicalized in a repetitive AA form in quite a few modern Sinitic speech forms, as shown below. The Old Chinese form deviates from the modern Sinitic forms in representing the A A/x pattern:

a) *Standard Chinese*:

xīng xing	'star'
dōu dou	'undergarment covering the chest and abdomen'

(Wei et al. 1995: 1134, 235)

b) *Old Chinese*:

*peŋʔ-poŋʔ	'scabbard ornaments'

(Baxter & Sagart 1998: 65)

c) *Northern Mandarin*:

ts'ou^{45} ts'ou	'drawer'
po^{45} po	'(collective name for) cooked wheaten food'

(Mancheng, Hebei) (Chen 1988: 110)

d) *North-western Mandarin*:

iɔ^{31} iɔ^{35}	'sleeveless garment'
iɔ^{13} iɔ^{13}	'cave dwelling'
sæ^{31} sæ^{35}	'sieve, sifter, screen'
xu^{13} xu^{13}	'mush, paste'
ts'ʌʔ^{31} ts'ʌʔ^{35}	'blackboard eraser'
uŋ^{35} uŋ^{53}	'urn, earthen jar'
ɕiʌʔ^{53} ɕiʌʔ^{13}	'mat'
k'uæ^{31} k'uæ^{35}	'big mouthed, small bellied porcelain ware'
sɑŋ^{31} sɑŋ^{35}	'unlined jacket'
xei^{13} xei^{13}	'river'
tɕy^{13} tɕy^{13}	'canal, ditch, channel'
uʌʔ^{31} uʌʔ^{35}	'square stool'
sʌʔ^{53} sʌʔ^{13}	'forage, fodder'

(Pingyao, Shanxi) (Hou 1980: 12-14)

牌牌	'bib'
饃饃	'steamed bun, steamed bread'

(Suide, Shaanxi) (Liu 1988: 265)

tsəŋ53 tsəŋ31 'dumpling'
(Xinzhou, Shanxi) (Wen & Zhang 1994: 3)

e) *South-western Mandarin*:

ts'o213 ts'o 'the brim of a hat'
k'an42 k'an 'mound'
(Wuhan, Hubei) (Zhu 1987: 23)

缸缸 'tea jar'
沙沙 'grains of sand'
灰灰 'dust, dirt'
嘴嘴 'spout of a teapot'
杯杯 'cup'
包包 'pocket'
箱箱 'chest, case, trunk'
坎坎 'flight of steps'
夾夾 'clip, tongs'
鏟鏟 'shovel, spade'
柜柜 'cupboard'
鉤鉤 'hook'
圈圈 'pen, fold, sty'
(Kunming, Yunnan) (Zhang Ning 1987: 26)

According to Zhang Ning (1987: 26), the first four lexemes on the Kunming list represent a specialisation of meaning in relation to the base item, in other words, 缸 alone is 'jar', 沙 refers to 'sand', 灰 stands for 'ash, dust' and finally 嘴 in the non-repetitive form signifies 'mouth', all of which, when repeated, narrow down the scope of their possible denotations to the ones on the list. Zhang also proposes a derivative relationship between 鉤鉤 and 鉤 as well as 圈圈 and 圈, of which the monosyllabic bases are composite both in the class of nouns and that of verbs. He depicts the rest of the lexemes on the list as "habitually used in a repetitive form", which presumably refers to their stable status as repetitive nominal lexemes in the Kunming lexicon.

牛牛(兒) 'top'[20]
簸簸 'dustpan, winnowing fan'
抽抽 'drawer'
戳戳 'seal, stamp'
索索 'cord, rope, string'

20 Supposedly toys can be regarded as being necessities from a child's point of view.

片片(兒)	'diaper, napkin'
兜兜檻	'basket'

(Chengdu, Sichuan) (Liang 1987: 113)

Liang (1987: 26) sets up a derivative relationship between the following monosyllabic verbal lexemes in the Chengdu vocabulary and their disyllabic repetitive nominal derivations on the list above: 簸 'to winnow with a fan' —> 簸簸, 抽 'to take out (from in between)' —> 抽抽 and 戳 'to jab, poke, stab' —> 戳戳. Deverbal disyllabic nominal repetitive lexemes are not foreign to the lexicon of the Renshou dialect either, as the derivatives of 遮 'to hide from view, cover, screen' and 鑽 'to get into, make one's way into' at the beginning of the following list, also containing other repetitive forms, show (Liu 1987: 114):

遮遮(兒)	'hat, brim of a hat'
鑽鑽(兒)	'sleeveless garment'
旗旗(兒)	'flag'
紙紙	'paper'
扣扣(兒)	'button'
帕帕	'towel'
梳梳(兒)	'comb'
盤盤(兒)	'tray, plate, dish'
椅椅(兒)	'chair'
橋橋(兒)	'bridge'

(Renshou, Sichuan) (Liu 1987: 114)

Disyllabic repetitive lexemes of AA structure are a regular feature in the vocabulary of the Dafang south-western Mandarin dialect (Li 1987: 201), which is also characterized by deadjectival nominal forms derived from such adjectives as 短 'short', 鮮 'fresh', 空 'empty' and 拐 'tortuous', for example, standing first on the list below:

短短	'defect'
鮮鮮	'fresh object'
空空	'vacant position, vacancy'
拐拐	'turning place'
褂褂	'short gown'
院院	'courtyard'
柱柱	'post, pillar'
錘錘	'hammer'
推推	'hair-clippers'
滾滾	'wheel'

攪攪	'thin gruel'
砣砣	'chunklike object'
絲絲	'threadlike object'
掃掃	'rice brush'
刮刮	'dung rake'
系系	'belt, girdle, rope, cord'
柴柴	'firewood'

(Dafang, Guizhou) (Li 1987: 200-201)

The Guiyang dialect is similar to the other south-western Mandarin dialects treated so far in that disyllabic repetitive nominal lexemes are a regular feature of its lexicon. It is also similar to them in deriving nominal disyllabic items from monosyllabic verbs and adjectives (Tu 1987: 203-204):

蓋 'to put a cover on'	—>	蓋蓋 'lid, cover'
刷 'to clean with a brush'	—>	刷刷 'brush'
拍 'to clap, beat'	—>	拍拍 'bat, racket'
箍 'to bind round'	—>	箍箍 'hoop, band'
皺 'wrinkled'	—>	皺皺 'wrinkles'
凹 'concave, sunken'	—>	凹凹 'depressed place'

f) *Xiang dialects*:

fu^{13} fu$^{(13)}$	'paste'
t'au^{55} t'au^{55} (tsɨ)	'case, cover'
pa^{33} pa	'cakes (in general)'

(Changsha, Hunan) (ChaFYCD 1993: 21, 111, 28)

g) *Wu dialects*:

dɛ^{13} dɛ^{13}	'pocket, bag'

(Shanghai, Jiangsu) (Min et al. 1986: 278)

h) *Min dialects*:

sap-sap(-á)	'drizzle'

(Taiwanese) (Embree 1973: 252)

pɛ$^{51/31}$ p-βɛ^{51}	'plate, sign'[21]
piŋ$^{51/31}$ p-miŋ^{51}	'bottle'
pui^{44} p-βui^{44}	'cup, glass'
tøy$^{242/21}$ t-ləy^{242}	'sack, bag'

21 The two consonants separated by a hyphen at the beginning of the second syllable of most Fuzhou items refers to the regular morphonological changes in this dialect (e.g. Zheng 1995). Note also vocalic changes dependent on tone type.

puɔ$^{242/21}$ p-βuɔ^{242} 'notebook, book'
a?^{4} a?^{4} 'box, case'
kuaŋ$^{213/21}$ k-ŋuaŋ^{213} 'pot, jar'
kai$^{213/21}$ k-ai^{213} 'lid, cover'
ts'øy$^{213/21}$ ts'-ʒəy^{213} 'powder'
k'øyŋ$^{213/21}$ k'-ŋəyŋ^{213} 'hole'
(Fuzhou, Fujian) (Yuan et al. 1989: 300)

Examples of structurally more complex lexemes with denotations concerning necessities and natural phenomena as defined at the beginning of the chapter, share in patterns symbolized as AAB, ABB and ABA, and the following groups of Sinitic speech forms:

a) *Standard Chinese*:
wō wo tóu 'steamed bread made of corn, sorghum, etc.'
mēng mēng hēi 'dusk, twilight'
(Wei et al. 1995: 1060, 672)

b) *Southwestern Mandarin*:
ku^{55} ku tɕio^{55} '(children's game of) tending babies'
(Wuhan, Hubei) (Zhu & Liu 1981: 230)

酒窩窩 'dimple'
(Dafang, Guizhou) (Li 1987: 201)

c) *Xiang dialects*:
la^{11} la^{11} tsan^{13} 'something that cannot be estimated in advance'
(Changsha, Hunan) (ChaFYCD 1993: 46)

d) *Wu dialects*:
t'ø^{55} iɵ^{53} t'ø^{55} 'kind of pancake'
(Chongming, Jiangsu) (ChoFYCD 1993: 51)

ɕiɔ^{13} tɕiʏ^{34} tɕiʏ^{34} 'abacus rhymes'
(Hangzhou, Shaoxing; Zhejiang) (Min et al. 1986: 18)

doŋ^{13} tɕ'iø$^{55/33}$ tɕ'iø$^{55/21}$ 'door knocker'
kæ^{55} tən^{55} tən$^{55/21}$ 'mound, hillock'
(Suzhou, Jiangsu) (SFYCD 1993: 237-238, 58)

With these formally more complex items we are again faced with the situation where with some, the opacity can be verified by consulting a more extensive source while with others we have relied on the semantic information carried by ideograms.

Standard Chinese lexemes belong in the former category, of course, and starting the analysis with *wō wo tóu*, we find that *wō* means 'nest, lair, den, a hollow part of the human body, pit, etc.' (Wei et al. 1995: 1060) combined in a repetitive form with *tóu* 'head' (Wei et al. 1995: 1014). The repeated form (*wō wo*) as such does not constitute a lexeme. *Mēng mēng hēi* is identical to the other Standard Chinese example in the sense that both *mēng* and *hēi* are lexemes in their own right, but it differs from *wō wo tóu* in that its constituents are categorized as verbs or adjectives. Semantically, the individual meanings of *mēng* 'to cheat, deceive; unconscious, senseless' and *hēi* 'black, dark' (Wei et al. 1995: 672, 395) seem to be hopelessly incompatible with the meaning of the complex lexeme.

The south-western Mandarin items are proposed as being opaque solely on the basis of a mismatch between the meaning of the lexemes and the meaning of the characters used to transcribe them. The Wuhan item is written as 姑姑角 in Chinese characters, the meanings of which are 'father's sister, aunt' and 'horn, corner', respectively[22] (Wei et al. 1995: 344-345, 487), hardly compatible with the semantics of *ku^{55} ku tɕio^{55}* as a whole. The fact that this item is reported to be archaic (Zhu & Liu 1981: 230) increases the probability of its being opaque even for native speakers of the Wuhan dialect. The modern Wuhan term with the same meaning as *ku^{55} ku tɕio^{55}* is *ua^{213} ua tɕia^{55}* (Zhu & Liu 1981: 230), a transparent compound lexeme, as confirmed by the characters used: 娃娃家 (娃 / 娃娃 'baby, child' + 家 'family, household, home' [Wei et al. 1995: 1032, 463]). On the basis of the characters, the Dafang lexeme is as opaque as *ku^{55} ku tɕio^{55}*, as it is composed of 酒 'alcoholic drink, wine, liquor, spirits' and of a repeated 窩 'nest, lair, den, a hollow part of the human body, pit, etc.' (Wei et al. 1995: 523, 1060), which taken together are not semantically equal to 'dimple'. Finally, a word of warning might again be in order as we are dealing with dialectal forms in connection with which the phonetic use of characters has been and still is, a common practice[23].

The Xiang item from Changsha is exceptional in that its repetitive sequence seems to be based on a monosyllabic prefix *la^{11}* which intensifies the meaning of the adjective to which it is attached (ChoFYCD 1993: 45-46), while *tsan^{13}* is a measure word associated with the course of things (ChoFYCD 1993: 167). As the meaning of this Changsha complex item is not obviously relatable to the meaning of its parts, it must be considered opaque. Incidentally, *la^{11} la^{11} tsan^{13}* is a good reminder of how a certain degree of caution is always appropriate when passing judgment, based exclusively on the meaning of a character, on the possible meaning of a Sinitic dialectal element, because *la^{11}* has been transcribed as 拉 in the relevant source, clearly chosen for its phonetic value alone, as the character in question means 'to pull, draw, tug, drag, etc.' (Wei et al. 1995: 576).

22 姑 and 姑姑 have more or less the same meaning (Wei et al. 1995: 344-345).

23 For an early comment on this phenomenon in modern Chinese dialectology, see Chao 1928: ix, 12.

The following monosyllabic constituents in the set of Wu lexemes have an independent meaning in the relevant sources: *iø*^{53} 'cooking oil, lamp oil' (ChoFYCD 1993: 90), *ɕiɔ*^{13} 'small, little' (Min et al. 1986: 17), *tɕiɤ*^{34} 'nine (as a unit to measure the distance travelled)' (Min et al. 1986: 7), *doŋ*^{13} 'copper' (SFYCD 1993: 237), *tɕ'iø*^{55} 'earring; circle, ring; to enclose, surround, etc.' (SFYCD 1993: 123) and *kæ*^{55} 'high, tall' (SFYCD 1993: 57). The constituents *t'ø*^{55} and *tən*^{55} do not figure as independent entries in the sources consulted. The characters used to transcribe them (攤, 墩) have the meaning of 'to spread out; vendor's stand, booth, stall; m.[24] (for paste or thick liquid), etc.', and 'mound; a block of stone or wood; m. cluster', respectively (Wei et al. 1995: 975, 246). It is very difficult to believe that *tɕiɤ*^{34} (九) only has the meaning assigned to it by Min et al., since sources on closely related Wu dialects list it with the expected numeral meaning (SFYCD 1993: 153; see also Enomoto & Fan 1988: 130). However, even the usual meaning connected with *tɕiɤ*^{34} (九) does not make the lexeme in which it is embedded any more transparent. The acceptance of the meaning 'mound' for the character 墩 in the Suzhou dialect would render *kæ*^{55} *tən*^{55} *tən*$^{55/21}$ transparent, but as SFYCD does not contain *tən*^{55} as a monosyllabic entry with this particular meaning, it is better to consider this Suzhou lexeme opaque, which is also the case with the other Wu lexemes.

The fact that *kæ*^{55} is an adjective makes one wonder if *kæ*^{55} *tən*^{55}*tən*$^{55/21}$ was originally a repetitive adjective that underwent nominalisation at some stage, since it is structurally exactly identical to an exceedingly prolific repetitive adjectival pattern in the Sinitic group, and is not unknown in the other language groups of the corpus, either.

2.1.1.5. Diminutives

Diminution seems to be a common semantic feature of repetitive nominal lexemes. The following set is a representative selection of diminutives with a literal meaning taken from Sinitic speech forms in the total set of nominal repetitive lexemes contained by the corpus. As diminutives easily lend themselves to affective usage as terms of endearment, the set of nouns to which the double function of both diminutives and terms of endearment is attributed in Sinitic sources, are classified under connotative meaning (2.1.2).

Diminution through repetition (AA) in the nominal category is a widespread phenomenon in north-western and south-western Mandarin-speaking areas. E.g.:

a) *Standard Chinese*:

xīng xīng 'a tiny spot, speck'

(Wei et al. 1995: 1134)

24 m. is short for 'measure word'.

b) *North-western Mandarin*:

xuʌʔ^{31} xuʌʔ^{35}	'small opening, break, breach'[25]
sɥ^{35} sɥ^{53}	'small tree'
ŋəu^{31} ŋəu^{35}	'small bowl'
sʌʔ^{31} sʌʔ^{35}	'short rope'
pɔ^{35} pɔ^{53}	'small rod, stick'
t'ɑŋ^{35} t'ɑŋ^{53}	'small ball'

(Pingyao, Shanxi) (Hou 1980: 12, 14)

刀刀	'small knife'
瓶瓶	'small bottle'
牆牆	'small wall'
筐筐	'small basket'
缸缸	'small jar'
盅盅	'small cup'
勺勺	'small spoon, ladle'
毯毯	'small carpet'

(Suide, Shaanxi) (Liu 1988: 265)

p'an^{51} p'an^{51} (tsɨ)	'small dish'
tsuɤ^{213} tsuɤ^{213} (tsɨ)	'small table'
mɤŋ^{51} mɤŋ^{51} (tsɨ)	'small door'
sua^{213} sua^{213} (tsɨ)	'small brush'
pan^{51} pan^{51} (tsɨ)	'small plank'
p'ian^{213} p'ian^{213} (tsɨ)	'small thin piece'

(Wulumuqi/Ürümqi, Xinjiang) (Zhou 1994: 248)

mɑu^{44} mɑu(r)$^{44/53}$	'small hat'
ɕiɑŋ^{21} ɕiɑ(r)$^{21/24}$	'small box'
ts'ɤ^{21} ts'ɤ(r)$^{21/24}$	'small vehicle'
iɛ^{21} iɛ(r)$^{21/24}$	'small leaf'
kɛ^{44} kɛ(r)$^{44/53}$	'small lid, cover'

(Xi'an, Shaanxi) (Wang 1995: 90)

c) *South-western Mandarin*:

toŋ^{35} toŋ	'small hole'

(Wuhan, Hubei) (Zhu & Liu 1981: 238)

棚棚	'small shed'
人人	'drawn or manufactured person, small in size'
塘塘	'small dyke, pond'

25 The adjective 'small' is used throughout this chapter as a modifier to all items as an explicit mark of diminution, even though the result may be unidiomatic English.

核核 'small pit, stone'
(Kunming, Yunnan) (Zhang Ning 1987: 26)

馬馬(兒) 'drawn or manufactured horse, small in size'
(Chengdu, Sichuan) (Liang 1987: 113)

扇扇 'small fan'
篩篩 'small sieve, sifter, screen'
辮辮 'small pigtail, braid'
(Dafang, Guizhou) (Li 1987: 200)

亭亭 'small pavilion, stall'
車車 'small vehicle'
輪輪 'small wheel'
帕帕 'small handkerchief'
鏈鏈 'small chain'
楔楔 'small wedge'
(Guiyang, Guizhou) (Tu 1987: 203)

2.1.1.6. Distributive meaning

Semantically distributive repetitive forms based on a monosyllabic noun are a common feature in the Chinese-speaking area. These nouns can be classified into the following three types: nouns with temporal reference, nouns referring to place and some other nouns. The subsequent selection, structurally subsumable under AA, AAA and AAB structural types, is an exemplification of the exponents of this tripartite classification in the Sinitic data:

a) *Standard Chinese*:
rén rén 'every person'
shì shì 'every thing'
tiān tiān 'every day'
(Li & Cheng 1990: 16-17)

b) *Northern Mandarin*:
月月月 'every single month'
天天天 'every single day'
年年年 'every single year'
(Xuzhou, Jiangsu) (Su & Lü 1994: 194)

c) *South-western Mandarin*:
天天(兒) 'every day'
年年(兒) 'every year'

碗碗(兒) 'every bowl'
(Changyang, Hubei) (Yang 1987: 204)

早早晨 'every morning'
晚晚晨 'every evening'
(Kunming, Yunnan) (Zhang Ning 1987: 26-27)

c) *Wu dialects*:

ya-ya 'every night'
koh-koh 'every country'
(Shanghai, Jiangsu) (Bourgeois 1941: 14)

天天天 'every single day'
年年年 'every single year'
(Danyang, Jiangsu) (Cai 1994: 116)[26]

d) *Min dialects*:

lin$^{24/33}$ lin^{24} 'every person'
lit$^{55/11}$ lit^{55} 'every day'
(Xiamen, Fujian) (Yuan et al. 1989: 270)

chhù-chhù 'every place, everywhere'
tai-tai 'every generation, generation after generation'
(Taiwanese) (Embree 1973: 62, 252)

e) *Yue dialects*:

chi-chi 'every time'
lìhn-lìhn 'every year'
(Cantonese) (Matthews & Yip 1994: 266)

The set of nouns expressing distributive meaning after repetition seems to be very restricted indeed in Sinitic speech forms; all major dialect groups represented above possess only a few items of time and place complemented by a couple of other terms in this semantic function.

The tripartite forms (AAA) coming from the dialects of Xuzhou and Danyang, besides being distributive, are also emphatic in meaning (Su & Lü 1994: 194; Cai 1994: 116).

26 The geographical position of Danyang at the juncture of Wu- and eastern Mandarin-speaking areas has consequences for the linguistic characteristics of Danyang speech (Cai 1994: 104). On the whole, however, it is considered a representative of the Wu dialects, spoken at the northern end of the Wu-speaking area (Cai 1994: 109).

2.1.1.7. Diversity/completion

The repetitive lexemes in this category are exclusively of the type AABB and are very often derived by juxtaposing semantically similar A and B in a repeated form, thus achieving a sense of diversity, or of completion. It is hardly wrong to depict them as implying a sense of collectivity. This type of meaning expressed by the type of structure just mentioned is typical of at least the following Sinitic groups in the data:

a) *Standard Chinese*:

nán nán nǚ nǚ	'men and women'
lǐ lǐ wài wài	'inside and outside'
pén pén guàn guàn	'pots and pans, household utensils'
fēng fēng yǔ yǔ	'(wind and rain,) difficulties and hardships, groundless gossip'
qián qián hòu hòu	'(front and rear,) the ins and outs, the whole story'

(Wei et al. 1995: 704, 599, 743, 290, 788)

b) *South-western Mandarin*:

棍棍棒棒	'rods and sticks'
洞洞眼眼	'holes and cavities'
湯湯水水	'hot and cold water'
小小菜菜	'all vegetables'
果果木木	'all fruits'

(Renshou, Sichuan) (Liu 1987: 114)

The two final Renshou lexemes above, 小小菜菜 and 果果木木, deviate from the general derivation pattern of juxtaposing repetitive A and B suggested above. Their formation must be schematized as AB —> AABB because 小菜 'vegetables' and 果木 'fruit' are independent lexical items themselves in Renshou (Liu 1987: 114).

索索老老	'ropes and cords'
油油老老	'oil and fat (in general)'
氣氣老老	'flavours and smells'
鞋鞋腳腳	'socks and shoes'
腸腸肚肚	'internal organs'
門門道道	'all kinds of methods and plans'
朋朋友友	'friends'
團團轉轉	'surroundings'
箱箱柜柜	'all kinds of containers'

旮旮角角 'nooks and crannies'
(Dafang, Guizhou) (Li 1987: 201)

Derivational variation to an even greater extent than in Renshou is a feature of the above Dafang four-syllable forms. According to Li (1987: 201-202), 箱箱柜柜 and 旮旮角角 implement the formula AA + BB —> AABB, i.e. they are combinations of repetitive forms, capable of being used as independent lexemes as such. 鞋鞋腳腳 and 腸腸肚肚 comply with the proposed general derivational pattern of juxtaposed, repetitive monosyllabic nouns, schematically A,B —> AABB, the repetitive forms of which, however, cannot usually assume the status of independent words. From the form of the rule AB —> AABB it is clear that its input form must be a disyllabic non-repetitive form; thus, as output forms, 門門道道, 朋朋友友 and 團團轉轉 in the above set represent the input compounds 門道, 朋友 and 團轉, respectively. The fourth derivational type is reducible to the formula AA + 老老 —> AABB in which AA stands for a repetitive noun and -老老 is an affix; this type permits the suffixation of a plural affix (-些) after it.

子子孫孫 'children and grandchildren'
家家伙伙 'tools and utensils'
(Changyang, Hubei) (Yang 1987: 204)

c) *Min dialects*:

tap-tap-tih-tih 'odds and ends'
lân-lân-san-san 'small quantities'
sè-sè-tai-tai 'generations'
(Taiwanese) (Embree 1973: 255, 164, 223)

tie$^{31/35}$ tie^{31} ŋie$^{242/53}$ ŋie^{242} 'inside and outside'
suoŋ$^{242/53}$ suoŋ^{242} xa$^{242/53}$ xa^{242} 'top and bottom'
tsieŋ$^{53/44}$ tsieŋ^{53} xau$^{242/53}$ xau^{242} 'front and rear'
(Fuzhou, Fujian) (Zheng 1995: 155)

2.1.1.8. Emphatic meaning

Lexemes in Sinitic speech forms indicating position can be repeated for the sake of emphasis with the implication "the very...". Unlike the previous category, this category is not confined to one specific structural pattern but is formally quite versatile by being realized in AA, AAA, AAB, ABB and ABAB forms. The Fuzhou dialect seems to allow most variation in emphatic repetitive nominal forms referring to position in the exposition below:

a) *Northern Mandarin*:

tiŋ^{35} ti(r)$^{55(/213)}$	'the very top, the very end'
眼(兒)眼(兒)眼(兒)	'the very place close by'
邊(兒)邊(兒)邊(兒)	'the very edge'
頂頂頂(兒)	'the very top'[27]
底底底	'the very bottom'

(Xuzhou, Jiangsu) (Su & Lü 1994: 187, 194)

b) *South-western Mandarin*:

那那邊	'the very yonder place'
高高上	'the very top'
中中間	'the very centre'
底底下	'the very bottom'

(Kunming, Yunnan) (Zhang Ning 1987: 26-27)

c) *Wu dialects*:

pii^{55} pii$^{55/33}$ lɑ$^{13/21}$ 'the very side'

(Suzhou, Jiangsu) (SFCD 1993: 128)

d) *Min dialects*:

sɛiŋ$^{53/44}$ sɛiŋ^{53}	'the very front'
au$^{242/53}$ au^{242}	'the very rear'
tie$^{31/35}$ tie^{31}	'the very inside'
kia$^{242/53}$ kia^{242}	'the very underneath'
pieŋ^{44} pieŋ^{44}	'the very side'
muəi$^{31/11}$ t-lau$^{31/35}$ t-lau^{31}	'the very rear'
tai$^{53/11}$ t-louŋ^{44} t-louŋ^{31}	'the very centre'
a$^{242/11}$ t-lɛ$^{31/35}$ t-lɛ^{31}	'the very bottom'
sɛiŋ$^{53/11}$ t-nau$^{31/35}$ t-lau^{31}	'the very front'
kɛiŋ-kɛ$^{53/11}$ tiŋ-lɛiŋ$^{31/35}$	
kɛiŋ-kɛ$^{53/11}$ tiŋ-lɛiŋ^{31}	'the very top'
au-a$^{242/11}$ t-lau$^{31/35}$	
au-a$^{242/11}$ t-lau^{31}	'the very rear'
ŋie$^{242/11}$ t-lau$^{31/35}$ ŋie$^{242/11}$ t-lau^{31}	'the extreme side'
tie$^{31/11}$ liɛ$^{213/11}$ tie$^{31/44}$ liɛ^{213}	'the very inside'

(Fuzhou, Fujian) (Zheng 1995: 154-155)

toi3 toi3 (tsie3) 'the very centre'

(Jianyang, Fuzhou) (Norman 1992: 123)

27 The AAA form is explicitly depicted as being 'emphatic' in meaning, but no explanation is given as to the difference in emphasis between the AAA form and the corresponding AA form (*tiŋ^{35} tir$^{55(/213)}$*).

2.1.2. Connotative meaning

2.1.2.1. Children's language

Children's language refers in this context to the repetitive nominal lexemes marked as being spoken by or to children in Sinitic speech forms. Since this type of repetitive forms is often mentioned by the sources as having affective overtones and its exponents being used as terms of endearment, they are introduced under connotative meaning. Some lexemes defined in a source as being both diminutive and a term of endearment are also treated under this heading (see 2.1.1.5).

The following selection of simple (AA) and complex (ABB) lexemes exemplifies repetitive nominals complying with the characterization in the preceding paragraph:

a) *Standard Chinese*:

bāo bǎo	'darling, baby'

(Wei et al. 1995: 32)

b) *North-western Mandarin*:

手手	'hand'
眼眼	'eye'
腳腳	'foot'
燈燈	'lamp'
貓貓	'cat'
狗狗	'dog'

(Suide, Shaanxi) (Liu 1988: 265)

椅椅(子)	'chair'
襖襖(子)	'coat'
雨雨(子)	'shower (of rain)'
風風(子)	'breeze'
店店(子)	'shop'
人人(子)	'person'
書書(子)	'book'

(Yinchuan, Ningxia) (Li & Zhang 1995: 104)

c) *South-western Mandarin*:

sei^{55} sei	'urine'
nou^{55} nou	'meat'
ma^{42} ma	'horse'
fan^{35} fan	'food'

kau^{55} kau 'cake'
pi^{213} pi 'nose'
pei^{55} pei 'cup, glass'
ɕiou^{35} ɕiou 'sleeve'
p'i^{35} p'i 'buttocks'
(Wuhan, Hubei) (Zhu 1987: 23)[28]

帽帽(兒) 'hat'
鞋鞋(兒) 'shoe'
凳凳(兒) 'stool'
(Changyang, Hubei) (Yang 1987: 204)

d) *Xiang dialects*:

tɕy^{33} lo^{13} lo$^{(13)}$ 'pig'
tsoŋ^{13} ŋa^{55} ŋa 'insect'
(Changsha, Hunan) (ChoFYCD 1993: 25, 203)

e) *Wu dialects*:

ho^{55} ho^{55} 'flower'
k'a$^{33/53}$ k'a$^{33/55}$ 'chopstick'
tsoʔ^{55} tsoʔ^{55} 'gruel'
ʔŋei$^{24/55}$ ʔŋei$^{24/55}$ 'fish'
ʔlø$^{242/53}$ ʔlø$^{242/55}$ 'egg'
hfioʔ^{22} ʔoʔ$^{22/55}$ 'pot'
ʔmaʔ$^{22/55}$ ʔmaʔ$^{22/55}$ 'socks, stockings, hose'
sɨ$^{424/53}$ sɨ$^{424/55}$ 'water'
ts'ɛ$^{33/424}$ uɑʔ$^{424/55}$ uɑʔ$^{(424)}$ 'heart of a vegetable'
(Chongming, Jiangsu) (Zhang 1979: 300-301; ChoFYCD: 63)

fiiaŋ^{13} p'ɔ^{53} p'ɔ^{53} 'small balloon'
zø^{13} pɔ^{34} pɔ^{34} 'silkworm'
(Shanghai, Jiangsu) (Min et al. 1986: 224, 229)

兜兜(兒) 'pocket'
(Wenzhou, Zhejiang) (Zhengzhang 1979: 222)

kuø^{53} kuø^{53} 'boy'
(Jiaxing, Zhejiang) (Min et al. 1986: 186)

28 Zhu (1987: 23) divides the repetitive nominal lexemes used by children in the Wuhan dialect into three classes. The first comprises those nominal monosyllabic lexemes which in adult speech are not usually repeated but which in children's language appear in repeated form, i.e. the first five lexemes above. The second class is depicted by Zhu as consisting of those terms which in adult usage carry a suffix (-子) but have repetitive structure in a child's lexicon, i.e. the next three items. The third group is formed by lexemes of children's talk whose repetitive structure is matched by a disyllabic term in adult vocabulary, i.e. the last unit.

2.1.2.2. Other connotative categories

Other connotative categories extractable from the corpus are labelled according to the sources as respectful, playful, derogatory and ironic. In terms of structure they are patterned as AA, ABB, AAB and ABCC:

(1) respectful:

a) *Standard Chinese*:

shào nǎi nai 'your or sb. else's daughter-in-law'
lǎo bó bo 'granddad'
(Wei et al. 1995: 881, 587)

b) *Wu dialects*:

lɔ^{13} lɔ^{13} 'old man'
lɔ^{13} koŋ^{53} koŋ^{53} 'old man'
(Shanghai, Jiangsu) (Min et al. 1986: 75, 77)

ɦilɔ$^{242/313}$ t'ɑ$^{33/55}$ t'ɑ$^{(33)}$ 'old woman'
(Chongming, Jiangsu) (ChoFYCD 1993: 96)

du^{13} me^{13} t'a^{34} t'a^{34} 'matchmaker, go-between'
(Shaoxing, Zhejiang) (Min et al. 1986: 13)

(2) playful:

a) *South-western Mandarin*:

車車匠 'engraver'
(Dafang, Guizhou) (Li 1987: 201)

b) *Xiang dialects*:

tsau^{55} tɕ'i^{33} tɕ'i^{33} 'cook'[29]
(Changsha, Hunan) (ChaFYCD 1993: 114)

c) *Wu dialects*:

mi^{53} mi^{53} (dɤ^{13}) 'small child'[30]
(Pinghu, Zhejiang) (Min et al. 1986: 106)

---

29 The jocularity resides in the fact that *tsau^{55} tɕ'i^{33} tɕ'i^{33}* basically means 'house cricket' that habitually lives in the kitchen, whence indexically it has acquired the meaning 'cook'.

30 This lexical form is also listed as an adjective implying intensification of the quality of smallness, i.e. 'very small, very little' (Min et al. 1986: 106). In the absence of information to the contrary, we regard the final constituent as a suffix (see Yuan et al. 1989: 96-97).

(3) derogatory:

a) *South-western Mandarin*:

憨憨 'blockhead'
瓜瓜 'foolish person'
廣廣 'gullible person'
恍恍 'careless, absent-minded person'
(Chengdu, Sichuan) (Liang 1987: 113)[31]

聾聾 'deaf person'
歪歪 'bully'
(Guiyang, Guizhou) (Tu 1987: 204)[32]

b) *Wu dialects*:

læ$^{31/13}$ læ$^{31/33}$ (dʏ) 'old man'
(Suzhou, Jiangsu) (SFYCD 1993: 51)

(4) ironic:

a) *South-western Mandarin*:

ɕiau^{55} tɕia p'o^{213} p'o 'any person (with a negative implication)'
(Wuhan, Hubei) (Zhu & Liu 1981: 238)

2.1.3. Compositional meaning

Compositional meaning was defined as referring to lexemes whose meaning has been achieved through the combination of a formally consecutive repetitive constituent with a formally non-repetitive one. It was further stipulated that if an entity is to be analysed as semantically compositional, it must contain at least one semantically sufficiently transparent constituent (ch. 2). Such lexemes belong to one of the following four formal categories in the data: AAB, ABB, AABC and ABCC.

This chapter does not aim at an exhaustive presentation of all the sufficiently transparent nominal lexemes of the corpus, but instead, with a selection of items from the Sinitic data representing complex structural patterns, it wishes to highlight the fact that repetition is not restricted to purely repetitive lexemes but is also employed in compounding for the purpose of creating new vocabulary. The number of compound nominal lexemes with a repetitive element as a constituent turned out to be surprisingly large in the lexica of the Sinitic speech forms consulted.

---

31 According to Liang (1987: 113), these repetitive Chengdu nominals derive from monosyllabic morphemes regularly assigned to the class of adjectives.

32 Tu (1987: 204) notes that the two Guiyang forms are derived from adjectives.

Starting with Standard Chinese, a rather transparent example of compositionality is *pèng pèng chuán* (Wei et al. 1995: 745) 'bumper boat' consisting of the repeated form of the verb *pèng* 'to bump' which modifies *chuán* 'boat' (Wei et al. 1995: 155). *Niǎn nian zhuàn(r)* 'top' (Wei et al. 1995: 717) is identical with the first example in having a repeated verb (*niǎn* 'to twist with the fingers') as a modifier to the suffixed head, usually in the role of a verb when non-suffixed (Wei et al. 1995: 1353). Of similar composition is also *qiāo qiāo bǎn* 'seesaw' (Wei et al. 1995: 796) (*qiāo* 'to lift up, hold up' + *bǎn* 'plank' [Wei et al. 1995: 25]).

In Xi'an (north-western Mandarin), the concept of a thing contained in a container or the form of something is expressed repetitively: the container or the element referring to the form is repeated and acts as a modifier while the constituent referring to the contents/something remains intact acting as a head, e.g.: *xuo^{24} xuo^{24} fe^{53}* 'flour/powder packed in a box' in which *fe^{53}* 'flour' is modified by *xuo^{24}* 'box'. Thus 'a bottle of wine' is expressed as *p'iŋ^{21} p'iŋ^{21} tɕiou^{53}* in traditional Xi'an speech (*p'iŋ^{21}* 'bottle' and *tɕiou^{53}* 'wine') (Yuan et al. 1989: 48). Analogically tea, wrapped up in paper is 包包(兒)茶 in this dialect (包 'to wrap' + 茶 'tea' [Wei et al. 1995: 30, 102])[33]. 'Flat, thin noodle' is consequently expressed as 片片(兒)面 (片 'flat, thin piece' + 面 'wheat flour, flour' [Wei et al. 1995: 751, 679]) and 'thin, stick-like noodle' as 棍棍(兒)面 (棍 'rod, stick' + 面 'wheat flour, flour' [Wei et al. 1995: 367, 679]) (Wang 1995: 90). A construction based on the principle of repeated container modifying non-repetitive contents can also be found in Dafang (south-western Mandarin) (Li 1987: 201): 碗碗茶 'bowl(ful) of tea' (碗 'bowl' + 茶 'tea' [Wei et al. 1995: 1040, 102]); 杯杯酒 'cup(ful) of wine' (杯 'cup' + 酒 'wine' [Wei et al. 1995: 38, 523]).

Another kind of denotative background for the formation of a repetitive nominal lexeme through compounding is provided by *t'aŋ^{53} t'aŋ^{53} pɛ^{53}* 'wooden ship' (Shanghai, Wu) (Min et al. 1986: 274) in which the repetitive constituent is based on *t'aŋ^{53}* 'small brass gong', used as a signaling device on a regularly run wooden passenger and cargo ship in earlier times; as far as *pɛ^{53}* is concerned we assume it to represent the same morpheme as *pɛ^{53}* in *pɛ^{53} dɤ^{13}* '(work) shift, runs (e.g., of a bus)' (Creamer et al. 1991: 114), followed by a suffix (see Yuan et al. 1989: 96-97).

Combining an already existent repetitive disyllabic noun *xīng xing* 'orangutan' with the adjective *hēi* 'black', a new lexeme with the meaning 'chimpanzee' is achieved in Standard Chinese (Wei et al. 1995: 396). The adjective *dà* 'big' together with *xīng xing* is an independent lexeme referring, rather unsurprisingly, to 'gorilla' (Wei et al. 1995: 187). When *yáng* in its meaning of 'foreign' (Wei et al. 1995: 1178) contracts a modifying relationship with *wáwa* 'baby', the resulting complex lexeme refers to 'doll'.

---

33 It is assumed that the meaning of the characters represents accurately enough the meaning of the constituents in these Xi'an compounds.

Sinitic kinship terms have also been replenished through combining a non-repetitive modifying element with a repetitive head. In the Yinchuan dialect (north-western Mandarin), for example, *vɛ*^{13}, presumably referring to the concept of 'kin from mother's side', when attributive to *ie*^{53} *ie* 'grandfather' and *nɛ*$^{53/35}$ *nɛ* 'grandmother' (Li & Zhang 1995: 96), makes clear that maternal grandparents are meant.

The more transparent cases of quadrisyllabic repetitive lexemes naturally also derive their meaning, as independent entries, from modification. The Standard Chinese *huā huā gōng zǐ* 'playboy, dandy, coccomb, fop' (Wei et al. 1995: 412) is thus composed of the repetitive form of *huā*, which presumably derives its meaning from 'coloured; flowery, showy' (Wei et al. 1995: 411) and of *gōng zǐ* 'son of a feudal prince or high official' (Wei et al. 1995: 337), while *běn běn zhǔ yì* 'book worship, bookishness' is transparent enough to make the division into its constituents, namely *běn běn* 'written or printed documents, books, papers' and *zhǔ yì* 'doctrine, -ism' (Wei et al. 1995: 43, 1345), an easy task.

The first step in the process of making such Changsha dialect (Xiang) entries as *to*^{41} *to*^{41} *lo*^{24} *xo* 'vocal mimicry performance' and *toŋ*^{41} *toŋ*^{41} *lo*^{24} *xo* 'puppet show' a bit more transparent is to learn that both *to*^{41} and *toŋ*^{41} are verbs, meaning 'hide' and 'lift, raise, hold up', respectively (ChaFYCD 1993: 63, 200). Unfortunately, the other constituent, *lo*^{24} *xo*, does not figure as an entry in the original source, but evidently refers to some kind of performance. As the holding of puppets is an essential and quite conspicuous element in the course of a puppet show, knowledge of the meaning of the base in the repetitive constituent shifts *toŋ*^{41} *toŋ*^{41} *lo*^{24} *xo* towards the more transparent end of the transpareny/opacity continuum. What about *to*^{41} *to*^{41} *lo*^{24} *xo*, then? It seems that in this case the meaning of the base form is not enough to help us conceive of it as a compositional item and we need something else to solve the problem. Fortunately, the source provides us with a necessary bit of background information when explaining that during a vocal mimicry performance the performers hide themselves behind a cloth which can be pulled up if necessary (ChaFYCD 1993: 63).

On a more general level, it is worthy of note to observe how especially the patterns AAB and ABB are relatively numerous among the set of more complex repetitive nominal lexemes in the Sinitic corpus. Note, for example, the following more transparent items, with the putative constituents and their meaning placed in parentheses:

a) *Standard Chinese*:

bèng bèng(r) xì 'old name for the local opera of north and northeast China'

(<— bèng 'to leap, jump, spring' + xì 'drama, play, show')

(Wei et al. 1995: 46, 1083)

lā lā dùi 'cheering squad, rooters'
(<— lā 'to pull, draw, tug, drag' + dùi 'a row of people, line; team, group')
(Wei et al. 1995: 576, 243)

b) *Northern Mandarin*:

iau$^{213/21}$ kuai^{35} kuai 'kiss'
(<— iau^{213} 'to bite' + kuai^{35} '(of a child) well-behaved, good')[34]
(Mancheng, Hebei) (Chen 1988: 112)

tian^{51} paŋ$^{51/21}$ paŋ (ŋər) 'flashlight'
(<— tian^{51} 'electricity' + paŋ^{51} 'stick, club')[35]
(Mancheng, Hebei) (Chen 1988: 110)

c) *South-western Mandarin*:

tɕiou^{55} tɕiou piɛn^{35} 'short plait (tied up)'
(<— tɕiou^{55} 'bun, knot, chignon' + piɛn^{35} 'plait, braid, pigtail')[36]
(Wuhan, Hubei) (Zhu & Liu 1981: 228)

ia^{213} ia ɕy^{55} 'children's picture story book'
(<— ia^{213} 'child, kid' + ɕy^{55} 'book')[37]
(Wuhan, Hubei) (Zhu & Liu 1981: 229)

撮撮帽 'peaked cap'
(<— 撮 'to pick up or hold [dust, powder, etc.] between the thumb and the first finger' + 帽 'cap')[38]
(Dafang, Guizhou) (Li 1987: 201)

華華云 'fine weather with occasional clouds'
(<— 華 'flower' + 云 'cloud')[39]
(Dafang, Guizhou) (Li 1987: 201)

煤煙煙 'soot, kind of black earth resembling coal'
(<— 煤 'coal' + 煙 'smoke; mist, vapour; tobacco')[40]
(Dafang, Guizhou) (Li 1987: 201)

---

34 The meaning of the constituents is based on the characters used to transcribe this dialectal item. For the meaning of the characters, see Wei et al. 1995: 1183, 352.

35 See fn. 34; Wei et al. 1995: 220, 30.

36 See fn. 34; Wei et al. 1995: 521, 59.

37 See fn. 34; Wei et al. 1995: 1163, 930.

38 See fn. 34; Wei et al. 1995: 173, 665.

39 See fn. 34; Wei et al. 1995: 411, 1267.

40 See fn. 34; Wei et al. 1995: 667, 1165.

d) *Xiang dialects*:

pa^{33} pa tən^{35} 'round, small lamp'
(<— pa^{33} pa 'flat, round object' + tən^{35} 'lamp')[41]
(Changsha, Hunan) (ChaFYCD 1993: 28)

in^{55} pa^{33} pa 'round seal, seal mark'
(<— in^{55} 'seal, stamp'[42] + pa^{33} pa 'flat, round object')
(Changsha, Hunan) (ChaFYCD 1993: 196-197)

e) *Wu dialects*:

ʔin^{55} ʔin^{55} dzø^{313} 'disease (of dreaming of sex every night)'
(<— ʔin^{55} 'the feminine or negative principle in nature'[43] + dzø^{313} 'to pester, bother, harass'[44])
(Chongming, Jiangsu) (ChoFYCD 1993: 141)

矮矮人(兒) 'dwarf'
(<— 矮 'short (of stature)' + 人 'human being, person')[45]
(Wenzhou, Zhejiang) (Zhengzhang 1979: 222)

薄薄親(兒) 'distant relative'
(薄 'thin, flimsy; weak, light' + 親 'blood relation, next of kin')[46]
(Wenzhou, Zhejiang) (Zhengzhang 1979: 222)

懦懦佛(兒) 'weak-willed person'
(懦 'cowardly, weak' + 佛 'Buddha')[47]
(Wenzhou, Zhejiang) (Zhengzhang 1979: 222)

---

41 The meaning of this constituent is based on the character used to write it; for its meaning, see Wei et al. 1995: 207.

42 See fn. 41; Wei et al. 1995: 1223.

43 See fn. 41; Wei et al. 1995: 1217.

44 ChoFYCD 1993: 54.

45 The meaning of both constituents is based on the characters. Sufficient semantic transparency between the meaning of the lexeme and that of the constituent characters suggests a derivative relationship between them; for the meaning of the characters, see Wei et al. 1995: 4, 833.

46 See fn. 45; Wei et al. 1995: 32, 800.

47 See fn. 45; Wei et al. 1995: 727, 295-296.

2.1. THE TIBETO-BURMAN GROUP

The data on Tibeto-Burman languages does not equal the Sinitic material in quantity. Consequently, setting up specific sub-titles is futile as the data can quite easily be treated in one chapter. The representative languages are Jingpo, Pumi, Jinuo, Tangut, an extinct language of Central Asia, and Burmese.

In terms of the semantic classification system presented in ch. 2, the repetitive Tibeto-Burman nominal lexemes are all subsumable under denotation, and quantitatively the most prominent sub-categories in the data are formed by kinship terms and the items that are analysed as being distributive or emphatic in meaning.

There are scattered exponents of other sub-categories, such as a term referring to a bird, viz. *ʈɕha*^{55} *ʈɕha*^{55} 'magpie' (Pumi; Lu 1983: 26), and the following three items from Jinuo, Burmese and Pumi, respectively, the denotation of which complies with the definition given to the category titled as necessities and natural phenomena in 2.1.1.4:

tɕhø^{3} tɕhø^{3}	'vegetable garden'
moúñmoúñ	'cakes, eatables'
dʒə^{13} dʒə^{13}	'book, letter'

(Gai 1981: 69; O'Kell 1969: 474; Lu 1983: 58, 62)

The source on Burmese provides an example of a term of endearment, e.g. *hcouhcou* 'sweetie' based on *ǎhcou* 'something sweet', and *nènè* 'a little, a bit' is a repetitive deverbal nominal lexeme, derived from *nè* 'be few, little' (O'Kell 1969: 474, 473). Such a meaning as 'this year', *pə*^{55} *pə*^{55}, is expressed by a repetitive form in Pumi (Lu 1983: 38, 62). The source does not tell whether this item is monomorphemic or not, but as it is clearly repetitive in form, it obviously falls under the scope of the study (see [ii] p. 5). It is not derived from 'year' which in modern Pumi is *ko*^{55} (Lu 1983: 110).

If the Pumi kinship terms with an A A- -pattern are accepted as lexicalised output forms of a repetitive process, the total set of forms, structurally AA in addition to A A-, belonging to this category in the data, comprises the following items from Pumi and Burmese:

a) *Pumi:*

bɑ^{55} bɑ^{55}	'father'
põ^{13} põ^{13}	'uncle (father's younger brother)'
miɛ^{55} miɛ^{13}	'wife of father's younger brother, aunt'
kəu^{55} kəu^{13}	'mother's brother, uncle'
ni^{13} ni^{13}	'wife of mother's brother, aunt'

pa^{13} pa^{55} 'elder sister'
(Lu 1983: 29, 115)[48]

b) *Burmese:*

meimei	'mummy'
hpeihpei	'daddy'
dodo	'auntie'
lèilèi	'uncle'[49]

According to O'Kell (1969: 474) the Burmese kinship terms are derived from *ămei* 'mother', *ăhpei* 'father', *ădo* 'aunt' and *ùlèi* 'uncle', respectively.

Repetitive terms with a distributive semantic function, patterned as AA, ABA (B = infix), AAAA, and ABAB, are represented by the following items from Pumi, Tangut and Burmese:

a) *Pumi:*

mi^{55} mə^{55} mi^{55}	'every person, everybody'
tʃə^{55} mə^{55} tʃə^{55}	'every room'

(Lu 1983: 30)

b) *Tangut:*

ne ne	'every day'
dzie dzie	'every time, often'
zia zia	'all generations'[50]

(Ma 1988: 38)

c) *Burmese:*

nènè nènè	'a little at at time'
hkăná hkăná	'every moment'

(O'Kell 1969: 193-194)

Note how two of the Burmese alliterative lexemes below seem to provide an alternative form for the same semantic content since the inputs and the outputs do not differ in meaning in the subsequent derivations (A —> A x/A or A —> A A/x). Note also the verbal base of the second derivation:

---

48 Repetitive kinship terms are from the dialect of Jinghua, except for *ba^{55} ba^{55}*, the dialectal origin of which is not specified. The Taoba dialect does not seem to have repetitive kinship terms (see Lu 1983: 115).

49 The description in O'Kell (1969: 474) of these items does not absolutely exclude the interpretation of them being used primarily in children's language or as terms of endearment.

50 The inclusion of Tangut forms here rests on the supposition that Ma's (1988) phonologization of the Tangut script is correct.

làñ	'road'	—>	làñ pàñ	'road'
káñ	'be athwart'	—>	káñ láñ	'fiasco'
nì	'method'	—>	nì na	'method'

(O'Kell 1969: 54-55, 116)

The Sinitic lexemes treated in 2.1.1.7 were semantically defined as expressing a sense of diversity, or of collectivity, and structured exclusively as AABB. There are semantically, but not formally parallel Tibeto-Burman nominal quadrisyllabic patterns. Pumi, for example, seems to prefer the ABAB-pattern for this purpose, as shown by *tsy*^{55} *i*^{55} *tsy*^{55} *i*^{55} 'children and grandchildren, descendants', a transparent lexeme with *tsy*^{55} 'son' and *i*^{55} 'grandson' serving as base morphemes (Lu 1983: 26).

Jingpo makes use of an ABAC pattern for the semantic function in question. E.g.:

ka^{31} ʃu^{31} ka^{31} ʃa^{31}	'descendants'
a^{31} ʒuŋ^{33} a^{31} ʒai^{55}	'utensils, appliances'

(Si et al. 1983: 934-935)

Although the syllabic structure of the two Jingpo lexemes is identical, they are different in terms of morpheme structure, since the former consists of two juxtaposed alliterating, semantically similar single-morpheme lexemes, viz. *ka*^{31} *ʃu*^{31} 'grandson' and *ka*^{31} *ʃa*^{31} 'son' (Si et al. 1983: 178, 176), while the latter comprises a single-morpheme lexeme, namely *a*^{31} *ʒai*^{55} 'thing' (Si et al. 1983: 38), and two prefixed syllables, *a*^{31} and *ʒuŋ*^{33}, of which the latter alliterates with the second syllable of the single-morpheme constituent. The requirements of an alliterative relationship between the second and the fourth syllable and semantic similarity between constituents are the principles governing the construction of quadrisyllabic lexemes in Jingpo (Si et al. 1983: 934).

In Burmese, the sense of diversity within the nominal repetitive framework is achieved by repeating a noun and adding the prefix *ă* (A —> BAA). E.g.:

ywa	'village'	—>	ă ywa ywa	'various villages'

(O'Kell 1969: 46)

When the numeral *ti?* 'one' is prefixed to a duplicated noun in Burmese, a nominal item with a sense of indefiniteness results (A —> ABB). E.g.:

ti? + myoú	'town'	—>	tămyoú myoú	'some town or other'
ti? + ăjau?	'person'	—>	tăyau? yau?	'some person or other'

ti? + ǎhtou? 'package' —> tǎhtou? htou? 'some package or other'
(O'Kell 1969: 75)

According to Xu Xijian (1990: 52), who seems to be fond of describing repetition in a syntactic framework, Jingpo nominal repetition taking mono- (A —> AA) and disyllabic lexemes as bases, is primarily emphatic in meaning and concerns principally nominal lexemes used as subjects. Note how in duplicating a disyllabic noun only the second syllable undergoes repetition (AB —> ABB). E.g.:

sa^{55} lik^{55} lik^{55}	ko^{31}	n^{55}	lu?^{31}	na^{33}	ni?^{55}	ai^{33}
cigarette	part.	neg.	inhale	will	part.[51]	

'As for cigarettes, I do not smoke.'

Lexemes denoting time, even though marked as subject, when repeated for emphasis, must be modified by the demonstrative pronoun *tai^{33}* 'that' (Xu Xijian 1990: 53). E.g.:

tai^{33} ʃa^{31} ni^{55} ni^{55}	ko^{31}	ʃan^{55} the^{33}	joŋ^{31}	n^{33}ta^{33}	ŋa^{31}	ma?^{31}	ai^{33}
that day	part.	they	all	home	exist	part.[52]	

'That day, they were all home.'

The duplicated noun fullfilling an attributive function in the following sentence is not emphatic but denotes indefinite plurality, which is suggested as the other possible meaning with repetitive nouns in Jingpo by Xu Xijian (1990: 52). E.g.:

ka^{31} thoŋ^{31} thoŋ^{31}	na^{31}	mam^{33}	ko^{31}	tan^{31}	ŋut^{33}	ma^{33}	sai^{33}
village	part.	rice	part.	cut	finish	part.[53]	

'The rice of some (stockaded) villages has already been reaped.'
(Xu Xijian 1990: 53)

Xu Xijian (1990: 53) maintains that an interrogative pronoun modifier is almost a prerequisite for the repetition of a noun when it functions as an object or as an adverbial. The object noun in the subsequent sentence is duplicated for indefinite plurality:

---

51 *Ni?^{55} ai^{33}* is a sentence final particle in a declarative sentence indicating that the subject is 1st person sg. (Si et al. 1983: 594).

52 *Ma?^{31} ai^{33}* is also a sentence final particle in a declarative sentence, but with a 3rd person pl. reference in respect to the subject (Si et al. 1983: 441).

53 *Ma^{33} sai^{33}* is likewise a sentence final particle in a declarative sentence with a 3rd person pl. subject (Si et al. 1983: 496).

naŋ^{33}	ka^{31} ʒa^{31}	te?^{31}	te?^{31}	sa^{33}	n^{31} tai^{33}
you	which	place	go	part.[54]	

'(Which places =) Where are you going?'

If Jingpo seems to possess cases of nominal repetition which can be interpreted as being partially conditioned by elements in the linear structure, then the following examples from Burmese show how the interpretation of consecutively repeated nouns as expressing alternativity is conditioned by the total sentential context. (O'Kell 1969: 477):

moù	moù	hsàuñ	hsàuñ	nwei	nwei	hsé	hnă	yadhi	pwíñ	ţe
rain		winter		summer		ten	two month	blossom	verb-sentence marker	

'(It) flowers all the year round, whether (it is) the rainy season, the cool season, or the hot season.'

di	ywa	hma	mèiñmá	mèiñmá	yau?cà	yau?cà	tă yau?	hmá
this	village	in	woman		man		one person	even

thu	lu	mă	hma?	hpù
he	human being	not	think	verb-sentence marker

'He regards no one in this village, man or woman, as a human being.'

As far as word formation is concerned, the Jingpo nominal lexicon can be expanded, when necessary, with items derived from (i) verbs and (ii) adjectives through an infixal pattern (A —> ABA or AB —> ABCAB = A —> A *mi/ma* A or AB —> A B *mi/ma* A B) with a concomitant generic meaning. E.g.:

(i)	ʃa^{55}	'eat'	—>	ʃa^{55} mi^{55} ʃa^{55}	'eatables'
	ʃa^{31} tu^{33}	'cook'	—>	ʃa^{55} tu^{33} mi^{31} ʃa^{55} tu^{33}	'beverages'
(ii)	khje^{33}	'red'	—>	khje^{33} mi^{33} khje^{33}	'redness'
	ka^{31} tun^{31}	'short'	—>	ka^{31} tun^{31} mi^{33} ka^{31} tun^{31}	'shortness'

(Xu Xijian 1990: 55)

With insertion of *la^{55}* between the syllables of some repeated monosyllabic verbs, trisyllabic nouns with the kind of meaning expounded by the phrasal English equivalents below, are achieved:

54 *N^{31} tai^{33}* is a sentence final particle with a 2nd person sg. reference as regards the subject of a declarative sentence (Si et al. 1983: 562).

mu^{31} 'see' —> mu^{31} la^{55} mu^{31} 'something clearly seeable'
tʃe^{33} 'know' —> tʃe^{33} la^{55} tʃe^{33} 'something obviously knowable'
(Xu Xijian 1990: 55)

In Tujia, repetition of nouns according to a quadrisyllabic pattern (ABAC, AABB, ABAB, ABCC) can be accompanied by notions of plurality, emphasis, intimacy and generic meaning. All categories of meaning appear to be possible when a monosyllabic noun serves as the base for the generation of a disjunctively repetitive item (A —> ABAC, in which B and C stand for meaningless syllables) (Tian 1986: 30). There is quite a lot of variation in the form of the second and fourth syllables. E.g.:

no^{55} 'person' —> no^{55} te^{55} no^{55} pa^{55}
no^{55} le^{55} no^{55} pai^{55}
no^{55} li^{55} no^{55} pha^{55}
no^{55} tɕhi^{55} no^{55} lai^{55}
no^{55} na^{55} no^{55} te^{55}
no^{55} lai^{55} no^{55} le^{55}
no^{55} li^{55} no^{55} te^{55}
no^{55} le^{55} no^{55} nai^{55}

Instead of varying both the second and the fourth syllable, it is possible to alternate either, in which case *tɕhi^{55}* seems to play the role of a constant second syllable and *li^{55}* that of the fourth (see Tian 1986: 30).

When a disyllabic noun is duplicated for the ABAC pattern in Tujia, only C represents a variant asemantic syllable, since the second A naturally refers to the duplicated non-alternating first syllable of the base. Note the formal variation of the fourth syllable in the repetitive item. E.g.:

pu^{55} tsho^{21} —> pu^{55} tsho^{21} pu^{55} pa^{55}/pha^{55}/na^{55}/la^{55}/sa^{55}/tsha^{55}/ka^{55}/kha^{55}
'guest' pu^{55} tsho^{21} pu^{55} pai^{55}/te^{55}/le^{55}/ze^{55}/li^{55}/tɕhi^{55}/khai^{55}
(Tian 1986: 31)

Within this pattern, the second and fourth syllables of a repetitive form derived from a disyllabic base may change positions and Tian (1986: 30-31) argues that this permutation entails a semantic change whereby a permutated disyllable-based ABAC (or rather ACAB) lexeme is semantically otherwise similar to ABAC lexemes derived from monosyllabic bases, except that it cannot be used for emphatic meaning. Formal variation is once more a feature of the asemantic syllable. E.g.:

pu^{55} tsho^{21}	—>	pu^{55} la^{21} pu^{55} tsho^{21}
'guest'		pu^{55} lai^{21} pu^{55} tsho^{21}
		pu^{55} te^{21} pu^{55} tsho^{21}
		pu^{55} le^{21} pu^{55} tsho^{21}

(Tian 1986: 31)

With *khu^{55} tsa^{55}* 'mountain, hill', the consecutive repetitive pattern AABB represents plurality (khu^{55} tsa^{55} —> khu^{55} khu^{55} tsa^{55} tsa^{55} 'connected hills or mountains'), while with *pu^{55} tsho^{21}* 'guest' it is primarily an instrument in implementing emphatic, generic and intimate meaning, of which the first function is lost when *pu^{55} tsho^{21}* is duplicated according to the ABAB pattern (Tian 1986: 33).

The sense of plurality can also be expressed by a repetitive compositional pattern of four syllables in which repetitiveness is realized by a suffixal duplicative element attached to a disyllabic noun (AB + CC —> ABCC). Again, the duplicate is not formally restricted to one type. E.g.:

khu^{55} tsa^{55}	—>	khu^{55} tsa^{55} la^{55} la^{55}/lai^{55} lai^{55}/le^{55} le^{55}/li^{55} li^{55}
'mountain'		khu^{55} tsa^{21} sa^{55} sa^{55}/sai^{55} sai^{55}/ze^{55} ze^{55}/si^{55} si^{55}
		khu^{55} tsa^{21} thi^{21} thi^{21}/tʂhi^{21} tʂhi^{55}
		'(connected) hills or mountains'

(Tian 1986: 34)

2.3. THE TAI GROUP

The Tai languages in the corpus represent various speech forms of Tai minority groups living in mainland China. The Tai nominal corpus thus consists of material from Gelao[55], Shui, Dai, Mulao, Li, Maonan, Dong, Daiya and Lajia; it is much smaller than the set of Chinese data so there is no need to set up separate subchapters according to the major semantic classification system presented in 2, for its treatment. Structurally, Tai nominals presented here display the subsequent patterns: AA, A A-, A A/x, A A-/x, A x/A, A x/A-, AAB and AABB.

From a quantitative viewpoint, the formal category A A/x is most numerous among the set of structural patterns. The majority of the denotations of the items to be presented below language by language are subsumable under the sub-category 'animals and plants' and 'necessities and natural phenomena', as defined in 2.1.1.3 and 2.1.1.4, respectively:

55 As the data used originates completely from Chinese sources, the names of the Tai linguistic groups are all given in their pinyin form. Though Gelao's status as a Tai language is not universally accepted, this work follows He's (1982: 8) cautious suggestion to treat it as such.

a) *Gelao*:

tsaŋ^{33} tsaŋ^{33}	'dragon fly'
tsuŋ^{31} tsuŋ^{24}	'frog'
xəu^{24} xɒ^{24}	'furniture'
ŋau^{31} ŋe^{44}	'spider'

(He 1982: 17)

b) *Dong*:

ləm^{11} leŋ^{33}	'cicada'
ŋo^{53} ŋet^{24}	'long-horned beetle'
aŋ^{33} əi^{13}	'lily'[56]
ka^{31} ɲa^{24}	'confusion'

(Liang 1980a: 26)

c) *Mulao*:

ti^{44} tɛ^{44}	'horn (musical instrument)'
tsøn^{11} løn^{44}	'top (children's toy)'

(Wang & Zheng 1980: 29)

d) *Maonan*:

təm^{231} təŋ^{231}	'mantis'
buŋ^{213} ba^{24}	'butterfly'
ɔŋ^{44} iːt^{44}	'cricket'[57]
puŋ^{213} pi^{51}	'horn (instrument)'
tuŋ^{213} tin^{213}	'dragonfly'
taːt^{44} tɯ^{42}	'pimple, lump, knot'

(Liang 1980b: 28)

e) *Li*:

tshop^{55} tshei^{55}	'spider'
tshop^{55} tshun^{53}	'rainbow'
noŋ^{55} niːŋ^{53}	'cicada'
hjau^{53} hja^{55}	'waist'
ŋa^{53} ŋom^{53}	'kite'
kut^{55} kau^{11}	'firefly, glow-worm'
hu^{11} tu^{11}	'owl'

(Ouyang & Zheng 1980: 77-78)

---

56 In traditional Chinese phonological analysis, a syllable starting with a vowel is treated as a syllable with a zero initial; consequently, this item belongs to the category A A/x according to our syllabic notation system.

57 See fn. 56.

f) *Shui*:

ljum^{55} lja^{55}	'cicada'
lup^{55} lai^{33}	'dusk'
djo° djoŋ^{55}	'tadpole'[58]
ke^{33} le^{33}	'long-horned grasshopper'

(Zhang Junru 1980: 23)

g) *Dai*:

saŋ^{1} saŋ^{1}	'thing'[59]
a^{6} la^{5}	'disease, illness'
pha^{2} sa^{1}	'nation'

(Yu & Luo 1980: 23)

Synchronically, the repetitive nominal lexemes above are opaque, i.e. their constituent syllables are not meaningful, thus they cannot constitute lexemes by themselves (see Liang 1980a: 26; Liang 1980b: 28; Ouyang & Zheng 1980: 77; Yu & Luo 1980: 22). There is no mention in the Tai sources of a productive alliterative or rhyming word-forming process of the kind represented by the set of items above, but despite this they are included in the corpus of repetitive nominal lexical units because, (i) they are repetitive in form (see p. 5); (ii) they are constantly referred to by the same set of terms in the Chinese sources as are generally applied to the output of a productive repetitive process (see p. 5); (iii) they resemble in form the outputs of a repetitive process described as synchronically productive in Mon-Khmer languages (see 2.4, 2.5), which implies the possibility of the existence of such a process earlier in the history of Tai languages.

Distributive meaning is also among the set of meanings expressed through the AA pattern within the Tai repetitive nominal corpus. E.g.:

a) *Dong*:

paːn^{11} paːn^{11}	'every dish'
jaːn^{11} jaːn^{11}	'every household, every family'
man^{55} man^{55}	'every day'
ɲin^{11} ɲin^{11}	'every year'
toi^{53} toi^{53}	'every place'

(Liang 1980a: 35-36)

58 The syllable marked with '°' is tonally neutral (Zhang Junru 1980: 12).

59 The non-paired digits in the upper right hand corner of these Dai items refer to tone categories, not to tonal values.

b) *Mulao*:

u^1 u^1 ($pɤa^1$)	'every (hill) top'[60]
kon^2 kon^2	'every table'
$çən^1$ $çən^1$	'every person, everyone'

(Wang & Zheng 1980: 36)

c) *Maonan*:

$ceŋ^{213}$ $ceŋ^{213}$	'every table'
van^{42} van^{42}	'every day'

(Liang 1980b: 37-38)

d) *Lajia*:

$tsɛ:n^{24}$ $tsɛ:n^{24}$	'every dish'
$ũn^{24}$ $ũn^{24}$	'every bowl'
$lie:k^{11}$ $lie:k^{11}$	'every home, every family'
wan^{231} wan^{231}	'every day'

(Mao et al. 1982: 138)

The scope of application of repetition to nouns varies among the set of Tai languages in the corpus. Dai, for example, does not possess productive nominal repetition at all among its inventory of morphological processes (Yu & Luo 1980: 36). Shui almost equals Dai in this respect, it allows repetition with an emphatic meaning for a subcategory of nouns, viz. those referring to place, on the condition they are modified by the demonstrative pronoun *tsa*^{13} 'that'. E.g.:

te^{33} te^{42} tsa^{13}	'(that) very bottom'
$lən^{31}$ $lən^{42}$ tsa^{13}	'(that) very rear'

(Zhang Junru 1980: 32)

In Li, nouns cannot usually be duplicated, but there are dialectal exceptions to this rule like *pau*^{131} *pau*^{131} 'every year' (Tongshen dialect; Ouyang & Zheng 1980: 31). In Mulao, the duplication of place nouns, for example, is forbidden in one dialect but allowed in another; the above example (*u*^{1} *u*^{1} *(pɤa*^{1}*)*) is from the dialect of Dawu (Wang & Zheng 1980: 36). Maonan, Lajia and Dong are depicted as sharing the common feature of allowing productive repetition for a class of lexemes defined in the respective sources as fullfilling the double function of measure words and nouns. According to Liang (1980b: 38), such items are represented by nouns expressing time and place and those having the meaning of 'dish' and 'household, family', for example. And finally Dong, although deviant from Shui as far as the extent of nominal repetition is concerned, resembles it in the requirement of

60 See fn. 59 for the significance of non-paired digits.

attaching the demonstrative pronoun 'that' to a duplicated place noun, e.g. *wu*^{55} *wu*^{55} *ta*^{53} 'that very top' (Liang 1980a: 37).

Tai languages are similar to Sinitic languages in juxtaposing two semantically similar nouns in repeated form in order to achieve a sense of diversity or of collectivity. E.g.:

a) *Gelao*:
ntai^{44} ntai^{44} mpi^{13} mpi^{13} 'oxen and sheep'
paŋ^{13} paŋ^{13} kun^{13} kun^{13} 'pots and pans'
(He 1982: 25)

b) *Dai*:
luk^{8} luk^{8} laːn^{1} laːn^{1} 'children and grandchildren, descendants'
xɯn^{2} xɯn^{2} van^{2} van^{2} 'day and night'
(Yu & Luo 1980: 29-30)

c) *Shui*:
qaːi^{35} qaːi^{35} ep^{55} ep^{55} 'chickens and ducks'
u^{24} u^{24} te^{33} te^{33} 'top and bottom'[61]
(Zhang Junru 1980: 32)

d) *Mulao*:
khɣaːu^{3} khɣaːu^{3} sik^{8} sik^{8} 'wine and meat, food'
(Wang & Zheng 1980: 370)

e) *Daiya*:
mɯ^{3} mɯ^{3} van^{2} van^{2} 'night and day'
(Xing 1987: 45)

But Liang (1980a: 35) argues that in Dong the quadrisyllabic pattern AABB is utilized primarily for emphatic purposes in the following kind of context, for example:

pət^{55}	pət^{55}	aːi^{53}	aːi^{53}	tik^{24}	jaːn^{11}
duck	duck	chicken	chicken	full	house/room

'The house/room is full of ducks and chickens (not of other animals).'

61 This example is taken from a context where the repeated form serves to emphasize the repetition of the action expressed by the verb (Zhang Junru 1980: 32). It can still be conceptualized as expressing diversity, this time in the sense of fluctuation in the direction of the action in question.

In Liang's opinion, disyllabic nominal duplicates (AA) are likewise used for emphatic meaning in Dong (Liang 1980a: 35). E.g.:

əu^{31}	əu^{31}	tik^{24}	so^{31}
grain	grain	full	granary

'The granary is full of grain (and not of something else).'

məi^{31}	məi^{31}	tik^{24}	tən^{31}
tree	tree	full	mountain

'The mountain is full of trees (and not of something else).'

It is interesting to note how, depending on the analyst, different conclusions are drawn as to the essential meaning of a particular form in a similar context. The context of the AABB Mulao item in the following example is similar to that of Dong, but there is no talk of emphaticness; instead the duplicative form is expressly said to indicate a large number of the things designated (Wang & Zheng 1980: 37):

khɣaːu^{3}	khɣaːu^{3}	sik^{8}	sik^{8}	paːi^{3}	pik^{7}	n̥aːu^{3}	kon^{2}
wine	wine	meat	meat	lay	full	one	table

'The table is full of wine and meat.'

The dissimilar semantic analyses presumably depend on the fact that the analysts have simply paid attention to different aspects in the semantic configuration of the sentences. The emphatic interpretation seems to stress the fact that within the category of domestic animals, for example, it is ducks and chickens that have filled the room, while the latter interpretation can be seen as accentuating the plurality of the categories of things referred to.

2.4. THE VIET-MUONG GROUP

The corpus of nominal lexemes in this chapter originates from Vietnamese and Muong (Mường[62]) which make up the Viet-Muong sub-group within the Mon-Khmer languages.

The set of repetitive nominal lexemes to be treated can be exhaustively represented by the following formal syllable-based patterns: AA, A A-, A A/x, A A-/x, A x/A, A x/A-, ABAB-/x, ABC ABC-/x and ABCD ABCD-/x. This rather long list of different repetitive structural patterns attempts at capturing all the relevant phonological and tonological features within the Viet-Muong nominal repetitive sub-

62 According to the orthographic conventions of Standard Vietnamese. The Muong call themselves 'Mol' in their own language (Hoàng 1998: 27).

corpus. But as the changes of tones in a Vietnamese repetitive form are modified following certain rules (see below), the subsequent set of collapsed notational formulae is proposed in respect to this language[63]: AA(-), A A(-)/x, A x/A(-), ABAB-/x, ABC ABC-/x and ABCD ABCD-/x. This set has the advantage of doing away with a predictable element in the present repetitive Viet-Muong corpus, and of still making explicit the essential formal characteristics of the repetitive items. The first three formulae also correspond more or less to categories set up traditionally by Vietnamese scholars with regard to Vietnamese[64]. Hoang's (1985: 36-71) exposition of the regularities involved in Vietnamese productive repetition expounds more thoroughly the formal variation characteristic of this language in this respect.

Repetitive nominal lexemes referring to the flora and fauna of the natural environment in the areas inhabited by speakers of Vietnamese and Muong are in the majority in the total nominal corpus so that it can conveniently be divided into two categories in terms of denotation: animals and plants vs. other denotations of which the former is treated first. Due to the much better accessibility of lexical material, most of the lexemes to be analysed below are taken from Vietnamese. The decision not to prune down the number of Vietnamese items to fewer exponents in each category rests on the desire to emphasize the pervasiveness of repetition as a structural principle in the lexicon of modern Vietnamese.

The items to be introduced will, in the first place, be categorized according to structural pattern with interspersed comments on formal characteristics with respect to repetition. The data are for the sake of clarity further divided into such sub-categories as 'birds', 'plants', 'insects', 'fish' and 'reptiles' in the following structural taxonomisation:

---

63 Regrettably the Muong data do not shed any light on possible regularities in the tonological domain either within repetitive forms or within the whole language for that matter.

64 Vietnamese linguistic literature traditionally does not pay attention only to the similarities between an input and an output form of a productive repetitive process, but it assigns equal weight to the concept of dissimilarity in defining repetition as a phonetic and semantic process whereby a morpheme is duplicated according to fixed rules involving formal repetition and dissimilation of tone, initial consonant and rhyme (Hoang 1985: 27). When this definition is mixed with the concept of dividing in two, initial consonant and rhyme, of the syllable according to traditional Chinese phonological thought, the following four-way patterning of repetitive lexemes, emerges (Hoang 1985: 39):

a) Complete duplicatives, repetition of rhyme, e.g. người —> người người
b) Complete duplicatives, dissimilation of rhyme, e.g. ắp —> ăm ắp
c) Partial duplicatives, repetition of rhyme, e.g. nhùng —> bùng nhùng; khéo —> khéo léo
d) Partial duplicatives, dissimilation of rhyme, e.g. chắc —> chắc chắn,

The reason why this classification has not been used as such is that it would be conceptually misleading to apply such notions as 'complete' and 'dissimilation' to the same repetitive form [see b) above] in a study which takes the concept of formal similarity/difference between the base and the repetitive syllable as a fundamental classificatory principle. That is why b) and d) above can be collapsed into one, which results in the three formal categories symbolized as AA(-), AA(-)/x and A x/A(-) according to the notational system of the study.

(1) AA(-):

a) *Birds*:

choi choi	'plover'
kền kền	'vulture'[65]
đa đa	'francolin'
le le	'tree-duck'
se sẻ	'sparrow'
cu cu	'(a bird close to) pidgeon, dove'
điên điển	'a bird species (large in size)'[66]
chiền chiện	'skylark'

(Dang & Le 1990: 145, 350, 211, 403; Nguyen 1975: 180; Hoang et al. 1995: 100, 123, 83)

b) *Plants*:

dành dành	'gardenia'
chôm chôm	'rambutan'
bìm bìm	'bindweed'
đòng đòng	'rice in ear'
bồ bồ	'a medicinal herb'
bo bo	'Job's tears'
bui bui	'bran and rice husks in loose bits'
đu đủ	'papaya, melon tree'
su su	'chayote'
vên vên	'a species of tree, related to parashorea'
bòn bon	'a species of fruit plant'
bồng bồng	'a plant of medium-size'
bòng bong	'a species of fern'
bòng bòng	'a shrub-like plant'
điềng điễng	'a species of plant used to make green manure'
kiền kiền	'a species of tree'

(Dang & Le 1990: 190, 147, 59, 246, 156; Hoang Phe et al. 1988: 93; Hoang Van Hoanh et al. 1995: 45, 54, 127, 485, 555, 46, 123, 210)

c) *Insects*:

cào cào	'locust'
chuồn chuồn	'dragon-fly'
châu chấu	'grasshopper'
bươm bướm	'butterfly'[67]

65 Also with level tone: *kên kên* (Hoang et al. 1995: 187).

66 This is a dialectal word (Hoang et al. 1995: 123).

67 *Bướm bướm* is considered dialectal (Hoang et al. 1995: 59).

ve ve	'cicada'
cò cộ	'large cicada'
đom đóm	'fire-fly, glow-worm'[68]
niêng niễng	'cybister'[69]

(Nguyen 1975: 180; Hoang et al. 1995: 554, 124, 419)

d) *Fish*:

thia thia	'macropodus'
mài mại	'a species of fish related to carp'
đòng đong	'a species of fish (small in size)'

(Hoang et al. 1995: 508, 331, 125)

e) *Reptiles*:

ba ba	'trionychid turtle'

(Dang & Le 1990: 20)

Vietnamese dialects have repetitive forms corresponding to non-repetitive monosyllabics in the standard language. The dialect of Nghe Tinh, for example, has *én én* 'swift' for *én* and *tráo tráo* 'mynah bird' for *sáo* established by the official language; the lexeme for 'sparrow' in this dialect is also a representative of the AA(-) -pattern, namely *rặt rặt*, corresponded, for example, by a locally unspecified dialectal AA(-) -form *se sẻ* (Hoang et al. 1995: 479) and the monosyllabic standard lexeme *sẻ* (Hoang 1985: 99; Dang & Le 1990: 109, 265, 604). A species of amphibian is dialectally *hiu hiu* (Hoang et al. 1995: 164), an AA(-) -item, corresponded by A A(-)/x -forms in the lexicon of the standard language (*cháo/chẫu chàng* 'racophorus'). *Tê tê* 'rhinoceros', a species of mammal, is also an AA(-) -form (Hoang et al. 1995: 498).

A change of tone in Vietnamese duplicates, evident also in the above lexemes, is regulated by the principle of opposition (dissimilation!) of 'plain' vs. 'non-plain' ('broken') tones within the same register[70]; the criterion of the same register is conditional, but the criterion of plain vs. non-plain is fundamental (Hoang 1985: 42-43)[71]. The dichotomy constituted by the opposition between plain and broken

68 This is marked as dialectal (Hoang et al. 1995: 124).

69 A lexeme regarded as dialectal differs from this form only in the tone of the second syllable: *niêng niệng* (Hoang et al. 1995: 419).

70 The opposition 'plain' vs. 'non-plain' ('broken'), if translated into phonetic terms, refers to an opposition non-pharyngealised/non-glottalised vs. pharyngealised/glottalised (see e.g. Dauphin 1994: 20-30). There are two tonal registers in Vietnamese, one is characterised by a relatively higher pitch and the other by a lower pitch.

71 An exemplification of the fulfillment of both conditions is provided by the variant forms for 'cybister', viz. *niêng niễng* and *niêng niệng*, where the tones of the two items belong to the low register, but are plain + broken, respectively.

tones is essential in Vietnamese prosody where rules concerning the distribution of plain and non-plain tones are particularly strict.

(2) A A(-)/x:

a) *Birds*:

bìm bịp	'boucal'
chích chòe	'magpie-robin'
ghầm ghì	'green imperial pigeon'
cun cút	'button quail'
cồng cộc	'cormorant'[72]
dồng dộc	'a species of bird related to the sparrow'
khảm khắc	'a species of bird living in the mountains'

(Nguyen 1975: 180; Hoang et al. 1995: 82, 139, 101-102, 100, 112, 189)

A regularity on the segmental level in Vietnamese concerns voiceless stop finals of root morphemes in duplicative lexemes, which are replaced by homologous nasals in repetitive syllables: *-p* by *-m*, *-t* by *-n* and *-k* by *-ŋ* (e.g. *bìm bịp*, *cun cút*, *cồng cộc*, *dồng dộc* above) (Hoang 1985: 46).

b) *Plants*:

đùng đình	'fish-tail palm'
núc nác	'a species of plant (tall in height)'

(Hoang et al. 1995: 128, 423)

c) *Insects*:

nắc nẻ	'hawk-moth'

(Dang & Le 1990: 474)

d) *Fish*:

săn sắt	'macropodus'

(Hoang et al. 1995: 477)

e) *Reptiles*:

nòng nọc	'tadpole'
cháo/chẫu chàng	'racophorus'
cháo/chẫu chuộc	'hylarana'
cắc kè	'gecko'[73]

(Dang & Le 1990: 533; Hoang et al. 1995: 72, 79, 64)

72 A dialectal word (Hoang et al. 1995: 100).

73 Dialectal (Hoang et al. 1995: 64).

There are also other sea creatures in addition to *săn sắt* 'macropodus' above which are referred to by a term conforming to the A A(-)/x -pattern, e.g. *trùng trục* 'unio (a kind of mussel, related to the oyster)' and *đòn đột*, a dialectal name for the holothurian, related to the sea-cucumber and bêche-de-mer (Hoang et al. 1995: 537, 126).

(3) A x/A(-):

a) *Birds*:

cúm núm	'a species of bird related to the swamp-hen'
chót bót	'a species of bird related to the koel'
cheo bẻo	'drongo'
chào mào	'a species of bird (small in size)'
liếu điếu/tiếu	'Chinese laughing thrush'
lênh đênh	'pelican'
chàng làng	'a species of bird (small in size)'

(Hoang et al. 1995: 101, 88, 80, 72, 274, 267, 70)

b) *Plants*:

thốt nốt	'palmyra'
là ngà	'a species of bamboo'
lú bú	'white radish'[74]
thài lài	'day-flower'
lòng bong	'lygodium (climbing fern)'[75]
thầu dầu	'ricinus, castor-oil plant'
lồ ô	'a species of bamboo (tall in height)'
bời lời	'a species of tree'
chà là	'date palm, date'
bùi nhùi	'skein of straw, skein of bamboo shaving'
chòi mòi	'a species of plant related to the ricinus, the castor-oil plant'

(Hoang et al. 1995: 514, 214, 312, 499, 292, 505, 296, 52, 68, 54, 86)

c) *Insects*:

tò vò	'mason bee, wall bee'
lăng quăng	'mosquito larva'[76]

(Hoang et al. 1995: 523, 238)

74 Dialectal (Hoang et al. 1995: 312).

75 Dialectal (Hoang et al. 1995: 292).

76 Dialectal (Hoang et al. 1995: 238).

d) *Fish*:

thác lác	'a species of fish'
lờn/thờn bơn	'flounder, sole'
lành canh	'a fresh-water species of fish'

(Hoang et al. 1995: 499, 309, 515, 225)

e) *Reptiles*:

liu điu	'hypsirhina'
thằn lằn	'lizard'
thuồng luồng	'legendary snake-like monster'
đồi mồi	'sea tortoise'

(Hoang et al. 1995: 276, 502, 517, 126)

A mammal, namely the orangutang, is referred to in Vietnamese as *đười ươi*, also a term of the A x/A(-) pattern (Hoang et al. 1995: 129).

A specific trait of duplicatives under this pattern naturally consists of differing initial consonants, similar rhymes and often identical tones, with a few exceptions in this respect (e.g. *cheo bẻo*, *lòng bong*, *lồ ô*, *lờn/thờn bơn* and *lành canh*). Two sub-groups can be distinguished under this pattern according to the position of the root morpheme, if it is distinguishable: similarity of tone and position after the duplicative syllable is typical of one, while a position before the repetitive syllable and possible tonal dissimilarity between the constituent syllables characterize the other sub-group (Hoang 1985: 48, 51-52).

On the basis of larger corpora related to this portion in the Vietnamese lexicon, regular combinatory tendencies between lexeme-internal syllable-initial consonants have been observed. It has been noticed, for example, that an initial *l-* in the first syllable pairs off with any other consonant in the second syllable except *n-* and *g-* (Hoang 1985: 49). There are some exponents of the pair *l-* + *C-* (mostly *đ-*) in the above set, namely *liếu điếu/tiếu*, *lềnh đềnh*, *là ngà*, *lú bú*, *lăng quăng* and *liu điu*. Other frequent consonant pairs in this context, also represented in the mini corpus here, are *b- – nh- (bùi nhùi)*; *b- – l-, (bời lời)*; *ch- – b-, (chót bót)*; *ch- – m-*, (*chào mào*, *chòi mòi*); *ch- – l-*, (*chàng làng*, *chà là*); *th- – d-*, (*thầu dầu*) and *th- – l-* (*thài lài*, *thác lác*, *thằn lằn*, *thuồng luồng*). It has been suggested that modern disyllabic duplicative lexemes especially with an initial liquid (*l-*, *r-*) in the second syllable, may be the results of the break-up of an original consonant cluster in a monosyllabic frame (see ch. 6).

The following exposition of the quantitatively much smaller Muong set settles for a classification based on structure alone:

(1) AA:

sôm^{2} sôm^{2}	'shrimp'[77]
khaw^{3} khaw^{3}	'mynah bird'
din^{3} din^{3}	'kingfisher'
ba^{2} ba^{2}	'turtle'

(Hoang 1998: 28-29, 35)

(2) A x/A:

bok^{3} kok^{3}	'toad'
de^{4} khe^{4}	'sparrow'
thạw^{1} dạw^{1}	'China tree, margose'

(Hoang 1998: 28)

(3) A A/x:

pop^{5} pip^{5}	'boucal'

(Hoang 1998: 33)

(4) A A-/x:

tlaj^{3} tlang^{2}	'fruit'
sôl^{3} sim^{2}	'sedge'
kut^{3} kơw^{5}	'owl'

(Hoang 1998: 33, 35)

The set of other denotations within the Viet-Muong repetitive sub-corpus will be exemplified in terms of three sub-categories: generic terms, terms with a distributive meaning and terms not belonging in either of the first two. The possibility of the first sub-category to be further divided into such classes as 'animals and plants', 'people and parts of the body' and 'necessities and natural phenomena', is duly reflected in a tripartite exposition below.

All the members in the subsequent tripartite set of generic terms consistently repeat the initial consonant of the root morpheme, but insert a new rhyme. Thus the notion 'generic' within the framework of repetitive Vietnamese nominals of the present data can be formally translated into A A(-)/x in the suggested notational system. According to an investigation there are about one hundred different rhymes that can be attached to the repeated initial consonant in the duplicative syllable, which is about 60% of the total set of rhymes in Standard Vietnamese (Hoang 1985: 54-58). The root morpheme may precede or follow the duplicated syllable in this type of repetitive lexical item (Hoang 1985: 53); the former alternative is the rule in the data below, with a couple of items marked as capable of taking both orders. In

77 The single digits in the upper right hand corner of Muong lexemes refer to tone categories and not to actual tonal values.

the following presentation, the rhymes applied in the generic data will be specified after each sub-set. Recognition of repetitive syllables is not difficult as the set below consists of transparent items, i.e. the root morphemes exist as lexemes by themselves. E.g.:

(1) *Animals and plants*:

chim chóc	'birds'
ngựa nghẽo	'horses'[78]
cây cối	'trees and plants, vegetation'
hoa hoét	'flowers'[79]

(Dang & Le 1990: 139, 111; Hoang et al. 1995: 383)

With the exception of *-oet*, all the other rhymes (*-oc*, *-eo*, *-ôi*) in the set cited appear on the list drawn up by Hoang (1985: 54-58) of frequent rhymes applied to the duplicative syllable positioned after the base morpheme.

(2) *People and parts of the body*:

bạn bè/bè bạn	'friends'[80]
khách khứa	'guests and visitors'
hình hài	'body, physical being'
giặc giá	'rebels'
đĩ đượi	'prostitutes'
da dẻ	'complexion'
dân dá	'peasants'
vú vê	'breasts'[81]
người ngợm	'dullard, dolt (in general)'
phu phen	'coolies, corvee-bound labourers'
mắt mũi	'eyes, eyesight'
xương xảu/xẩu/xóc	'bones'
lú lí	'crowds (of people)'[82]

(Hoang et al. 1995: 25, 37, 189, 164, 144, 122, 104, 108, 560, 578; Dang & Le 1990: 506, 444, 336, 312)

The lexemes cited indicating people and parts of the body are exceptionless in terms of the correspondence between Hoang's frequency list and the rhymes they contain. Thus in addition to the rhymes enumerated under (1), the sub-set (2)

78 Derogatory (Hoang et al. 1995: 383).

79 Ironic (Hoang et al. 1995: 165).

80 *Bầu bạn* is yet another duplicative alternative for expressing the meaning 'friend' (Hoang et al. 1995: 25).

81 Derogatory (Hoang et al. 1995: 560).

82 Marked as a form belonging to the spoken language (Hoang et al. 1995: 312).

features *-e*, *-ưa*, *-ai*, *-a*, *-ươi*, *-ê*, *-ơm*, *-en*, *-ui*, *-au* and *-âu*. If the form *bè bạn* is regarded as an exponent of the optional duplicative syllable first -order, the rhyme of its first syllable (*-e*) conforms to Hoang's list of rhymes frequently used in lexemes which exemplify this principle in the mutual ordering of syllabic constitutents.

The last item on the list, *lú lí*, embodies a vowel alternation between its constituent syllables, which according to Hoàng (1985: 44-45) is frequent among alliterative disyllabic lexemes.[83]. The form in question is opaque,[84] so that the direction of correspondence in terms of a base and a derivative syllable cannot be solved.

Instances of Muong vocabulary with the type of reference presently under consideration are restricted to *sạk³ sa¹* 'hair' (A A-/x) (Hoang 1998: 29).

(3) *Necessities and natural phenomena*:

máy móc	'machinery'
đồ đạc	'outfit, furniture'
chùa chiền	'pagodas'
bụi bặm/bậm	'dust'
bão bùng	'storms, hurricanes'
gai góc/gốc	'thorns'
dây dóng	'cord and string'
đất đai	'soil, land (in general)'
đê điều	'dykes and dyke-maintenance'
ghét gứa	'dirt (in general)'
gậy gạc/gộc	'sticks and canes'
hàng họ/họ hàng	'goods; business transactions'
mỡ màng	'fat, lard (in general)'
là lượt/lượt là	'silks and satins'
màu/mầu mè	'colours'
ngóc ngách	'narrow and out-of-the-way roads'
quà cáp	'gifts, presents'

83 A contradictory feature in Hoang's system of classifying duplicative patterns is to regard forms typifying such a vowel alteration as *-u – -i* as an example of complete repetition (Hoang 1985: 44). Even though we would accept as totally predictable the tonal adaptations, which is close to the truth (see the table of correspondences in Hoang 1985: 42), and as exceptionless the mutual correpondence between voiceless stop finals and homologous nasals; the acceptance as identical in Vietnamese, i.e. as partaking of complete repetition, of some pairs of segmentally different rhymes, such as the ones presented on pp. 44-45 in Hoang (1985) for instance, and the fact of regarding as different, i.e. fulfilling the criterion for partial repetition, of other pairs of segmentally differing rhymes (see Hoang 1985: 54-58), amount to an obvious contradiction. Such a framework is conceptually rather confusing which is why the present work consistently interprets non-identity in segmental structure of rhymes as an indication of difference. Hoang's system reflects the traditional Vietnamese classification (see fn. 64).

84 As far as the sources presently available are concerned.

rác rưởi	'litter, rubbish, refuse'
mũ mãng	'hats'
thịt thà	'meat (in general)'
vóc vạc	'stature, size of people (in general)'
miếu mạo	'temples and shrines'

(Dang & Le 1990: 446; Hoang et al. 1995: 125, 92, 54-55, 27, 135-136, 109, 119, 121, 142, 150-151, 165, 345, 214, 329, 334, 337, 372, 459, 346, 510, 557, 340)

Correspondence between Hoang's list and the rhymes exposed by the second syllables of disyllabic repetitive nominals in the cited sub-set of nominals defined as referring to necessities and natural phenomena within the Vienamese lexicon, fails only with *-ăm*, *-ôc* and *-ua*, while it is substantiated by *-ac*, *-iên*, *-âm*, *-ung*, *-ong*, *-iêu*, *-ang*, *-ươt*, *-ach*, *-ap* and *-ao*. If again the linear orderings *họ hàng* and *lượt là* are aligned with the cases where the duplicated syllable is placed first, the *-o* -rhyme agrees with an entry on Hoang's list (1985: 54), while *-ươt* is slightly problematic since Hoang has provided the corresponding linear segment on his list with a tone mark (*-ướt*), which is unusual because otherwise, with a few exceptions, he insists on transcribing only the segmental substance of the rhymes listed.

The Muong lexicon lists at least the following alliterative nouns (A A(-)/x) categorizable as falling under necessities and natural phenomena:

hraw^{1} hrak^{5}	'fence'
sit^{5} sa^{1}	'meat'
la^{3} lung^{3}	'leaf'
lac^{5} lung^{5}	'bamboo tape, cane tape'

(Hoang 1998: 33, 29)

Vietnamese is similar to the languages treated in 2.1.1.6, 2.2 and 2.3 in that lexical items denoting people, collectives, time and place can be subjected to total repetition, resulting in a form with a distributive meaning (AA). E.g.:

người người	'every person, everyone'
lần lần	'time after time, gradually'
chiều chiều	'every evening'
ngày ngày	'every day'
năm năm	'every year'
đời đời	'generation after generation, forever'
làng làng	'every village'
nhà nhà	'every household, every family'
nơi nơi	'every place'

(Dang & Le 1990: 399, Tran et al. 1983: 157, Nguyen 1969: 188; Hoang et. al. 1995: 423)

Muong seems to share in this common feature of distributive duplicates (AA):

dông^3 dông^3	'every heap; every hill; every place'[85]
mang^4 mang^4	'every chunk'[86]

(Hoang 1998: 34)

The total corpus of Vietnamese repetitive nominals satisfying the formal patterns established at the beginning of this chapter are not exhausted by nor restricted to the denotative sub-categories presented so far, but are involved in other types of referential relationships as well, as demonstrated by the following selection:

nông nỗi	'plight, uncomfortable emotional state'
nháy nháy	'quotation marks'[87]
sơ sót	'minor mistake'
xàng xê	'Chinese-influenced aria of the reformed theatre'
lô lốc	'great quantity'[88]
phần phò	'something composite, something to be divided'[89]
thồm lồm	'disease causing pustules in the helix of the ear'
tí tỉnh	'a little'[90]
màng màng	'layer of film on the surface of liquid'
mảy may	'particle, a tiny bit'
mệnh lệnh	'order'
đằng đằng	'boil in the hand, provokes inflammation with pus'
bùng binh	'square'[91]
búng báng	'stomach disease'
tung tích	'whereabouts, trace'

(Hoang et. al. 1995: 422, 389, 483-484, 565, 295, 438, 513, 519, 332, 335, 338, 117, 56, 57, 540)

The set of lexemes above contains three transparent instances of the A A(-)/x -pattern of which two place the repeated syllable before and one after the base morpheme. Of the former two, only one has a rhyme (*-σ* in *sơ sót*) matching an

85 As it is impossible to know which of the three meanings attributed to the Vietnamese lexeme used to translate the Muong-word is possibly the actual meaning of the latter, all meanings are given (see Dang & Le 1990: 254).

86 With this item, only one of the meanings of the Vietnamese translation of the base morpheme is made explicit. The other sense is 'small bamboo raft' (Dang & Le 1990: 443), which could also be the correct one.

87 Marked as a form used in colloquial language (Hoang et. al. 1995: 389).

88 Colloquial (Hoang et. al. 1995: 295).

89 Derogatory (Hoang et. al. 1995: 438).

90 Colloquial (Hoang et. al. 1995: 519).

91 Dialectal (Hoang et. al. 1995: 56).

entry on Hoang's (1985: 54) list of rhymes of repetitive syllables placed before the base, while the other (*-ông* in *nông nỗi*) is a non-entity in this sense. The *-o* in *phần phò*, on the other hand, makes its appearance on the list of rhymes in duplicative syllables placed after the root syllable morpheme (Hoang1985: 57).

Finally, a description of a productive repetitive pattern in Vietnamese concludes this chapter. This pattern consists of suffixing the rhyme *-iếc* to the initial consonant of a base with the concomitant semantic effect translatable in a nominal context as 'the so-called N' or 'N and the like' (Dao 1998: 1, 6). In the case of monosyllabic bases, the result conforms to the A A(-)/x -pattern. E.g.:

sách	'book'	—>	sách siếc	'books and the like'
phở	'noodle soup'	—>	phở phiếc	'the so-called noodle soup'
lãi	'profit'	—>	lãi liếc	'profits and the like'

(Dao 1998: 1, 3)

In polysyllabic nominals *-iếc* is inserted after the initial consonant of the final syllable of a duplicated polysyllabic item (Dao 1998: 1), which with disyllabic bases gives ABAB(-)/x as a result when translated into the notation applied in the study. E.g.:

cà phê	'coffee'	—>	cà phê cà phiếc	'coffee and the like'
hành lí	'luggage'	—>	hành lí hành liếc	'luggage and the like'
xe đạp	'bicycle'	—>	xe đạp xe điếc	'the so-called bikes'

(Dao 1998: 1; Nguyen 1969: 193)

Lexical items of more than two syllables are often phonetic loans in Vietnamese, such as the tri- and quadrisyllabic nominals serving as bases in the following exponents of '*-iếc* -sation' (ABC —> ABC ABC-/x and ABCD —> ABCD ABCD-/x):

câu lạc bộ	'club'	—>	câu lạc bộ câu lạc biếc	'clubs and the like'
pênixilin	'penicillin'	—>	pênixilin pênixiliếc	'penicillin and the like'

(Nguyen 1969: 193; Dao 1998: 1)

In earlier studies, repetition with *-iếc* was treated as a non-restricted productive process, applicable to all lexemes, but later investigations have shown that repetition with *-iếc* is barred from applying to lexemes ending in *-iếc* in their basic form. Furthermore, repetitive derivatives cannot undergo '*-iếc* -sation', neither can coordinate compounds with generic meaning nor combinations containing a constituent with a complementary meaning be duplicated with *-iếc*; in terms of word classes, the application of duplication with *-iếc* is restricted to nouns, verbs and

adjectives, being especially productive in the class of nouns (Dao 1998: 2, 4). Register-wise, '*iếc* -sation' is almost exclusively a phenomenon of the spoken language where an additional requirement for its usage is informality of the speech situation and that the interlocutors be on intimate terms with each other (Dao 1998: 3). Dao (1998: 6-7) also pays attention to the role of syntagmatic conditioning in the usage of repetition with *-iếc* and notes that elements sometimes attendant in syntactic structure are indispensable for its application.

2.5. OTHER MON-KHMER LANGUAGES

The set of other Mon-Khmer languages in the data available for the study comprises Wa[92], Bru, Katu, Pacoh, Taoih and Jeh. Bru, Katu, Pacoh and Taoih form a more tightly-knit unit, the Katuic sub-group, in the Mon-Khmer branch of the Austro-Asiatic family (Hoang 1993: 8). Except for Wa, a minority language in Yunnan province (Zhou & Yan 1984: 1), mainland China, the rest of the Mon-Khmer speech forms in question are all spoken in Vietnam.

Denotations of the repetitive items to be exemplified in this chapter range from animals and plants to relatives, people and parts of the body, necessities and natural phenomena as delineated in 2.1.1.4 and to nouns of location. The scope of reference for terms indicating people and the parts of the body as defined in 2.1.1.2 has been extended to cover all phenomena associated with the human condition. The method of exposition in this chapter coincides with the one established in 2.4 except that no further specific categorization beyond structural patterns is considered necessary. When the forms cited for a particular pattern originate in various languages, the language of origin is given in parentheses below the forms cited.

The vowel in the rhyme of the repeated syllable in the subsequent set of disyllabic repetitive words referring to animals and plants in the Katuic languages is not random, but there are certain tendencies around which this alternation clusters. One major tendency is for the high vowel of the base morpheme to change to a low vowel: *-i-* —> *-a-*, *-u-* —> *-a-*, another consists of a front to back change: *-i-* —> *-u-*, *-i-* —> *-ơ-*. This feature is evident in the examples from Bru below.

Furthermore, all Katuic languages have a rich inventory of different rhymes for the type of disyllabic repetitive lexeme represented by the Taoih and Pacoh floral/faunal items on the alliterative list below, where the repetitive syllable stands after what can be distinguished as the base morpheme[93] (see 2.4 for a related phenomenon in Vietnamese with respect to rhymes). The Wa alliterative repetitive nominals with reference to flora and fauna below are treated as monomorphemic in the source

92 This is the Chinese name for the ethnic group in question.

93 In addition to the rhymes here (*-e*, *-it*, *-uk*), Hoang (1993: 12) lists the following: *-ai*, *-ang*, *-al*, *-an*, *-eng*, *-et*, *-eh*, *-ooj*, *-oi*, *-oq*, *-ul* and *-ơu*.

(Zhou & Yan 1984: 24), but the assumption of their possible duplicative origin is supported by the existence within Wa of an alliterative repetitive process (Zhou & Yan 1984: 28). The fact that productive alliterative duplication is alive and well in genetically related languages hardly detracts from the value of this assumption.

Note how things are not always what they seem; for example, the repetitive aspect of *to vo̲* 'lotus' in Wa is not the result of a productive rhyming repetition despite its resemblance to an output of such a process, but is explained by Zhou & Yan (1984: 13) as being the result of an assimilatory development (*tai vo̲* —> *to vo̲*). Such forms can at some stage, however, be interpreted by the speakers as belonging in the sphere of duplication, as proved by Vietnamese (see ch. 6.).

One of the Jeh names of animals on the list below complies with Bru in having *i* in the base morpheme and *u* in the alliterative syllable (*lu lit*), which, however, is placed before the root instead of after as in Bru (i.e. A —> A/x A) (Cohen 1966: 39):

(1) A A/x:

yit yat	'racket-tailed treepie'
mur miar	'fire ant'
ngir ngur	'bee'
kling klơng	'green beetle'
(Bru; Hoang 1993: 9)	
llong lle	'trees and plants'
tăng tít	'dragonfly'
(Taoih; Hoang 1993: 12)	
păng puk	'butterfly'
(Pacoh; Hoang 1993: 12)	
praŋ prɤk	'radish'
kaŋ kɔi	'hare'
(Wa; Zhou & Yan 1984: 24)	
ho hoh	'buffalo'
lu lit	'a large biting fly'
(Jeh; Cohen 1966: 39)	

The liquid *l* as an initial consonant in the first syllable of a rhyming disyllabic repetitive item paired with some other consonant in the second syllable, exemplified by *long mong* below, is a regular phenomenon in the Katuic languages (see 2.4 for a related phenomenon in Vietnamese). E.g.:

(2) A x/A:

long mong	'butterfly'
sau rau	'mynah bird'

(Bru; Hoang 1993: 10)

Complex repetitive lexemes in the Katuic languages are items constructed by duplicating a disyllabic base. The three complex floral/faunal items below, exemplifying two distinct patterns, are also examples of semantic generalisation attendant on the repetitive process: e.g. *sarưng* 'forest, jungle' —> *sarưng sariaq* 'forest and jungle, forest and mountains (in general)' (Hoang 1993: 17):

(3) ABAB/x:

sarưng sariaq	'forest and jungle'

(Bru; Hoang 1993: 17)

atruai atrưiq	'fowls'

(Pacoh; Hoang 1993: 12, 13)

(4) ABAC:

cơrnoh cơrbet	'seeds for sowing, farm produce'

(Katu; Hoang 1993: 14)

The only instance of complete repetition of a monosyllabic base with reference to either animals or plants, comes from Jeh (*chaw chaw* 'locust' [Cohen 1966:40]).

Nouns are not usually subject to productive repetition in Wa, but some kinship terms are an exception in this respect. The completely duplicative items below might as well be categorized under connotative meaning since their repetition involves an implication of intimacy (Zhou & Yan 1984: 34), but preference for subsuming them under denotative interpretation has prevailed this time. E.g.:

ta? ta?	'(paternal) grandfather'
mɛ? mɛ?	'mother'

(Zhou & Yan 1984: 34)

The vowel change in the alliterative (A A/x) lexeme with the meaning 'bone, skeleton' in the Bru items below referring to parts of the body is an exception to the general high to low - and front to back -tendencies in displaying a low to high change instead (*-a-* —> *-o-*) (Hoang 1993: 9), while *lơiq kơiq* is congruent with the common Katuic parallelism of having an initial *l-* in the first syllable of a rhyming duplicative lexeme (A x/A) (Hoang 1993: 10). E.g.:

pung pang	'buttock'
nghang nghong	'bone, skeleton'
lɑiq kɑiq	'nape of the neck, back'

(Hoang 1993: 9-10)

The second syllable in the first two alliterative (A A/x) lexemes in the subsequent set of Katu items with the kind of reference presently under discussion, is duplicative and exemplifies *-al* and *-et* as rhymes in the derived syllable. The Vietnamese translation attributes a negative connotation, more specifically an implication of dissatisfaction, to the meaning of the second item (Hoang 1993: 12; Hoang et al. 1988: 1164). The third lexeme is of the same type but with a different rhyme (*-ang*) in the duplicated syllable characteristically positioned after the root morpheme (Hoang 1993: 12). E.g.:

sok sal	'hair'
sok set	'hair'
krhoh krhang	'copious perspiration'

(Hoang 1993: 12)

A term for expressing one aspect in the human condition, namely the word for 'widow' in Pacoh and Taoih is derived from an adjective (*kammai* 'widowed') and structurally identical with *sarɯ́ng sariaq* and *atruai atrɯ́aq* (ABAB/x) treated above:

kammai kammook	'widow'

(Hoang 1993: 13)

Wa is not devoid of alliterative disyllabic nominals with reference to parts of the body, either. The process of creating the following items on the basis of *rhɔ̱m* and *prɛʔ* (A —> A A/x) does not involve any semantic change:

rhɔ̱m 'heart'	—>	rhɔ̱m rhi̱	'heart'
prɛʔ 'food and drink, diet'	—>	prɛʔ prɯm	'food and drink, diet'

(Zhou & Yan 1984: 28)

If semantics is not the primary reason for the formation of such lexemes as the ones from Wa above, could it be motivated by an aspiration towards a canonical structure of some sort, which has not been thoroughly established yet, as the co-existence of synonymous forms suggests? Or perhaps there is a stylistic difference between the base and the derived form, not mentioned by the source.

The Jeh data feature the following completely repetitive (AA) or alliterative (A A/x) nominal lexemes with reference to people and parts of the body:

chang chang	'the side of a person's body'
chun chun	'the haunches'
kul kul	'wrist'
dam dam	'young person'
dra? dra?	'old person'
dri dri	'girl'
luw luw	'boy'
juk jul	'elbow'
su si	'tendon'

(Cohen 1966: 39-40)

Hoang (1993: 9) notes that *luq lung* in the following set of alliterative (A A/x) Bru items with reference to necessities and natural phenomena implies the possibility of a regular change of the final consonant of the repeated syllable according to the principle of 'different quality, same articulatory position', reminiscent of the rule that voiceless final stops observe in Vietnamese (see 2.4), but he further adds that regrettably the data at his disposal are too scanty for comprehensive conclusions. The lexeme for 'household goods' features another rhyme (*-ơu*) on the list of syllable final elements found in duplicated syllables placed after the root morpheme in disyllabic alliterative lexemes (Hoang 1993: 12). E.g.:

kip kuap	'mountain gorge, pass'
luq lung	'valley'
krơng krơu	'household goods'

(Hoang 1993: 9, 12)

Dak dai in the set of denotatively similar A A/x Katu items below is identical in type to the Bru *krơng krơu* above, having *-ai* as a rhyme in the derived syllable. *Dak det* equals *sok set* (p. 65) in its connotative aspect of implying a sense of dissatisfaction as part of its meaning (Hoang 1993: 12; Hoang et al. 1988: 1164). The complex repetitive form (*ajooh ajooj*) is an instance of semantic generalisation accomplished through duplication: *ajooh* 'jacket, coat' —> *ajooh ajooj* 'untidy clothes' (AB —> ABAB/x) (Hoang 1993: 17). E.g.:

rơk rak	'rubbish, dregs'
dak dai	'water'
dak det	'water'
ajooh ajooj	'untidy clothes (in general)'

(Hoang 1993: 9, 12, 17)

Both *chót choi/chơat choi* and *dúng dóq* (A A/x) below from the Pacoh and Taoih set of terms with reference to necessities and natural phenomena represent instances of the rhymes *-oi*, *-oq* being used in the duplicative syllable placed after the root morpheme in disyllabic repetitive lexemes:

chót choi/chơat choi	'farm work, tilling'
dúng dóq	'house'

(Hoang 1993: 12)

Another variation in the way in which repetition affects the syllables of a disyllabic base form, is exemplified by the following Taoih name of a natural phenomenon where only the second syllable is repeated (AB —> ABB):

karcheat cheat	'mountain gorge'

(Hoang 1993: 13)

The Jeh sub-corpus features both completely repeated and alliterative terms (AA, A A/x) functioning as names of natural phenomena. E.g.:

lik lik	'dirt particles'
hung hiang	'a small whet stone'
búk bòok	'brown color'

(Cohen 1966: 39-40)

When such nouns of location as *tiuh*, *liuŋ* and *siuh* are duplicated in Wa, the vowel *-u-* or *-u̲-* and the final consonant are lost. No implication of emphasis, often typical of this type of nouns in Sinitic speech forms (2.1.1.8), is attributed to this repetitive process with an alliterative result (A A/x). E.g.:

tiuh tiuh	—>	ti tiuh	'that side, there'
liuŋ liuŋ	—>	li liuŋ	'top side, up'
siuh siuh	—>	si siuh	'bottom side, down'

(Zhou & Yan 1984: 15)

2.6. THE MIAO-YAO GROUP

The Miao-Yao (Hmong-Mien) material originates in speech forms spoken in Guangxi and Hunan province, on Hainan island in Guangdong province in southern China, and in Vietnam. A solitary lexeme from Miao (Green Miao) spoken in Thailand completes the sample. On the basis of one specific criterion, the variants from China actually seem to represent the Yao-branch of this group, though only one of them, written Mian in the pinyin transcription system, is classified as belonging to Yao by Mao et al. (1982: 12), while the other speech form exemplifying the Miao-Yao group and transcribed as Bunu in pinyin, is relegated to the Miao-branch by them (Mao et al. 1982: 12)[94].

According to the same criterion, the data from Vietnam could also represent the Yao-branch within the Miao-Yao group.[95] The Hainan variant, though traditionally referred to as Miao in Chinese, is argued by Lu (1987: 63) as being a Yao dialect. So it seems that the Green Miao item is the sole representative of the Miao-branch in the data. The seemingly considerable discrepancy in outward appearance between the data from China and that from Vietnam is solely due to a difference in the transcription system used. The nominal repetitive corpus of this group is too scanty to be distributed between separate sub-chapters so that it is quite convenient to treat it in one chapter.

Nouns cannot usually be regularly duplicated in the speech forms of the data except for monosyllabic nouns also used as measure words (Mao et al. 1982: 27, 84; Lu 1987: 56; Nguyen 1975: 22). Such nouns can further be characterized as generally denoting collectives, time and place. The repetition, with a resulting distributive meaning, of the type of nominals just defined is a common feature in the total set of repetitive nominal data in the study. Thus one can say that the kind of lexemes in the following exemplification of Miao-Yao items, structurally AA(-), could be replaced by corresponding items from any speech form in the language groups treated so far. The language of origin is given in parentheses after each set. E.g.:

jwen$^{52/21}$ jwen^{52}	'every bowl'
n̥aŋ$^{24/21}$ n̥aŋ^{24}	'every year'
n̥oːi$^{33/21}$ n̥oːi^{33}	'every day'
tsau$^{24/21}$ tsau^{24}	'every foot'

(Mian; Mao et al. 1982: 27)

ɕaŋ^{42} ɕaŋ^{42}	'every year'
pɤu^{54} pɤu^{54}	'every bowl'

94 See fn. 96.

95 See fn. 96.

coŋ^{22} coŋ^{22}	'every place, everywhere'
nu$^{12/24}$ nu$^{12/24}$	'every person, everybody'

(Bunu; Mao et al. 1982: 84)

nɔi^{44} nɔi^{13}	'every day'
van^{53} van^{53}	'every bowl'

(Yao, Hainan; Lu 1987: 56)

baox baox	'all herds/flocks'
chaor chaor	'every clod'
phuz phuz	'every dipper'
jaol jaol	'every village'
zis zis	'every family'
qou qou	'every place, everywhere'
hnuz hnuz	'every day'
hmao hmao	'every night'
jas jas	'every time'

(Miao [Yao?], Vietnam; Nguyen 1975: 23)

Of the following five items, the first four come from the Vietnamese Miao (Yao?) data while the last one is taken from Green Miao (Nguyen 1975: 24; Lyman 1974: 27). Formally they are either alliterative (A A(-)/x) or completely repetitive (AA(-)). E.g:

trâuz trik^{96}	'crab'
njuôr njuôk	'crow'

96 Unfortunately the Vietnamese source does not explicitly specify the set of segmental tone symbols used, but from the discussion on tonal harmony between the tones of the two syllables in alliterative lexemes (Nguyen Tai Can 1975: 24) one would conclude that the final velar stop *-k* is perhaps not a tone symbol but a symbol of a syllable final consonant. Bisang, for example, is quite categorical in his argument that the only possible syllable final consonant in all Miao dialects is the velar nasal *-ŋ* (Bisang 1992: 477, 489). Bunu, which Mao et al. (1982: 12) unequivocally classify as a Miao speech form, is argued by them as possessing two voiceless stop syllable final consonants, viz. *-t* and *-k*, besides the velar nasal *-ŋ* (Mao et al. 1982: 74-75). According to Bisang (1992: 489) on the other hand, syllable final voiceless stops are a sure characteristic of Yao dialects. It is interesting that in the case of Miao speech forms spoken in China, Bisang builds his argument on the authority of a Chinese scholar, Wang Fushi, who just prior to the publication of Mao et al. (1982) had written two articles on the subject of Miao syllable initials and finals (Wang Fushi [1980] "Miaoyu de shenglei he yunlei (Types of Syllable Initials and Finals in Miao)", and Wang Fushi [1981] "Tantan zai Miaoyu fangyan sheng-yunmu bijiaozhong de jidian tihui (On some Experiences with the Comparison of Syllable Initials and Syllable Finals in the Miao Dialects)"). Against this background the problem of the final *-k* in the sample from Vietnam may have the following solutions: if the final *-k* is meant to be a tone symbol we are indeed dealing with a Miao speech form and *njuôr njuôk*, for example, is an instance of the AA(-) pattern, but if it marks a syllable final consonant, we have a set of Yao lexemes in our hands, and the structural affiliation of the same item is written as A A/x. For a summary of the sources used in Miao-Yao (Hmong-Mjen) studies, see Niederer (1998).

kur kuk	'a species of bird'
lôngs langs	'stunning pain'
ʔa ʔa	'red-breasted parakeet'

These instances of the repetitive Miao-Yao lexicon are all opaque, i.e. none of the syllables constitutes a meaningful element by itself in the speech form in question, with the exception of *lôngs langs*, which is derived from *lôngs* 'paralysed' (Nguyen 1975: 24).