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## **SOME THOUGHTS ON THE TYPOLOGY OF SOUND SYMBOLISM AND THE CHINESE LANGUAGE\***

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**0. ABSTRACT.** This paper represents the author's further thoughts on sound symbolism. It is a small extension of research began in Chan (1996) on the typology of sound symbolism that was presented in Hinton et al. (1994b). Chan (1996) noted that Hinton et al. tended to focus on the more universal tendencies in their typology, and ignored sound-symbolic phenomena that, though more language-specific, are iconically motivated. In their system, such phenomena fall between their 'synesthetic sound symbolism' and 'conventional sound symbolism' and fitting neither category. Hence, a further refinement of their typology, or classification, is proposed here by subdividing their third and most important category for sound-symbolic phenomena, namely, 'synesthetic sound symbolism', into two categories: 'universal synesthetic sound symbolism', and 'local synesthetic sound symbolism'. The result is a five-category typology of sound symbolism: corporeal sound symbolism, imitative sound symbolism, universal synesthetic sound symbolism, local synesthetic sound symbolism, and conventional sound symbolism. The proposed classification is supported by data from Chinese.

**1. HINTON ET AL.'S (1994b) FOUR-CATEGORY TYPOLOGY OF SOUND SYMBOLISM.** Sound symbolism is the study of the direct relationship between the sound of an utterance and its meaning. This is a topic that has intrigued scholars working on a variety of different languages in the world, and has led to many exciting new findings. Most of such works had, until recently, been published in various journals. In 1994, however, a collection of studies of sound symbolism, entitled *Sound Symbolism* was edited by Leanne Hinton, Johanna Nichols, and John Ohala. The research findings, together with references to earlier studies on different languages, leave no doubt in the reader's mind that sound symbolism is pervasive among the world's languages. Furthermore, sound symbolism plays a significant role in language, especially at the

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affective level. What is less obvious from studying the volume is to what extent sound symbolism operates in the Chinese language. This is because Chinese scholars have been conspicuously silent on this topic. In my presentation at the Fourth International Conference on Chinese Linguistics (ICCL-4), held jointly with the Seventh North American Conference on Chinese Linguistics (NACCL-7), I demonstrated, within the limits of time and space, the richness of sound symbolic phenomena in the Chinese language across several dialects.<sup>1</sup>

This paper is an extension of the research conducted for ICCL-4/NACCL-7. Here, it is proposed that a further refinement of the typology of sound symbolism proposed by Hinton et al. should be made, supported by data from Chinese. In the earlier paper, due to the paucity of research on the nature and extent of sound symbolic phenomena in the Chinese language, I used Hinton et al.'s (1994b) typology of sound symbolism as the starting point. Their typology consists of four categories, representing different degrees of sound-meaning linkage. The degrees of linkage form a continuum – from utterances with complete sound-meaning linkage, to language that is close to the arbitrary end of the language scale – that is, towards the end where there is presumably no direct connection between sound and meaning. The four categories are given in (1).

- (1) FOUR CATEGORIES OF SOUND SYMBOLISM (Hinton et al. 1994b)
  - a. Corporeal sound symbolism
  - b. Imitative sound symbolism
  - c. Synesthetic sound symbolism
  - d. Conventional sound symbolism

There is, actually, a wide gap between the third category, “synesthetic sound symbolism”, which subsumes language-universal, sound symbolic phenomena, and the fourth category, “conventional sound symbolism”, which includes a wide array of diverse phenomena that are viewed as fairly arbitrary and conventionalized. Data from the Chinese language are used here to argue for the addition of an important category to their

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<sup>1</sup> It was impossible to present the original manuscript in its entirety during the twenty minutes allotted for the presentation. The paper was then revised and further expanded upon, and is now published in the ICCL-4/NACCL-7 proceedings volume, cited here as Chan (1996). It is also currently available on-line in the World Wide Web under my publications page, URL: <http://www.cohums.ohio-state.edu/deall/chan.9/pubn.htm>. Some of the ideas and examples presented in Chan (1996) had not been presented before an audience and are repeated here for coherence and ease of presentation.

typology; namely, a category in between their third and fourth category. This new category accounts for sound symbolic phenomena that is more language-specific than their third category, “synesthetic sound symbolism,” but is nonetheless non-arbitrary in the linkage between sound and meaning, and is hence, not as far along the arbitrariness scale as their fourth category, “conventional sound symbolism”. Thus, such phenomena fit neither of their two categories. The result of adding a category in between, then, is a five-category typology that reflects the importance of sound symbolic phenomena that may not be language universal, but are, nonetheless, non-arbitrary in their sound-meaning correspondence. Other related issues will also be addressed here.

A brief overview of Hinton et al.’s four-category typology is in order, with examples from Chinese.

**4.1. Corporeal Sound Symbolism.** Corporeal sound symbolism is defined as “the use of certain sounds or intonation patterns to express the internal state of the speaker, emotional or physical (Hinton et al. 1994b:2). This category includes such involuntary, “symptomatic” sounds as coughing or hiccuping, expressive intonation, expressive voice quality, as well as interjections, sounds that are closely connected to emotional and physical states, and thus occur at the very fringes of what might be treated as sound symbolism. They are included, nonetheless, because of their relation to the biological roots of sound symbolism (and to language in general). Such sounds are often not written. For Chinese, only a few of these interjections can be found in the dictionaries. Some examples include the following utterances in (2):

- (2) a. 啊，你說甚麼？ á... What did you say? (surprise)  
 b. 哼，誰信你的！ hng, ... ‘Humph!’ (doubt)  
 d. [ ]，是真的嗎？ mí, ... ‘Oh, really?’ (doubt) ([ ] = 口+母)

**1.2. Imitative Sound Symbolism.** This category consists of onomatopoeic words and phrases that represent environmental sounds, a few Chinese examples of which are given in (3) and (4), from Chan (forthcoming). Cases in (3) are often reduplicated.

- (3) a. 咪 mī ‘meowing of a cat’  
 b. 哇 wā ‘baby crying’  
 c. 嗡 wēng ‘buzzing of bees’

- (4) a. 咕咚 gūdōng ‘thud, splash’  
 b. 咕隆 gūlōng ‘rumbling of thunder, rumble, rattle’  
 c. 咕嚕 gūlū ‘rumbling of stomach, roll’

Needless to say, examples of onomatopoeia in Chinese are not limited to Mandarin. Examples can be found in Shanghai, for example, which has checked syllables (those ending in a glottal stop), as well as syllables with voiced stop onset. Shanghai is thus interesting in providing a case of exploiting the intrinsic pitch, amplitude, and duration of segments for a three-way contrast of objects of varying sizes falling to the ground, as given in (5), from Jin (1995). In (6), based on Yu (1995), different degrees of loudness, and by extension, different degrees of politeness, in knocking on the door can also be indicated.

- (5) a. [pʊʔ lʊʔ tʊʔ] ‘sound of small object dropping on the ground’  
 b. [bʊʔ lʊʔ dʊʔ] ‘sound of bigger object dropping on the ground’  
 c. [boŋ loŋ doŋ] ‘sound of big and heavy object dropping on the ground’
- (6) a. [toʔ toʔ toʔ] ‘lightly, and politely, knocking on the door’  
 b. [toŋ toŋ toŋ] ‘knocking a bit louder on the door’  
 c. [doŋ doŋ doŋ] ‘knocking loudly (and rudely) on the door (as if kicking it)’

Further along the typology continuum, one could posit, within this second category of imitative sound symbolism, those cases that are not purely and simply imitations of the actual sounds that are made, including echoic words that can also be used to name the being that produced the sound, as noted by Jespersen (1922), and not mentioned in Hinton et al. (1994b). Imitative sound symbolism provides a natural basis for extending into naming and the creation of new vocabulary items. A few Chinese examples of names of animals are given in (7) that seem to still reflect their onomatopoeic origin.

- (7) a. 貓 māo ‘cat’  
 b. 鴿 gū ‘a kind of pigeon’  
 c. 鴣 guā ‘the crow’ (老鴣)

**1.3. Synesthetic Sound Symbolism.** Central to the study of sound symbolism in Hinton et al.'s typology is this third category, which they treat as 'synesthetic sound symbolism'. Hinton et al. (1994b:4) chose the term 'synesthetic' because "this realm of sound symbolism can be defined as the acoustic symbolization of non-acoustic phenomena. Synesthetic sound symbolism is the process whereby certain vowels, consonants, and suprasegmentals are chosen to consistently represent visual, tactile, or proprioceptive properties of objects, such as size or shape." In their typology, synesthesia, then, provides the most important case in sound symbolism for the non-arbitrary connection between sound and meaning, through the metaphorical extension of onomatopoeia to sight, taste, smell, and touch.

With Hinton et al.'s focus on acoustic properties, features such as [acute], [grave], [flat], and [sharp], as well as voicing,  $F_0$ , and  $F_2$ , play a prominent role in the analysis of sound symbolism. An outline summary is presented in (8), based on Ohala (1994:340-41).

(8) CONCEPTS 'SMALL' AND 'LARGE' IN SOUND SYMBOLISM

- a. 'SMALL' conveyed by the use of:
  - i. High tone
  - ii. Vowels with high  $F_2$   
e.g., [i, ɪ, y, e]
  - iii. Consonants with high acoustic frequency  
e.g., [acute]: apical and palatal C's  
[sharp]: palatalized C's  
voiceless C's  
ejectives
- b. 'LARGE' conveyed by the use of:
  - i. Low tone
  - ii. Vowels with low  $F_2$   
e.g., [ɑ, ɔ, u]
  - iii. Consonants with low acoustic frequency  
e.g., [grave]: labials and back velars  
[flat]: labialized, retroflexed, velarized, or  
pharyngealized C's  
voiced C's

It has been widely observed cross-linguistically that the concept of 'small' in sound symbolism is conveyed by one or more of the following acoustic properties: high tone; vowels with high  $F_2$  (that is, high front vowels, and [i] in particular); and consonants with

high acoustic frequency, such as acute consonants (i.e., those that are apicals — articulated with the tip of the tongue — and palatals), voiceless consonants, and ejectives. The concept of ‘large’, in contrast, is conveyed by one of the following acoustic properties: low tone; vowels with low  $F_2$  (that is, back vowels, and [ɑ] in particular); and consonants with low acoustic frequency, such as grave consonants (i.e., those that are labials and back velars), flat consonants (i.e., those that are labialized, retroflexed, velarized, or pharyngealized — the term ‘flat’, versus ‘sharp’ comes from music terminology), and voiced consonants.

The dialects of Chinese, including Mandarin, generally do not exhibit an opposition between a low front [a] vowel, and a low back [ɑ] vowel; consequently, an /i/ versus /a/ contrast for connotating smallness and largeness suffices. This universal tendency of associating /i/ with smallness and acuteness, and /a/ with large size, was first observed for Chinese by Sapir (1929) in his pioneering, experimental study of sound symbolism. More recently, LaPolla’s (1994) psycholinguistic study corroborates native Mandarin speakers’ intuition for size symbolism.

The sound origin of size symbolism might be traced to such contrastive sets as shown in (9), with their direct onomatopoeic sources. /i/ is associated with soft, quiet sounds, and /a/ with loud sounds, the contrast stemming from their acoustic energy and intrinsic amplitude.

- |        |     |           |                                       |
|--------|-----|-----------|---------------------------------------|
| (9) a. | 笑眯眯 | xiào-mīmī | ‘smiling; with a smile on one’s face’ |
|        | 笑嘻嘻 | xiào-xīxī | ‘grinning, smiling broadly’           |
| b.     | 笑哈哈 | xiào-hāhā | ‘laughingly, with a laugh’            |

Note that although Hinton et al. do not mention visual cues, the difference in mouth aperture is also very obvious in face-to-face communication: /i/ is produced with small mouth opening, and /a/ with the mouth open wide, as one would in laughing boisterously.

There is, thus, a natural association between /i/, with small mouth opening and relatively high, intrinsic pitch (as might be associated with infant and female vocalization), and that of diminution. And the same holds for the association between /a/, with large mouth opening and relatively low, intrinsic pitch (as might be associated with male vocalization), and augmentation. As noted in Chan (1995), even a cursory look at a set of words for bodies of water of different sizes in modern Chinese, for example, as in the set given in (10), provides evidence to suggest that size symbolism can be found in

the Chinese language. The examples also suggest that these sound-meaning correspondences are motivated and not arbitrary.

(10) a.	滴	dī	‘drop’
b.	池	chí	‘pond’
c.	溪	xī	‘small stream, brook’
d.	河	hé	‘river’
e.	江	jiāng	‘large river’
f.	湖	hú	‘lake’
g.	潭	tán	‘deep pool’
h.	海	hǎi	‘sea’
i.	洋	yáng	‘ocean’

Among the words in (10), (10d) and (10e) form an interesting pair. In the modern language, *he* is associated with rivers in general, while *jiang* is associated with **large** rivers. Historically, the two words have different geographical distribution with respect to their usage -- *he* has been used for major river names north of the Yangtze River, and *jiang* for major river names to the south. However, with the passage of time, *jiang*, with the low /a/ vowel has come to be perceived as a term for larger rivers than *he*, with a non-low vowel (cf. Hashimoto 1983). This may very well be a case of a folk-originated, sound-symbolic association. It also provides evidence of the psychological reality of size symbolism for native Chinese speakers.

The metaphorical extension of quiet, ‘small’ sound to small size, and of loud, noisy, ‘big’ sound to large size is a natural one, with an iconic basis that stems from our experience with the world. Consider, for example, three objects made of the same substance, differing only in size: when these three objects are dropped onto a surface from the same height, the loudest sound is created by the dropping of the largest object, and the least loud sound by the dropping of the smallest object. And if these three objects are made of metal, the highest acoustic frequency sound is clearly made by the dropping of the smallest object, and the lowest by the dropping of the largest object. Hence, our experience with the world around us tells us that, everything else being equal, the larger the size of an object, the louder is the sound it makes, and the lower is the acoustic frequency it produces. We further expect the larger the size, the heavier is the object, again, everything else being equal.

Given the above, it is not surprising that /i/ — and other high front vowels with their high acoustic frequency — are not only associated with small size, but also with

lightness in weight, shortness in distance, slenderness in shape, and so forth. The converse holds for the corresponding antonymous words with /a/, and other back vowels, as exemplified in the pairs in (11).

- (11) a. 輕 qīng ‘light (in weight)’  
重 zhòng ‘heavy’
- b. 近 jìn ‘near’  
遠 yuǎn ‘far’
- c. 細 xì ‘thin, slender; fine (re particles); thin, soft (voice)’  
粗 cū ‘thick, wide, coarse, rough; gruff/husky (voice)’

Note that the vowel contrast in (11a) is reinforced by a contrast in acuteness in the onset as well: *qing* ‘light’ has an acute onset (palatal [tɕ’]), and *zhong* ‘heavy’ has a grave onset (retroflexed [ʈʂ]). A high tone on *qing* ([tɕ<sup>h</sup>iŋ.55]), contrasting with a falling tone on *zhong* ([ʈʂuŋ.51]), further heightens the acute/grave contrast. That same pair in other Chinese dialects<sup>2</sup>, such as Standard Cantonese (12a) and Xiamen (12b), exhibits an higher overall pitch (Yin register) on *qing*, versus lower pitch (Yang register) on *zhong*. The pitch difference goes back to an earlier, Middle Chinese, contrast in initial voicing. This voicing contrast is still preserved in Wu dialects, as shown in the Shanghai, Suzhou, and Wenzhou pairs in (12) (c) through (e). And, as in the Standard Cantonese and Xiamen cases, the Wu dialect data also show an overall higher pitch register for *qing* ‘light’, contrasting with an overall lower pitch register for *zhong* ‘heavy.’

(12)	輕 ‘light (in wt.)’ <i>qing</i> [tɕ <sup>h</sup> iŋ.55]	重 ‘heavy’ <i>zhong</i> [ʈʂuŋ.51]
	=====	=====
a. Cantonese:	[hɛŋ.55]	[ts <sup>h</sup> uŋ.13]
b. Xiamen:	[k <sup>h</sup> iŋ.55]	[taŋ.33]
c. Shanghai:	[tɕ <sup>h</sup> iŋ.53]	[zoŋ.23]
d. Suzhou:	[tɕ <sup>h</sup> iŋ.44]	[zoŋ.31]
e. Wenzhou:	[tɕ <sup>h</sup> iaŋ.44]	[dzyɔ.24]

<sup>2</sup> The Xiamen, Suzhou, and Wenzhou data are based on Beijing (1964:362). Standard Cantonese is from the author’s own knowledge of the dialect, and the Shanghai pair is from Yu (1995).

**1.4. Conventional Sound Symbolism.** Hinton et al. (1994b:5) define conventional sound symbolism as “the analogical association of certain phonemes and clusters with certain meanings: e.g., the ‘gl’ of glitter, glow, glisten, glimmer, etc.”, using examples in English. They further emphasize the arbitrariness and conventionality of this category. That is, they view this category as being close to the arbitrary end of the language scale, and view it as involving analogical associations that are quite language-specific. The example of the ‘gl’ cluster in English to connote brightness is obviously not available for languages that lack consonant clusters. The case is not only language-specific, but there is nothing in the cluster that might suggest some iconic motivation for the association of ‘gl’ with brightness.

A possible Chinese counterpart might be the use of /m/ for conveying ‘dark, cover, blind’. This association (observed by Pulleyblank 1973) can be amply exemplified, as shown in (13). In (13e), note the metaphorical extension of meaning to ‘mournful, sorrowful’.

- (13) a. 盲      máng ‘blind; deluded’  
 b. 冒      mào ‘to go forward with eyes covered; to cover’  
 c. 昧      mèi ‘obscure, dark’  
 d. 悶      mèn ‘to cover; mournful, sorrowful’  
 e. 蒙      méng ‘to cover; to conceal’  
 f. 眯      mǐ ‘blind, as with dust’  
 g. 冥      míng ‘dark, obscure’      (冥 mìng ‘night’)  
 h. 默      mò ‘dark, secret; silent’

Observe, however, that the /m/ case in Chinese is still somewhat different from the English ‘gl’ case. The English case can be treated as a fairly arbitrary association between sound and meaning. Chinese case, however, is at the fuzzy edges between Hinton et. al’s ‘synesthetic sound symbolism’ and ‘conventional sound symbolism.’ While the selection of the segment /m/, per se, for conveying ‘dark, cover, blind’ is language-specific, the selection of a *labial* (i.e., [grave]) segment, is motivated, and is by no means arbitrary.<sup>3</sup> (cf., for example, Priestly’s (1994) discussion of the often-noted gravity-sadness association in Russian poetry). In addition, one can argue for an iconic basis for the selection of /m/: it has a relatively long duration of lip closure, during which

<sup>3</sup> See, for example, Priestly’s (1994) discussion of the often-noted gravity-sadness association in Russian poetry.

time the oral cavity is thrown into total darkness.<sup>4</sup> I would like to propose that the case of /m/ in Chinese fits into the new category of “local synesthetic sound symbolism.”

**2. A FIVE-CATEGORY TYPOLOGY OF SOUND SYMBOLISM.** As more sound symbolic phenomena are studied across languages, sound-meaning associations that reflect fairly universal tendencies become more obvious. Universal tendencies can be observed from such studies as that by Utan (1978, cited in Hinton et al. 1994b:4), in which he found the use of high front vowels for diminutive marking in almost 90% of the languages that he sampled. On the other hand, there are sound-symbolic associations that are fairly language-specific, or “local” (à la Priestly 1994). Universality, versus language-specificity, of a sound-meaning association serves as an important criterion for the two categories, ‘synesthetic sound symbolism’ and ‘conventional sound symbolism’ in Hinton et al.’s typology. An equally important consideration should be whether a sound-meaning association is in some way perception-based, and hence, iconically-motivated, or whether the sound-meaning association had emerged from analogical associations that do not involve perceptually-based motivations. If one takes universality and iconic motivation as two important criteria for categorization of sound symbolism, Hinton et al.’s third category can be subdivided, and their four categories would then form a total of five categories, as given in (14). (14c) is the original ‘synesthetic sound symbolism’ category in Hinton et al.’s typology.

(14) FIVE CATEGORIES OF SOUND SYMBOLISM

- a. Corporeal sound symbolism
- b. Imitative sound symbolism
- c. Universal synesthetic sound symbolism
- d. Local synesthetic sound symbolism
- e. Conventional sound symbolism

The case par excellence of the category of ‘universal synesthetic sound symbolism’ (14c) is the sound-symbolic association of /i/ for the concept ‘small’, and /a/ for that of ‘large’, an association that is widespread across languages of the world. One example from Chinese of ‘local synesthetic sound symbolism’ (14d) is the iconic use of labialized

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<sup>4</sup> A glaring counter-example pointed out at the conference by Professor Hongming Zhang is *ming* 明 ‘bright’. Although I did not have a ready answer for him at that time, note, however, that in the modern Chinese dialects, the word for ‘bright’ is typically *liang* «G in the north, and *guang* 光 in the south (Beijing U., 1964:360). Both *liang* and *guang* have a low vowel generally in the various dialects. Thus, the main vowel in those two words in the different dialects can have some sound-symbolic association with large size and vastness, which can then be extended metaphorically to brightness.

consonants to convey the concept ‘round’. Presented in (15) is a group of words from different word classes pertaining to the concept of ‘round’. One might note that this concept further extends to those of curvature, oval shape, and so forth.<sup>5</sup>

- (15) a. Circle, ring:
- i. 圓 yuán
  - ii. 圈 quān
  - iii. 圓圈 yuánquān
  - iv. 圓周 yuánzhōu ‘circumference’
- b. Sphere, ball:
- i. 團 tuán (團 / 搏 tuán ‘to roll (s.t.) into a ball’)
- c. Ellipse:
- i. 橢圓 tuǒyuán
- d. Cylindrical mass, roll:
- i. 卷 juǎn (Also: ‘to roll (s.t.) up into a roll’)
- e. Round, circular, annular, spherical:
- i. 團 tuán ‘round, circular’
  - ii. 環形 huánxíng ‘annular, ring-like’  
(環 ‘ring, hoop; encircle’)
  - iii. 團圓的 tuányuán-de ‘(to describe roundness of the moon)’
- f. To circle:
- i. 環繞 huánrǎo
  - ii. 環行 huánxíng
  - iii. 圍 wéi
  - iv. 繞圈 rǎoquān
  - v. 旋轉 xuánzhuàn
  - i. 團團轉 tuántuán-zhuàn ‘to turn round and round’
  - j. 旋 xuán ‘to revolve, spin, circle (return, come back)’

<sup>5</sup> Pulleyblank (1973) also contains a short discussion on this topic.

It is worth noting that besides *tuoyuan* ‘ellipse’, given in (15c), the word for describing an object that is elliptical, or egg-shaped, is *dan* 蛋 ‘egg’ (16a), with no lip-rounding. However, the character is a fairly recent one in the history of the Chinese language. (It cannot be found in the *Guangyun* nor in the *Zhongyuan Yinyun*, for example.) *Dan* has become the everyday word for ‘egg’ in modern Chinese, replacing *luan* 卵 ‘egg’ (16b). Observe that 卵 is a *he-kou* word, with lip-rounding. However, at some point in time, it became a taboo syllable in some Chinese dialects, such as the Wu dialects (Zhang 1985), and Cantonese, though not in others, such as Kejia (MacIver 1926:425) and Southern Min (Xiamen Daxue 1982:504)<sup>6</sup>. In Kejia (MacIver 1926:425), for example, ‘the shape of an egg’ is 卵形 *luanxing* (*lón hîn*) (= /lon.42 hin.12/ if it is modern Meixian Kejia). The word occurs in compounds for ‘egg yolk’, ‘egg white’, ‘egg shell’, and so forth, while 蛋 is used almost exclusively for ‘Name of a tribe. Boat people’. Clearly, in Kejia, the source suggests no avoidance of *luan*, or its replacement by *dan*. For the history of the Chinese language in general, however, the emergence of 蛋, with no lip-rounding, for ‘egg’, extending then to ‘something that is egg-shaped’, is a result of some irregular development in the language.

- (16) a. 蛋      dàn    ‘egg’  
       b. 卵      luǎn   ‘egg, ovum’

The association of labialization with ‘roundness’ is further underscored by the absence of labialization in words that do not convey the concept, ‘round’. This is shown in the words for ‘line’, ‘square’, and ‘cube’ in (17).

- (17) a. 線              xiàn    ‘line’  
       b. 方              fāng    ‘square’  
       c. 立方            lifāng   ‘cube’

Given the propensity for the natural association between labialization and ‘roundness’, one would predict that names of round objects that have a labialized onset would be processed faster, and retained longer in memory, than names of objects lacking labialization, everything else being equal.

The examples above suggests a clear tendency for the concept ‘round’ to be conveyed using lip-rounding at syllable onset in the Chinese language. Note that in English, the pronunciation of /r/ also involves lip-rounding. Relevant to the discussion,

<sup>6</sup> It is also significant that on page 147, under 蛋 *dan*, the editors noted that in the dialect 卵 *lŭg* [lŭ.22] is often used.

are such words in English as ‘round’ and ‘roll’, which involves lip-rounding. Hence, the natural association of lip-rounding with the concept ‘round’ is not limited to Chinese. Within the Chinese language, the natural association can be extended to other words to form a word family à la Karlgren (1934) and Pulleyblank (1973).

Perhaps more open to interpretation as an example of “local synesthetic sound symbolism” is the /m/ case discussed in the preceding section. The selection of /m/, a segment that is not only labial ([grave]), but also voiced, or sonorous ([grave]). The association of /m/, per se, with heaviness and melancholy in Chinese may not reflect universal tendencies, but the association of grave segments in general do, as noted earlier with Priestly’s (1994) observations about Russian poetry. English words such as ‘dark’, ‘doom’, ‘gloom’, for example, have grave segments, as do ‘murky’, ‘melancholy’, ‘moody’, ‘mournful’, and so forth.<sup>7</sup> Some of the words, such as ‘doom’, ‘gloom’, ‘murky’, ‘moody’, and ‘mournful’ contain an entire string of sonorous segments. The presence of the back vowel, /u/, heightens and intensifies the sense of heaviness and darkness.<sup>8</sup>

The above suggests that particular segments within a given language may be selected for sound-symbolic phenomena that do not reflect universal tendencies per se, but specific features from those segments, be they acoustically-based, or visually-based, may form part of more general observations of universal tendencies.

**3. CONCLUSION.** Synesthetic sound-symbolic phenomena are at the heart of the cases for arguing for sound symbolism, involving the non-arbitrary association of sound and meaning. Yet, Hinton et al. tended to emphasize the criterion of universal tendencies for characterizing synesthetic sound symbolism. It is proposed here that a typology of sound symbolism should take into consideration not only universality versus language-specificity, but also more clearly that of iconic motivation (that is, perception-based sound-meaning correspondences) that includes acoustic considerations, but not exclusively. Universality and iconic motivation are two important criteria for mapping out a typology of sound symbolism to yield a five-category typology of sound symbolism, as proposed here in (14).

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<sup>7</sup> Consider, further, the association of a back ‘dark’ vowel, as in such words as ‘glum’, ‘grumpy’, ‘the dumps’, and ‘moody’, with a non-cheerful state of mind (Jespersen 1922). Of further interest to note is Jespersen’s (1922:26) observation of the change in meaning of the words ‘moody’ and ‘sullen’ (O.E. *modig* ‘high-spirited’, ME. *solein* ‘solitary’), and his suggestion that sound symbolism had a role in the meaning change.

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