# FUNCTIONAL DISTINCTION BETWEEN ZAI (在) AND ZHENGZAI (正在) IN MANDARIN

## **Evidence from Collocations**

Lin, Tsi-chun

Liu, Mei-chun

National Chiao-Tung University

tsichung@yahoo.com.tw

mliu@mail.nctu.edu.tw

#### Abstract

Both zai and zhengzai are progressive markers in Mandarin Chinese, and by the principle of economy, there should be some differences in these two progressive markers. With the Sinica Corpus on-line tools, a significant difference is found in the collocation of adverbial adjuncts with the use of zai and zhengzai. This paper discusses three types of adverbials to distinguish these two markers: modality adverbs, time adverbs, and manner adverbs. Zhengzai cannot co-occur with [+iterative] adverbs and adverbs without a specific time reference. It mainly indicates the progression of an on-going event at a given specific time point. On the other hand, zai not only indicates the on-going process but can also signal the progression of repeated event as habitual- progressive.

#### 1 Introduction

In Mandarin Chinese, both zai and zhengzai are progressive markers which present an internal interval of a durative situation, and often have the connotations of activity and temporary imperfectivity associated with non-statives [3]. But, when talking about imperfective aspect markers in Mandarin Chinese, most studies just represent zai as a progressive marker ([2], [5], [6], [7], [11], [17], and [18]), while fewer studies indicate that there are other representations of progressive markers ([3], [4], and [15]). Although mentioning both zai and zhengzai as progressive markers, previous studies treat them almost as interchangeable and only focus on the discussion of zai with few detailed distinction between these two forms. Given that these two markers are morphologically distinct, some questions will have to be asked: do they encode the same grammatical, semantic and pragmatic information? Do they occur in completely the same contexts or they have different contextual constraints? If the two markers are functionally identical, we may wonder why Chinese has two different and redundant progressive representations. Given the principle of economy in language, our assumption is that there must be some fine-grained distinctions between zai and zhengzai. In this paper, we adopt a corpus-based approach, since corpus data provide a wealth of grammatical associations that may help delimit the key semantic distinctions, as successfully shown in recent studies on lexical semantics (cf. [9], [13], and [14]). This paper thus aims to explore the semantic distinction between zai and zhengzai by examining their collocational patterns in discourse.

#### 2 Methodology

Most of our data come from the Sinica Corpus. Since *zai* has a variety of senses, we only look at the instances of *zai* that are compatible with *zhengzai* as aspectual markers. As a result, there are 2000 utterances with *zai* and 696 utterances with *zhengzai*.

With the searching tools and POS tags in Sinica Corpus, we can readily retrieve the frequency counts of neighboring categories which precede or follow *zai* and *zhengzai* for further analysis.

## **3** Finding and Discussion

The data in Sinica Corpus reveal that the top ten grammatical categories before and after *zai* and *zhengzai* do vary, as shown in Tables la, lb and 2a, 2b.

詞類	左 5	左4	左3	左 2	左1	合計	比例
Na	303	304	285	338	413	1643	17.31
D	179	161	177	260	748	1525	16.06
,	220	227	254	213	98	1012	10.66
Nh	83	97	106	177	246	709	7.47
VH	94	92	82	71	38	377	3.97
Nf	61	67	68	98	18	312	3.29
SHI	25	31	38	63	134	291	3.07
VE	75	54	58	59	5	251	2.64
Nc	45	67	47	51	28	238	2.51
•	50	68	55	38	25	236	2.49

Table 1b. Top-10 Categories after zai

詞類	右1	右 2	右3	右4	右5	合計	比例
Na	20	333	270	299	304	1226	12.86
VC	762	91	78	68	94	1093	11.46
,	3	389	295	147	153	987	10.35
D	71	35	121	238	239	704	7.38
VA	353	31	37	34	43	498	5.22
Nh	4	153	103	110	102	472	4.95
VE	282	30	33	47	61	453	4.75
VH	142	57	77	85	90	451	4.73
۰	1	121	137	68	47	374	3.92
Nep	3	116	36	44	27	226	2.37

Table 2a. Top-10 Category before zhengzai

詞類	左5	左4	左3	左2	左1	合計	比例
Na	107	102	113	124	204	650	19.85
,	54	62	77	117	70	380	11.61
D	51	43	34	26	59	213	6.51
Nc	25	36	46	42	63	212	6.48
Nh	20	19	23	13	88	163	4.98

Nd	23	16	26	25	52	142	4.34
VH	35	40	36	24	2	137	4.18
٥	26	32	36	23	18	135	4.12
VC	38	39	26	15	14	132	4.03
Nf	12	25	18	30	13	98	2.99

Table 2b. Top-10 Categories after zhengzai

詞類	右1	右 2	右3	右 4	右5	合計	比例
Na	14	105	132	169	138	558	17.37
VC	290	56	59	31	30	466	14.51
,	0	65	73	66	71	275	8.56
VH	81	13	26	30	31	181	5.64
Nc	37	37	25	29	28	156	4.86
VA	57	24	28	17	14	140	4.36
D	24	11	13	45	45	138	4.30
٥	0	19	45	33	27	124	3.86
P	47	9	6	12	18	92	2.86
VE	34	10	9	12	23	88	2.74

(Na = common noun; Nc = place word; Nd = temporal word; Nf = measure; Nep = demonstrative determinative; Nh = pronoun; VA = active intransitive verb; VC = active transitive verb; VE = active verb with a sentential object; VH = stative intransitive verb; D = adverb; P = preposition; SHI =  $\mathbb{H}$ )

The result shows that although there is no significant distinction in the categories after *zai* and *zhengzai* from figure 1b and 2b, there are indeed differences in the categories before the two markers as shown in Tables 1a and 2a. The three categories commonly found after *zai* and *zhengzai* are the same and their percentages are close—no more than five percent. On the other hand, from Tables 1a and 2a, we found an interesting difference in the preceding positions. The three higher-frequency categories preceding the two markers are categorically the same but with different rankings, among which adverbs show a significant distinction. Adverbs preceding *zai* is 10 percent more than that of *zhengzai*. It may suggest that adverbs could be an important indicator to distinct *zai* and *zhengzai*. In the following, we mainly focus on three types of adverbs to characterize their relations with *zai* and *zhengzai*: modality adverbs, time adverbs, and manner adverbs.

Both zai and zhengzai can occur with modality adverbs such as yiding (一定), keneng (可能), yexu (也許), haoxiang (好像), and so on.

- (1) 他 **可能** <u>在</u> 躲避 什麼 ta keneng zai duobi sheme he possibly ZAI avoiding something "He is possibly avoiding something."
- (2) 她 想了 一下, **似乎** <u>在</u> 找 台詞 ta xiangle yixia sihu zai zhao taici she think a while seem ZAI search what to say "She thought for a while, seemingly to be searching what to say."
- (3) 他的 手 可能 正在 摸 黑黑 的 機油

tade shou keneng zhengzai mo heihei de jiyou his hands may ZHENGZAI group dark and black engine oil." "His hands may be groping in the dark the black engine oil."

# (4) 技術性 反彈 似乎 正在 醞釀

jishuxing fantan sihu zhengzai yunniang technical rebound seem ZHENGZAI ferment "The technical rebound seems to be fermenting."

However, when the modality adverb contains the feature [+ iterative], indicating a repetition or recurrence of an event, such as you (又) and zai (再) [6], the marker zhengzai is not allowed to co-occur.

#### (5) 真的嗎? 你又在/\*正在騙人

zhendema ni you zai/\*zhengzai qianren really you again ZAI/\*ZENGZAI decive people "Really? You are deceiving people again."

The above example indicates that the event with *zhengzai* can not be viewed as a repetition or a recurrence pertaining to a previous reference event. Thus, *zhengzai* is [-iterative], constrained by semantic and contextual factors, but *zai* is free to be used with [+iterative] events.

According to Givon [16], time adverbs can be classified into three sub-groups: temporal adverbs, frequency adverbs, and aspectuality adverbs. Both *zai* and *zhengzai* can co-occur with temporal adverbs, such as *xianzai* (現在), *muqian* (目前), *zuijin* (最近) and the like.

- (6) 你們 知道 那個 男孩 **現在** 心中 <u>在</u> 想 什麼 嗎? nimen zhidao nage nanhai xianzai xinzhong zai xiang sheme ma you know that boy now in mind ZAI think what "You know now what that boy is thinking in mind."
- (7) 明知, 她 **這時** 在 做 什麼 mingzhi ta zheshi zai zuo sheme know perfectly well she at this time ZAI do what "Knew perfectly well what she is doing at this time"
- (8) 現在 正在 施工 中

xianzai zhengzai shigong zhong now ZHENGZAI construction under "Now it is under construction"

# (9) 因為 那時 孩子 正在 傷心

yinwei nashi haizi zhengzai shangxin because at that time child ZHENGZAI sad "Because at that time the child is being sad."

But, there are some limitations of *zhengzai*. It can only occur with temporal adverbs referring to a specific time point or a short period of time with a clear reference point as *youyitian* (有一天), *xianzai* (現在), *zuijin* (最近) and so on. It cannot occur with a durational time adverb without a specified reference point, such as *meitian* (每天), *shiwunianlai* (十五年來), *yibeizi* (一輩子), etc.

# (10) 大人們 會 比 **現在 每天** <u>在 /\*正在</u> 用 的人 還要 懂 嗎 darenmen hui bi xianzai meitian zai/\*zhengzai yong deren haiyao dong ma

adults will than now everyday ZAI/\*ZENGZAI use people more understand "Will the adults understand more than those who use everyday?"

(11) 他 不是 個 騙子, 就是 個 沒有 感覺 一輩子 都 <u>在 /\*正在</u> 說謊 的 白痴。

Ta bushi ge pianzi jiushi ge meiyou ganjue yibeizi dou zai/\*zhengzai shuohuang de baichi he either a liar or a without feeling lifetime all ZAI/\*ZENGZAI tell a lie DE idiot "He is either a liar or an idiot who telling a lie for a lifetime without feeling."

From this, we know that *zhengzai* indicates what is on-going at a specific time reference, locating the event in the time axis and contributing contrastive and attitudinal features to the sentence [3].

With frequency adverbs such as *changchang* (常常), *zhongshi* (總是) and aspectuality adverbs as *luxu* (陸續), *buduan* (不斷), *zhengzai* are NOT allowed to appear, either, since these frequency adverbs signal a progressive aspect in the habitual sense, i.e. without a specific time reference [16] or indicate repetitive-progressive that extends over an unspecified period of time.

#### (12) frequency adverbs

# 基金會 也 常常 在/\*正在 廣告 大腸癌,

jijinhui ye changchang zai/\*zhengzai guanggao dachangai foundation also often ZAI/\*ZENGZAI advertise Colon Cancer "Foundation is also often advertising Colon Cancer."

#### (13) aspectuality adverbs

目前 全國 各 運動 單項 協會 **陸續 <u>在/\*正在</u> 召開** 會員 大會 進行 理監事 及 理事長 改選。

Muqian quanguo ge yundong danxiang xiehui luxu zai/\*zhengzai zhaokai currently national each exercise single-item association continuously ZAI/\*ZENGZAI hold huiyuan dahui jinxing lijianshi ji lishizhang gaixuan general meeting carry on supervisor and director re-election

"Currently each national association of single-item exercise is continuously holding the general meeting to carry on the re-election of the supervisor and the director."

The shorter form *zai* can co-occur with the above frequency adverbs, since it is compatible with the feature [+iterative] in that the progressive event can be repetitive. It not only represents simple progressive as an on-going event but can also signal habitual-progressive with the use of durational adverbs.

With regard to manner adverbs, both *zai* and *zhengzai* may occur with a variety of manner adverbs. But, there is a significant constraint in terms of the position of the manner adverb. *Zhengzai* cannot take a preceding manner adverb as shown in (14), while *zai* can occur both with preceding and following manner adverbs as (14) and (15).

#### (14) 畫家 悠閒地 在/\*正在 寫生

huajia youxiandi zai/\*zhengzai xiesheng painter leisurely and carefree ZAI/\*ZENGZAI draw from nature "The painter is leisurely and carefree drawing from nature"

#### (15) a. 整天 都 在 不停的 叫

zhengtian dou zai butingde jiao all day ZAI continuously cry "(she) is crying continuously all day."

#### b. 聽見 小雞 正在 唧唧的 吵鬧

tingjian xiauji zhengzai jijide chaunau hear chicken ZHENGZAI peep make noise "Hears the chicken is peeping and making noise."

Manner adverbs typically characterize the way or means the event is carried out. Since *zhengzai* signals the overlapping of an on-going event with a specific time point, which, when substantiated, is supposed take up the slot immediately preceding *zhengzai*. Thus, a manner adverb cannot take the pre-aspectual position that may be occupied by a time reference. It then ended up only in the post-aspectual position immediately preceding the verb, a slot that will not block the expression of reference time. On the other hand, *zai* is free from a specified time reference and may take a pre- or post-aspectual manner adverb. But the scope of modification differs with different positions of manner adjuncts. When a manner adjunct occurs after *zai* and immediately before the verb, it is event-internal, modifying the single instance of the predicated event. However, when a manner adjunct occurs before *zai*, it is event-external, modifying the relation of the predicated event with some other constituent.

In sum, *zhengzai* requires a time reference, indicating the on-going process pertaining to a specific time point. It is a semantically and pragmatically stronger form to represent progressive event [8]. It cannot be used to express repetitive-progressive (*He is repetitively hitting the ball*), continuous-progressive (*He continued hitting the ball*) or habitual progressive (He is always hitting the ball). But *zai* can occur with [+iterative] and [-iterative] events without a specified time reference. The distinction between them is that *zhengzai* only indicates **deictic progressive** (tensed aspect), while

#### 4 Conclusion

This paper discusses the distinction between *zai* and *zhengzai* with evidence from their collocational patterns. It is found that the use of adverbial adjuncts with *zai* and *zhengzai* represents a significance difference. *Zhengzai* is more constrained in semantic and pragmatic specifications. It cannot co-occur with [+iterative] adverbials indicating repetition of an event or adverbials without a specific time reference. *Zhengzai* indicates an on-going progressive event at a specific time, signaling temporally deictic aspectuality. On the other hand, *zai* is less restricted in marking all kinds of progressive perspective.

In Chinese, there are other markers which can also indicate the progressive or imperfective aspect, such as *zheng* (正) or *zhe* (著). Thus, in further studies, we can compare *zai*, *zhengzai* and other progressive markers to come to a complete picture of the imperfective marking system. In addition, this paper does not exhaust all types of adverbial collocations. There are other types of adverbs which do not collocate with *zhengzai*, such as negative adverbs. It can be reserved for a follow-up study in the future. Moreover, discourse-level constraints on the use of the two markers would be another interesting area to look further into.

#### References

- [1] B. Corrie. *Aspect*. Cambridge: Cambridge University Press, 1976.
- [2] Carlota S. Smith. Aspectual Viewpoint and Situation Type in Mandarin Chinese. *Journal of East Asian Linguistics* 3, pp. 107-46, 1994.
- [3] Carlota S. Smith. *The Parameter of Aspect*. Dordrecht: Klumer, 1991.
- [4] Chao-mao Huang. Riyu dongci 'te i-ru xing' de yufa gongneng: yu Hanyu zhengzai yu zhe de duibi (日語動詞「te i-ru 形」的語法功能--與漢語「正在」「著」的對比). Jingwen jishu xueyuan xuebao 11, pp.125-136, 1990.
- [5] Charles N. Li and Sandra A. Thompson. *Mandarin Chinese: A functional reference grammar, ch.* 6: *Aspect*. Berkeley: university of California Press, 1981.
- [6] Chouncey C. Chu. A Discourse Grammar of Mandarin Chinese. New York: Peter Lang Publishing, 1998.
- [7] C-Y. Chen. Aspectual features of the verb and the relative positions of the locatives. *Journal of Chinese Linguistics* 6, pp. 76-103, 1978.
- [8] L. Zhang. A contrastive study of aspectuality in German, English, and Chinese. Peter Lang Inc.: New York. [Berkeley insights in linguistics and semiotics 19], 1995.
- [9] Li-li Chang, Keh-jiann Chen and Chu-ren Huang. Alternation Across Semantic Field: A Study of Mandarin Verbs of Emotion. *International Journal of Computational Linguistics and Chinese Language Processing* 5 (1), pp. 61-80, 2000b.
- [10] Lillian Meei-jin Huang. Aspect: A general system and its manifestation in Mandarin Chinese. PhD dissertation, Rice University, 1987.
- [11] Lillian Meei-jin Huang and W. Davis. Philip. An Aspectual System in Mandarin Chinese. *Journal of Chinese Linguistics* 17, pp. 128-66, 1989.
- [12] Mari Broman Olsen. *A Semantic and Pragmatic Model of Lexical and Grammatical Aspect*. New York & London: Garland Publishing, 1997.
- [13] Mei-chun Liu. From Collocation to Event Information: The Case of Mandarin Verbs of Discussion. *Language and Linguistics* 4.3, pp. 563-585, 2003.
- [14] Mei-chun Liu. *Mandarin Verbal Semantics: A Corpus-based Approach 2<sup>nd</sup> ed.* Crane Publishing, 2002.
- [15] Søren Egerod. Aspect in Chinese. Carl Bache, Hans Basbøll, Carl-Erik Lindberg (eds.), Tense, Aspect and Action: Empirical and Theoretical Contributions to Language Typology (Proceedings of seminars on Verbal Semantics at Odense University in 1986 and 1987.). Berlin: Mouton de Gruyter, pp.279-310, 1994.
- [16] T. Givon. English Grammar: A function-based introduction. Amsterdam and Philadelphia: John Benjamins, 1993.
- [17] Wolfgang Klein, Ping Li and Henriette Hendriks. Aspect and Assertion in Mandarin Chinese. *Natural Language & Linguistic Theory* 18, pp. 723-770, 2000.
- [18] Yasuhiro Shirai. Where the progressive and the resultative meet: Imperfective aspect in Japanese, Chinese, Korean and English. *Studies in Language* 22, pp. 661-92, 1998.

[19] Yi-fen Luo. Imperfective Aspect Marker "Zai", "Zhe" In Mandarin Chinese:A New Look At An Old Problem (論漢語未完成貌動貌詞"在"與"著"). MA dissertation, NTHU, 1995.

# **Web Resource**

Sinica Corpus: http://www.sinica.edu.tw/ftms~bin/kiwi1/mkiwish