Intersubjectification across the Taiwan Strait: The Emergence of Adverbial (Yi) Zhengge in Taiwan Mandarin Revisited

Yi-Yang Cheng University of California, Santa Barbara

The role intersubjectivity plays in the development of discourse markers has been highlighted in the literature, where clause-internal adverbs are shown to commonly undergo intersubjectification to become discourse markers. Drawing on data from the PTT Corpus, adverbial (*yi*) *zhengge* in Taiwan Mandarin is argued in this study to instantiate such a process, whereby it has developed from a degree intensifier into a sentential adverb of unexpectedness/undesirability, and then into a discourse marker expressing the speaker's negative comment on prior discourse. The functional spectrum of (*yi*) *zhengge* in Taiwan Mandarin contrasts with that of *zhengge* in Mainland Mandarin; whereas both have developed subjective usages, the former has moved further along in the intersubjectification process in having developed a metatextual usage.

1. Introduction¹

It has been established in the literature that, in both Mainland Mandarin and Taiwan Mandarin, the fused expression *zhengge* (consisting of the totality quantifier *zheng* 'whole' and the general classifier *ge*) has developed preverbal, degree intensifying functions from an older, prenominal usage that serves mainly a quantifying function. Wu (2015), for example, sketches out the development of Mandarin *zhengge*, where its earliest fused compound form occurring in the prenominal position is found in the Northern Song dynasty, as in (1a) and (1b).

(1) 慗 一時 湖 陷 a. cheng yishi Zheng ge xian wei hи. jи whole CL city all-of-a-sudden all sink become lake 'The whole city, all of a sudden, sank and became a lake.' (Wu 2015:30)

¹ The earliest ideas for this paper stemmed from discussions with Ling-Chen Chou. Special thanks are given to Chun-Jui Liu for his help with the data collection process, and to Dr. Marianne Mithun for the invaluable intellectual resources she offered me regarding both the content and organization of this paper. Thanks are also given to the NACCL-29 audience, whose comments have been inspiring for writing up this paper. All the errors are, of course, mine.

整 b. 月 不 家 來 個 回 Zheng ge yue bи hui jia lai. whole CL return home come month not 'For the whole month, (he) didn't come home.' (Wu 2015:30)

A later development in the late 19th century involves *zhengge* being used as a prenominal adjective, as in (2a), or even undergoing *quantifier floating* (Bobaljik 2001, Buchstaller and Traugott 2006) to serve as an adverb in the preverbal position, as in (2b). As an adjective/adverb, *zhengge* at this stage had both a quantificational function and a degree-modifying function, and can be translated as 'whole', 'totally' or 'completely' in English.

(2)	a.	要	創立	整個	的	新	政治,
		Yao	chuangli	zhengge	de	xin	zhengzhi,
		in-order-to	establish	whole	ATT	new	politics
		'in order to es	stablish a whole	e new (system o	f) polit	ics,' (W	⁷ u 2015:30)
	b.	先生	出 的	題目,	他	竟	
		Xiansheng	chu de	timu,	ta	jing	
		teacher	give ATT	topic	3SG	even	
		一 字	不	忘, 整個		寫	出來。
		yi zi	bu	wang zheng	ge	xie	chulai.
		one charac	eter not	forget whole		write	out
		'As for the	topic that the	master gave, l	ne repr	oduced	(it) completely

The usage of *zhengge* as an adverb is found to further involve increased subjectivity in the early 20th century, being more and more situated in the speaker's attitude or viewpoint. At this stage, it had completely lost its quantifying function, and have evolved into a degree intensifier reinforcing the speaker's "subjective appraisal" of the subject referent (Wu 2015:32). As seen below, adverbial *zhengge* in (3a) does not quantify over the subject referent, but serves to reinforce the expression of affectedness (due to the subject referent's being in hell). Similarly, adverbial *zhengge* in (3b) serves to reinforce the personal trait (of being ridiculous) assigned to the subject referent.

without forgetting even a single word.' (Wu 2015:31)

是 b. 尤老二 整個 個 笑話! You Lao Er xiaohua! zhengge shi geCL(personal name) whole COP ioke 'You Lao Er is completely a joke!' (Wu 2015:32)

Interestingly, the degree-intensifying function has motivated *zhengge* to be fused with *yi CL* (numeral *yi* 'one' + classifier) in contemporary Mainland Mandarin to form the formulaic expression [*zhengge yi* (CL)] to reinforce the speaker's negative evaluative stance (Wu 2015:32-33). This can be seen in (4) below, where [*zhengge yi* (CL)] introduces a nominal expression that encodes the speaker's negative comment with a reinforced disapproving tone.

(4)	a.	許多 孩子		在	父母	面前	老實	
		Xuduo haizi		zai	fumu	mianqian	laoshi	
		many childre	en	at	parents	presence	well-behaved	
		聽話,	在	爺爺		奶奶	面前	卻
		tinghua,	zai	yeye		nainai	mianqian	que
		obedient	at	grandf	ather	grandmother	presence	but
		整個	_	個	"小	霸王"		
		zhengge	yi	ge	''xiao	bawang''.		
		whole	one	CL	little lo	ord		
		'Many childre	en are w	ell-beh	aved and	d obedient in fr	ont of their par	ents

'Many children are well-behaved and obedient in front of their parents, but are completely a "little lord" in front of their grandparents.' (Wu 2015:33)

b.	她	笑	我	迁	住	得	這麼	近,	
	Ta	xiao	wo	yu.	Zhu	de	zheme	jin,	
	3SG	laugh	1SG	pedantic	live	C	this	close	
	竟		是	整個	_	個	燈	下	黑
	jing		shi	zhengge	yi	ge	deng	xia	hei.
	unexpe	ectedly	COP	whole	one	CL	lamp	under	dark
	'She ri	idiculed	me as b	being pedantic,	since I	live qui	te close	(to Zho	onggua
	~ \		4 . 4			. /11. 1			

Cun), but completely know nothing about it (lit. being in the dark under the lamp).' (Wu 2015:28)

In Taiwan Mandarin, a similar developmental pathway has also been observed for the expression (*yi*) *zhengge* (Lin 2011, Hong 2013), which consists of the totality quantifier *zheng* and the general classifier *ge*, preceded by the optional numeral *yi* 'one'². As can be seen below, (*yi*) *zhengge* quantifies over the head noun it modifies³.

² One question raised by the audience during the presentation is whether *zhengge* should be functionally distinguished from *yi zhengge*. As no significant functional difference has been

(5) (-)整 個 學校 a. (yi)zheng ge xuexiao whole CL school one 'the whole school' (Lin 2011:148) b. (-)整 個 早上 (yi)zheng ge zaoshang whole CL morning one 'the whole morning' (Lin 2011:148)

(yi) zhengge as a fused expression has also been shown to have developed an adverbial usage, occurring in the canonical adverb (preverbal) position, modifying predicates. Similar to the case of zhengge discussed in (2), (yi) zhengge also behaves like a quantifier-float, serving both a quantificational function and a degree-modifying function. When modifying events, (yi) zhengge is interpreted as denoting the "completeness" of the action expressed by the main predicate, as can be seen in (6) below.

(6) 單槓 居然 整個 垮 了。 a. iuran zhengge kua le. Dangang horizontal.bar unexpectedly whole CRS collapse 'Unexpectedly, the horizontal bar completely collapsed.' (Hong 2013:57) 上來。 b. 水 就 整個 淹-了 Shui jiu zhengge shanglai. van-le whole flood-PFV up.come water then 'The flood then completely rose up.' (Hong 2013:57)

When modifying stative predicates, on the other hand, (yi) zhengge strictly serves as a degree intensifier, assigning a high value on a scale implied by the stative meaning of the head predicate (translated as 'so', 'really', or 'truly' in English in the following examples). As can be seen in (7), (yi) zhengge as a degree-intensifying adverb may occur in a resultative construction (7a), a relative clause (7b), or right preceding a predicate nominal (7c).

怪。 (7) 裁切 整個 (相片) 被 a. (*Xiangpian*) bei caigie de zhengge уi guai. photo PASS crop **CSC** whole weird one

identified in this study, we follow Lin (2011) in treating the numeral yi 'one' as an optional element in (yi) zhengge as a fused expression for the scope of this paper.

³ Glossing of data involving (*yi*) *zhengge* cited from Lin (2011) and Hong (2013) is based on the author's own morphological analysis of the data.

'The photo was cropped so weirdly.' (Lin 2011:151) b. 整個 難 穽 的 鞋子 chuan de vi zhengge xiezi nan one whole difficult put.on NOM shoes 'The shoes that are so/really difficult to put on.' (Lin 2011:151) 桃園 機場, 給 人 的 感覺 c. Taoyuan jichang ren de ganjue gei Taoyuan airport person NOM feeling give 威權 就 整個 時代 的 官僚... weiguan shidai de guanliao... jiu zhengge whole authority GEN bureaucracy iust era 'Taoyuan airport, the feeling that it gives people is just so/really/truly

bureaucratic, reminding people of the authoritarian era (in the past) ...'

According to Lin (2011:151), (*yi*) *zhengge* in these cases are usually identified as a newly emerged usage (especially in internet language) popular among young speakers of Taiwan Mandarin, and can all be replaced with other degree intensifiers such as *hen* % 'very' without changing the propositional content of the sentence. However, other usages of (*yi*) *zhengge* as exemplified in (8)⁴ below, which can also be considered newly emerged and non-standard/colloquial, have not been discussed in previous studies.

(Lin 2011:151)

(8) 整個 為了 滿足 物質 生活 a. 基本 shenghuo **Zhengge** weile manzu jiben wuzhi satisfy basic whole for material life 就 扭曲-了 自己 niugu-le jiu ziii distort-PFV then self '(She) zhengge distorted her own self just to satisfy her material needs in life.'

多 b. 人生 整個 少-了 好 美食 rensheng Zhengge shao-le hao duo meishi totally decrease-PFV so many delicacy life 感覺 可以 吃 的 keyi chi de ganjue NOM feeling can eat

⁴ The data are collected from the PTT Corpus, the process of which will be discussed in section 3. The collected data are glossed and translated based on the author's own analysis.

'It feels like there is *zhengge* so less delicacy to enjoy in life now!'

c.	整個	非常	輕鬆	愜意				
	Zhenge	feichang	qingsong	qieyi				
	whole	very	relaxing	pleasing				
	'(That's) <i>zhengge</i> very relaxing and pleasing.'							

The usages of (yi) zhengge as shown in (8) are crucially distinguished from both the degree-intensifying function of (yi) zhengge in (7) and the usage of the [zhengge yi (CL)] construction in (4). To begin with, whereas (yi) zhengge as a degree intensifier takes a predicational scope, modifying the head predicate it precedes as in (7), (yi) zhengge in (8) clearly involves a much wider scope, as it may be followed by complex clauses (8a, 8b) or clauses that already contain other degree intensifiers (8c). In addition, although the degree-intensifying function is observed in the newly developed [zhengge yi (CL)] construction in Mainland Mandarin, the meaning of reinforcement or intensified degree is not available in (yi) zhengge in (8), where replacement with other degree intensifiers would result in ungrammaticality. Moreover, while an increased scope of (yi) zhengge in (8) is apparent, without considering the discourse context it is difficult to determine its elusive semantic function, as its omission from the sentence would not incur any change to the propositional meaning:

- (8') a. (整個/*很/*超級)為了滿足基本物質生活就扭曲了自己
 - b. 人生(整個/*很/*超級)少了好多美食可以吃的感覺
 - c. (整個/*很/*超級)非常輕鬆愜意

To address the questions raised by the peculiar usages of adverbial (yi) zhengge in (8), the present paper aims to investigate its emergence in Taiwan Mandarin from a usage-based, discourse-pragmatic perspective. Drawing on data from the PTT Corpus (Liu 2014), which is a dynamic corpus that automatically collects, updates, and processes data from PTT (批踢踢實業坊), the largest and most popular BBS (Bulletin Board System) in Taiwan, the functions of adverbial (yi) zhengge are examined based on its usage in casual, personal online narratives. It is demonstrated that adverbial (yi) zhengge in Taiwan Mandarin has developed at least two more functions beyond its degreeintensifying usage: (i) as an epistemic adverbial expressing unexpectedness and/or undesirability over the situation described in the sentence, and (ii) as a discourse marker expressing the speaker's (often) negative evaluative comment on situations described in prior discourse. It is argued that an explanation for the discrepancy between the developments of (yi) zhengge in Taiwan Mandarin and zhengge in Mainland Mandarin lies in intersubjectification, a process well-documented in the development of discourse markers crosslinguistically. Exhibiting a wider spectrum of functions compared to zhengge in Mainland Mandarin, adverbial (yi) zhengge in Taiwan Mandarin can be considered as having moved further along in the intersubjectification process, whereby it has developed into a full-fledged discourse marker that takes prior discourse, and not just the predicate(s) within the clause, under its scope.

This paper is organized as follows. Section 2 introduces the notion of discourse marker and the process of intersubjectification typically undergone by discourse markers crosslinguistically. Section 3 discusses the data collection process and a quantitative summary of the collected data. In section 4, properties of (*yi*) *zhengge* as a degree intensifier are discussed with regard its frequent subjective use in discourse. In section 5, properties of (*yi*) *zhengge* as an epistemic adverbial are examined. In section 6, (*yi*) *zhengge* as a discourse marker is discussed with regard to its metatextual function. The summary and conclusion of this study is provided in section 5.

2. Discourse markers and intersubjectification

Also known as pragmatic markers, discourse connectives, discourse particles, among other terms (c.f. Heine 2013:1206), discourse markers are a category of linguistic expressions that generally serve as "non-obligatory utterance-initial items that function in relation to ongoing talk and text" (Maschler and Schiffrin 2015:191). Prototypically, discourse markers are realized as non-compositional (and often idiomatic) expressions, and mainly function to relate the clauses/utterances they occur in to the surrounding discourse context. They typically "signal a comment specifying the type of sequential discourse relationship that holds between ... the utterance of which the discourse marker is a part ... and the prior discourse" (Fraser 1988:21-22). In other words, they are markers that concern "a relationship across rather than within utterances, and contribute to the coherence of the discourse" (Fraser and Malamud-Makowski 1996:864). In this regard, their functions are commonly described as *metacommunicative*, *metatextual*, *metapragmatic*, *metadiscursive*, *instructional*, or even *procedural* (Heine 2013:1209-13).

The English discourse marker, *in fact*, for example, serves to express "the speaker's attitude to the appropriateness of the discourse itself", and functions not at the clausal/utterance level, but at the discourse level in relating the clause/utterance it occurs in to prior discourse (Traugott and Dasher 2002:168). As can be seen in (9), *in fact* occurs with a clause/utterance that introduces justification of what has just been said in the preceding clauses/utterances.

- (9) a. I should not have used the expression. In fact, it does not concern you it concerns only myself. (Traugott and Dasher 2002:168)
 - b. Thus in various ways ethical questions lead inevitably to psychological discussions; in fact, we may say that all important ethical notions are also psychological. (Traugott and Dasher 2002:168)

The cross-clausal/cross-utterance nature of discourse markers can be exemplified by another discourse marker in English—indeed. As can be seen in (10), indeed serves an additive function, signaling that the clause/utterance it occurs with is considered as

"adding to rhetorical argument, being a more appropriate statement for the circumstances at hand than something that preceded" (Traugott and Dasher 2002:164).

- (10) a. The idea of the Constitution as a living document, written so it can adapt to changing social and political times, is a major theme in U.S. judicial history.

 Indeed, it is the Constitution itself that allows those dissatisfied with Supreme Court rulings to turn to the amendment process. (Traugott and Dasher 2002:165)
 - b. Besides the problems noted by Sadock for nondetachability as a diagnostic for (content-based) implicata, it would appear that any means of linguistically canceling or suspending an implicatum ... is ipso facto a means of detaching that implicatum. **Indeed**, how could it be otherwise? (Traugott and Dasher 2002:165)

One of the common threads in the study of discourse markers centers around the observation that they typically exhibit non-discourse-marker functions from which their discourse marker functions develop. Synchronically, it is typical for discourse markers to have corresponding counterparts that serve non-procedural, but content-oriented functions associated with the propositional meaning of the clause it occurs in. This can be exemplified by English *well* and *in other words*, where a clause-internal (manner) adverb function (second *well* in (11), and *in other words* in (12a)) and a clause-initial discourse marker function (first *well* in (11), and *in other words* in (12b)) can be identified for each:

- (11) A: What did your friend say?
 - B: Well, I didn't understand him very well. (Heine 2013:1208)
- (12) a. *She asked him to rewrite it* **in other words**.
 - b. *In other words*, you must rewrite the whole essay. (Heine 2013:1208)

Diachronically, it is typically the case that the non-discourse marker counterpart has undergone semantic/functional changes that involve a development from serving referential/propositional semantic functions to serving pragmatic/procedural discourse functions, in which an increase of semantic-pragmatic scope (taking larger linguistic units under their scope) and intersubjectification (being increasingly based in the speaker's expression of subjective attitude, and later in the speaker's organization of discourse structure) can be found (Traugott and Dasher 2002, Brinton and Traugott 2005:138, Norde 2009:22). Brinton (2008), for example, posit three pathways of syntactic change that discourse markers in English are found to undergo:

(i) adverb/preposition > conjunction > discourse marker
 (ii) clause-internal adverb > sentential adverb > discourse marker
 (iii) matrix clause > parenthetical disjunct > discourse marker

For the sake of direct relevance and the scope of this paper, only the pathway clause-internal adverb > sentential adverb > discourse marker will be exemplified here, with reference to the development of English in fact. As reported in Traugott and Dasher (2002), in fact started out in the late seventeenth century as a prepositional phrase that came to be used as an adverbial meaning "respect in which". Here, in fact functions as a clause-internal (manner) adverbial, whose function is constrained to modification of the preceding predicate (in this example, enjoyed an exclusive trade) with a strictly clause-internal semantic scope (analogous to that of in law in the following subordinate clause).

(13) This company, therefore, have always enjoyed an exclusive trade **in fact**, though they may have no right to it <u>in law</u>. (Traugott and Dasher 2002:166)

The next step of development *in fact* took is to become an epistemic adversative expression, which does not function to contribute to propositional semantics, but presents the clause/utterance it occurs in as describing a counter-expectation. Here, *in fact* has undergone an increase in its semantic-pragmatic scope and subjectivity: it now serves as both a sentential adverb taking the sentence it occurs in under its scope, and an epistemic modal concerned with conveying the speaker's certainty over the truth of the proposition.

(14) When we look about us towards external objects, and consider the operation of causes, we are never able, in a single instance, to discover any power or necessary connexion ... We only find, that the one does actually, in fact, follow the other. (Traugott and Dasher 2002:168)

Finally, *in fact* developed a function at the discourse level to express the speaker's attitude to the appropriateness of the discourse itself. As can be seen below, *in fact* as a discourse marker retains the contrastive nuance of its epistemic adversative counterpart, but the contrastiveness is now not concerned with truth, but of appropriateness of expression in the context of surrounding discourse. In this regard, *in fact* takes a larger linguistic unit—prior discourse (instead of a sentence)—under its scope, and is intersubjective in nature, as it is concerned with the speaker's organization of linguistic units in the discourse context.

(15) Thus in various ways ethical questions lead inevitably to psychological discussions; in fact, we may say that all important ethical notions are also psychological. (Traugott and Dasher 2002:168)

As will be seen in the discussions that follow, similar to the case of English *in fact*, adverbial (*yi*) *zhengge* in Taiwan Mandarin will be shown to exhibit a functional spectrum that includes:

- (i) a clause-internal adverbial usage with a predicational scope;
- (ii) an epistemic adverbial usage with a sentential scope; and
- (iii) a discourse marker usage with a textual scope,

the latter two representing the usages of (yi) zhengge beyond the degree intensifying function as exemplified in (8), as a result of intersubjectification.

3. Data and Methodology

PTT is a non-commercial, open-source BBS (Bulletin Board System) used on the internet in Taiwan. It is completely free of charge, has more than 1.5 million registered users, with over 150,000 users during peak hours, and includes 20,000 forums, or "boards", covering a multitude of topics⁵. The boards mainly serve as online forums for their users to (i) post articles, (ii) reply to posted articles, and (iii) to comment on posted (original and replying) articles. The posted articles normally constitute casual, personal narratives whose content depends on the nature of the board on which an article is posted.

The data examined from this study are collected by searching the keyword *zhengge* (整個) on all articles posted on PTT during March 11 and March 12, 2016. The collected instances of (*yi*) *zhengge* (N=212) can be categorized into (i) prenominal usages and (ii) pre-predicate usages. The prenominal usages are all identified as serving a quantificational function, and account for 55% (N=116) of all instances of (*yi*) *zhengge*. The pre-predicate usages of (*yi*) *zhengge* shows a more diversified picture, accounting for 45% (N=96) of the data, and can be further categorized into three types: degree-intensifying (*yi*) *zhengge* (90%, N=87), epistemic adverbial (*yi*) *zhengge* (4%, N=4), and discourse marker (*yi*) *zhengge* (5%, N=5).

4. Subjectification of degree-intensifying (yi) zhengge

Among the 87 degree-intensifying usages in the collected data, almost half (N=37) modifying predicates involve zhengge that express the speaker's psychological/emotional experience. Without considering the discourse context, (yi) zhengge in these cases serves as a clause-internal adverb intensifying the meaning of the immediately following predicate that encodes the speaker's psychological/emotional experience, being translatable as 'so', 'really', or 'truly' in English. (yi) zhengge in these cases can all be replaced with other degree intensifiers such as hen 很 'very', feichang 非 常 'unusually/extremely', or chaoji 超級 'super', without changing the propositional content of the clause/sentence it occurs in. When omitted, the propositional meaning is crucially affected, as the degree intensifying meaning becomes no longer available.

⁵ Because registration of an account typically requires a valid Taiwanese university e-mail address, PTT users are usually introduced to the system when entering college, and since it was founded in 1995, the age of its users ranges from 18 to approximately 40, making it one of the primary platform for e-social interaction of Taiwanese young adults. For more information

```
(16)
                   (整個)
                                傻眼
             我
      a.
             Wo
                   (zhengge)
                                shayan.
             I
                   whole
                                dumbfounded
             'I was (so/really/truly) dumbfounded.'
                                 多
      b.
             看到
                          好
                                       黄安
                                                    的
                                                           新聞
             Kandao
                          hao
                                duo
                                       Huangan
                                                    de
                                                          xinwen
                                many Huangan
                                                    GEN
             see
                          SO
                                                          news
                                上來
             (整個)
                          火氣
                          huoqi shanglai
             (zhengge)
                          anger up
             whole
             'Seeing so much news about Huangan, (I got) (so/really/truly) furious.'
                   知道
                                             (整個)
                          的
                                 當下
                                                           氣
      c.
            wo
                   zhidao de
                                dangxia
                                             (zhengge)
                                                          qi
             I
                   know NOM moment
                                             whole
                                                          mad
             到
                   發抖
             dao
                   fadou
             until
                   shake
             'The moment I knew (about it), (I) got (so/really/truly) shakingly mad.'
```

When the discourse context is considered, it is found that many of the cases where (yi) zhengge is used to intensify the speaker's psychological/emotional experience are used to introduce the speaker's negative reaction to a series of events already described in prior discourse. Here, (yi) zhengge may be interpreted as serving the degree-intensifying function, modifying the psychological/emotional predicates inside the clause it occurs in. Interestingly, however, it may also be interpreted as serving a discourse-pragmatic function of indicating the unexpected/undesired nature of the situation presented in prior discourse. This can be exemplified in (17) below. Here, the speaker presents a series of events involving her boyfriend's cousin, whom the speaker did not know very well, planning to take a trip to Japan with the speaker and her boyfriend. As this was requested by the boyfriend's mother, who did not respect the couple's willingness, it was very shocking to the speaker. The speaker's intense reaction to the series of shocking events (verbalized by 晴天霹靂 'feeling extremely shocked') is marked with (yi) zhengge, and may be interpreted as either a mere description of an intense reaction, or an indication of the unexpected/undesired nature of the situation presented in prior discourse.

- (17) "[心情] 想跟男友家人出遊問題一大堆" Boy-Girl, Sat. Mar 12 20166
- 1 跟男友回到高雄之後的某天 One day, after I returned to Kaohsiung with my boyfriend,
- 2 男友的表妹"突然"LINE 男友說我們去日本的預算 my boyfriend's cousin suddenly sent a LINE message to him, asking about our budget for the Japan trip.
- 會說突然是因為男友跟表妹很不熟
 I said "suddenly" because my boyfriend was not close to the cousin at all,
- 4 就連表妹來高雄玩男友都懶得鳥她的那種程度 囧 to an extent where even when she visited Kaohsiung, my boyfriend was too lazy to hang out with her.
- 5 男友跟表妹聊了一些日本的事之後 After my boyfriend chatted with her a little bit about Japan,
- 6 我還天真的以為可能表妹也打算之後去日本玩 在參考行程跟預算 I was still naïve to think that she might have been planning to take a trip to Japan some time later, and that she was just taking our itinerary and budget as reference.
- 8 → 知道這件事情的時候我**整個**晴天霹靂 When I knew about it, I *zhengge* was extremely shocked.
- 9 一來連男友跟表妹都不熟了 更何況我 On the one hand, she's not even close to my boyfriend, let alone to me.
- 10 再來是男友媽完全沒知會我們就跑去邀表妹一同出遊 On the other hand, my boyfriend's mother didn't even tell us before inviting the cousin to come with us.

5. The emergence of (yi) zhengge as an epistemic adverbial

Interestingly, the discourse-pragmatic function of indicating unexpectedness/undesirability in (yi) zhengge as a degree intensifier is found to be the core function of the usage of (yi) zhengge as an epistemic adverbial in the collected data (4% (N=4) of all 96 adverbial usages of (yi) zhengge in the collected data). Syntactically, (yi) zhengge as an epistemic adverbial occurs in clauses/sentences that involve not psychological/emotional predicates, but (often complex) predicates that describe situations deemed by the speaker as highly unexpected and/or undesired, as can be seen

⁶ The title of textual data presented in this study is formatted as involving: (i) the title of the article where the data is from (placed within parentheses), (ii) the PTT board on which the article is posted, and (iii) the date it was posted. The data were translated into English by the author.

in (18) below. On the one hand, none of the unexpected/undesired situations in these cases involve stative predicates that imply a scale; (yi) zhengge here therefore cannot be interpreted as serving a degree intensifying function. On the other hand, all cases of (yi) zhengge as an epistemic adverb can be omitted without changing the propositional content of the clause/sentence it occurs in; when omitted, it is only the additional speaker attitude (of unexpectedness/undesirability) over the proposition that becomes unavailable in the interpretation.

(18)	a.	我	—	個	漂亮		表妹	北上,
		wo	yi	ge	piaolia	ng	biaomei	beishang
		1SG	one	CL	pretty		female.cousin	go.northbound
		(整個)		為了	滿足	基本	物質	生活
		(zheng	(ge)	weile	manzu	jiben	wuzhi	shenghuo
		whole		for	satisfy	basic	material	life
		就	扭曲-	了	自己			
		jiu	niuqu-	le	ziji			
		then	distort-	-PFV	self			

'A pretty female cousin of mine moved to Taipei, (and) *zhengge* distorted her own self just to satisfy her material needs in life! (with surprise and distain)'

Laiyayan	chuan	-le	xizhua	ng	yihou,	
Laiyayan	put.on	-PFV	suit		after	
(整個)	讓	好	多	人	戀愛	了
(zhengge)	rang	hao	duo	ren	lianai	le
whole	let	so	many	person	n fall.in.love	CRV

^{&#}x27;After Laiyayan put on her suit, (she) *zhengge* made so many people fall in love (with surprise)!'

The attitude-oriented function of epistemic adverbial (yi) zhengge significantly differs from the case of degree-intensifying (yi) zhengge as shown in (16) above, as omission of the latter will crucially change the propositional meaning of the clause/sentence it occurs in. In this regard, (yi) zhengge as an epistemic adverbial can be rightly considered as a sentential adverb that does not tap into the propositional content of the clause/sentence, but has a sentential scope in expressing the speaker's epistemic attitude.

When the discourse context is considered, (yi) zhengge as an epistemic adverb can all be replaced with other sentential adverbs that also convey a similar speaker attitude (of unexpectedness/undesirability), such as juran 居然 'actually, unexpectedly', or jingran 竟然 '(would) go so far as'. This can be seen in an example in (19) below. Here, the speaker narrates a series of events involving him/herself on a bus, where s/he heard a suspicious sound from the glass window to his/her right. After taking a look at the

window, the speaker found out that there was actually a crack in the window. This is not something one would expect or desire when taking the bus, and it made the author change his/her seat immediately. Here, the clause expressing "the window is cracked" involves (yi) zhengge occurring in it, and may be replaced with other epistemic adverbials expressing unexpectedness such as juran 居然 'actually, unexpectedly', or jingran 竟然 '(would) go so far as'.

(19) "[心情] 福和客運沒有極限..." Keelung, Sat. Mar 12 2016

- 今天搭福和客運,
 - Today, I was on a Fuhe bus.
- 2 右邊玻璃傳來奇怪的聲音,
 - The glass on my right hand side was making weird sounds.
- 3 認真一看,
 - I took a serious look
- 4 → 玻璃整個是裂的...==
 - (to find that) the glass zhengge was cracked... (emoji)
- 5 馬上坐遠離玻璃改靠走道

I immediately took an isle seat that is far away from the glass.

Another example of (yi) zhengge as an epistemic adverbial can be seen in (20) below. Here, the author complains about the crash of the smartphone app LINE, which led to the unexpected and undesired outcome of the loss of all except one of the emojis s/he had downloaded on the app. Again, zhengge here may be replaced with 居然, or 竟然.

(20) "[問題] line 表情不見了" iOS, Sat. Mar 12 2016

- 1 剛 line 大當機恢復後
 - Just now, right after the huge crash on LINE ended,
- 2 → 整個表情剩一個
 - **Zhengge** there's only one emoji left.
- 3 現在很苦惱要不要重新安裝
 - I'm very distressed, wondering if I should just install it again.
- 4 各位有人跟我一樣的嗎
 - Did the same thing happen to any of you guys?

6. Intersubjectification and the emergence of (vi) zhengge as a discourse marker

Still another type of adverbial (yi) zhengge identified in the collected data involves (yi) zhengge serving as a discourse marker with a textual scope in relating the clauses/sentences it occurs in to the discourse context. Similar to the case in the epistemic adverbial usage, (yi) zhengge as a discourse marker does not contribute to the propositional content of the clause/sentence. Therefore, when considered without the

discourse context, it can be freely omitted without resulting in any change in the propositional meaning. Again, this is crucially different from the case in (yi) zhengge as a degree intensifier, as has been illustrated in (16) above:

(21)(一整個) 就是 溫馨 八卦版 a. 善良 wenxin baguaban (Yi zhengge) jiushi shanliang one whole then.COP kind warm Gossiping.Board 的 書面。 de huamian. GEN picture '(Yi zhengge) what a kind and warm scene on the Gossiping Board!' b. (一整個) 制度 大亂 詭異 邏輯! 的 (Yi zhengge) zhidu daluan guiyi luoji! de one whole system completely.messy ATT strange logic '(Yi zhengge) what a completely messy system with a strange logic!'

Different from the case in (yi) zhengge as an epistemic adverb, however, all cases of (yi) zhengge as a discourse marker (5% (N=5) of all 96 adverbial usages of (yi) zhengge in the collected data) involve complex predicates that describe not situations, but the speaker's negative evaluative comment. When the discourse context is considered, the evaluative comment introduced by (yi) zhengge is necessarily construed as having scope over prior discourse, where a situation described across multiple preceding clauses/sentences is deemed as leading to, or involving, an unexpected/undesired outcome. In other words, instead of expressing unexpectedness/undesirability over a clause/sentence (as in the case of (yi) zhengge as an epistemic adverbial), (yi) zhengge as a discourse marker serves a metatextual function in indicating that the speaker is making a negative comment on the unexpectedness/undesirability of a situation already described in prior discourse. Consider (22), where an example of the metatextual function of (yi) zhengge as a discourse marker is exemplified. Here, the author talks about his/her inability to endure spicy food, which, compared to people who can, is deemed as depriving him/her of the opportunity to really enjoy the process of eating spicy food—an undesired outcome.

(22) "[閒聊] 不會吃辣", WomenTalk, Sat. Mar 12 2016

- 1 一直有個小疑惑
 - I've been wondering about something for a long time.
- 2 大家是不是都很會吃辣啊
 - Is everyone good at eating spicy food?
- 3 看會吃辣的人吃的很爽都有點羨慕
 - Whenever I see people eating spicy food totally enjoying it, I get a bit jealous.

- 4 可是我實在是太怕辣
 - But I'm just too bad at eating spicy food.
- 5 胡椒太重就不行了> <
 - Even when it's just too much pepper, I won't be able to handle it.
- 6 → 人生整個少了好多美食可以吃的感覺
 - 'It feels like there is *zhengge* so less delicacy to enjoy in life now!'

As can be observed, (yi) zhengge in (22) occurs in the final sentence of the post. Here, it introduces the author's negative comment on the preceding clauses/utterances, showing his/her disappointment about what s/he was missing in life.

The discourse marker function of (yi) zhengge can also be exemplified in another instance, as in (23) below. Here, (yi) zhengge is used in the middle of describing a series of events, where the author switches from narrating the situation (where the speaker's husband, once when he was a child, found a box of cookies and decided to take possession of it) to making a deriding comment on the husband's action of eating the cookies while watching television:

(23) "[無言] 這不是你的啦……", StupidClown, Sat. Mar 12 2016

- 1 上完廁所走到客廳看到桌上放了一盒很漂亮的餅乾盒
 - After he came out of the bathroom, he walked into the living room and saw that there was a very pretty cookie box on the table.
- 2 打開一看 哦哦哦 是小餅乾耶!!! He opened it, thinking: Wow! Little cookies!!!
- 3 (立刻抓一片來吃)
 - (Immediately grabs one to eat)
- 4 嗯!?是鹹的耶 雖然味道不重但脆脆的好好吃哦
 - Hmm? It's salty. The taste is not strong, but it's kind of crunchy. Tastes very good.
- 5 家裡剛好沒人 老妹也還沒回來 哼哼 這盒我獨佔了 It just happens that no one's home. Little sister is not home yet either. I'm going to keep the whole box to myself.
- 6 明天在帶一點去學校分同學吃好了~~嘿嘿 I'll just bring some to school tomorrow to share with classmates.
- 7 → 就這樣腦公就一口一片配著電視吃著餅乾逗弄著家裡的狗狗 整個非常輕鬆 恢意
 - Just like that, my husband watched TV, ate his cookies one by one, teasing our puppy, *zhengge* very relaxing and pleasing!
- 8 直到腦公的媽媽(我婆婆)回來後……
 - This continued until my husband's mother (my mother in law) came home.
- 9 腦公:媽~這盒餅乾哪買的?脆脆的很好吃耶

Husband: Mom, where did you get these cookies? They're crunchy and tasty.

10 婆婆:什麼餅乾?

Mother in law: What cookies?

11 腦公:就這盒啊(拿出餅乾盒)

Husband: This box of cookies. (Shows the cookie box)

12 婆婆:那盒!?那盒是········

Mother in law: That!? That's ...

13 那盒是皮皮吃的餅乾 你跟他搶餅乾吃哦?

That's Pipi's (dog's name) cookies! Are you fighting with him over cookies now?

Here, the author ironically evaluates his husband's action as "very relaxing and pleasing" (非常輕鬆惬意), when in fact it was essentially the opposite, as the cookies he was eating would in the end turn out to be dog food, which was not supposed to be enjoyable at all. Again, (yi) zhengge serves to introduce the author's negative comment on prior discourse, which is considered to be leading to an unexpected and undesired outcome (the cookies turning out to be dog food).

7. Summary and conclusion

It has been shown in this paper that adverbial (*yi*) *zhengge* in Taiwan Mandarin can be considered as having developed two additional usages beyond the degree intensifying usage, as evidenced in the data drawn from PTT forum posts. Although the epistemic adverbial and discourse marker usages of (*yi*) *zhengge* only account for 9.3% (N=9) of all the adverbial instances of (*yi*) *zhengge* in the data (N=96), it has been argued that they should be crucially distinguished from the other adverbial usages. In particular, they differ in terms of (i) their semantic/discourse-pragmatic function, (ii) their semantic-pragmatic scope, and (iii) the degree of (inter)subjectivity involved. The functional spectrum of adverbial (*yi*) *zhengge* based on the collected data is summarized as in table 1 below:

Table 1. Functional spectrum of adverbial (vi) zhengge

		• • • • • • • • • • • • • • • • • • • 			
	Function	Scope	(Inter)subjectivity		
(yi) zhengge ^{DI}	degree modification	predicate	N/A ~ (subjective)		
(yi) zhengge ^{EA}	attitude expression	sentence	subjective		
(yi) zhengge ^{DM}	textual cohesion	text	intersubjective		

While direct diachronic evidence is still required, the observed (subjective and intersubjective) functions of (yi) zhengge beyond its degree intensifying function correspond to successive stages of one of the developments typically undergone by discourse markers as illustrated in the case of English in fact in section 2. The functional differences as shown in table 1 can therefore be hypothesized as a diachronic pathway that (yi) zhengge has undergone, where it developed from a clause-internal, degree-

modifying adverb into a sentential, attitude-expressing adverbial, and finally into a discourse marker with a textual scope. In this regard, (*yi*) *zhengge* in Taiwan Mandarin contrasts with the [*zhengge yi* (*CL*)] construction in Mainland Mandarin in having further evolved an intersubjective, metatextual usage, taking prior discourse under its scope.

REFERENCES

- BOBALJIK, JONATHAN D. Floating quantifiers: handle with care. *The second Glot international state-of-the-article book*, edited by Lisa Cheng and Rint Sybesma, 107-8. Berlin and New York: Mouton de Gruyter.
- Brinton, Laurel J. 2008. The comment clause in English: Syntactic origins and pragmatic development. Cambridge: Cambridge University Press.
- Brinton, Laurel J., and Traugott, Elizabeth C. 2005. *Lexicalization and language change*. Cambridge: Cambridge University Press.
- BUCHSTALLER, ISABELLE, AND TRAUGOTT, ELIZABETH C. 2006. The lady was al Demonyak: historical aspects of adverb *all. English Language and Linguistics* 10.345-70.
- FRASER, BRUCE. 1988. Types of English discourse markers. *Journal of Pragmatics* 14.3:383-398.
- FRASER, BRUCE., and MONICA MALAMUD-MAKOWSKI. 1996. English and Spanish contrastive discourse markers. *Language Sciences* 18.3-4:863-881.
- HEINE, BERND. 2013. On discourse markers: grammaticalization, pragmaticalization, or something else? *Linguistics* 51.6:1205-1247.
- HONG, SHIH-CING. 2013. A semantic and pragmatic study of "zheng-ge" in Modern Chinese. MA Thesis: National Kaohsiung Normal University.
- LIN, HSIU-HSU. 2011. Zhengge yizhengge 'It's ALL (yi)zhengge': the emergence and grammaticalization of (yi)zhengge in Taiwan Mandarin Chinese. Chaoyang Journal of Humanities and Social Science, 9.1:141-158.
- LIU, CHUN-JUI. 2014. PTT Corpus: Construction and Applications. MA Thesis: National Taiwan University.
- MASCHLER, YAEL, and DEBORAH SCHIFFRIN. 2015. Discourse markers: Language, meaning, and context. *The handbook of discourse analysis*, 2nd edition, edited by Deborah Tannen, Heidi E. Hamilton, and Deborah Schiffrin, 189-221. Bloomsbury: Bloomsbury Publishing.
- NORDE, MURIEL. 2009. Degrammaticalization. Oxford: Oxford University Press.
- TRAUGOTT, ELIZABETH C., and RICHARD B. DASHER. 2002. Regularity in semantic change. Cambridge: Cambridge University Press.
- Wu, Haiping. 2015. Encoding subjectivity with totality: A corpus-based study of [zhengge yi (CL) + X] in Mandarin. *Journal of Pragmatics*: 83: 27-40.