The development of interlanguage pragmatic markers in alignment with role relationships

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Studies on the development of interlanguage pragmatic markers (PMs) have attracted increasing interest recently. However, little research is available on the PM dynamic development in alignment with English-as-a-foreign-language (EFL) classroom contexts. Given the lacuna, this article, based on the Complexity and the Alignment theories, investigates how PMs develop and how aligning with film-situated un/equal role relationships influences development. The study with eight data collection points tracks 28 EFL learners' PM production over around 1.5 year. Results revealed: (1) the employed PM functions fluctuated but developed from singular to multiple, with the interpersonal function use being regressive and the structural and the cognitive, progressive; (2) the PM development manifested a significant gain in aligning with the equal role relationships; and (3) different proficiency learners had dissimilar PM development. These findings corroborate the view of context-dependent dynamic development and provide strong evidence for aligning EFL learning with various role relationships.

Keywords: dynamic development, interlanguage pragmatic markers, context-dependence, un/equal role relationships, alignment, complexity theory, learning process

1. Introduction

The studies on the development or learning of interlanguage PMs are relatively sparse in second language (L2) studies (see Beeching 2015; Jones 2016; Müller 2005) though fewer researchers (Jones 2016; Jones and Carter 2014; Xiao 2012) have even undertaken research on explicit instructions of interlanguage PMs. Such studies are nonetheless increasingly noteworthy. On the one hand, what is

notable is that some recent influential cross-sectional or immediate effect studies on the comparisons of PM frequencies and functions between native speakers (NSs) and non-native speakers (NNSs) tend to have inconsistent findings. For instance, Fung and Carter (2007) find that Hong Kong NNSs' employments of PMs were mostly confined to referential functions while Ament et al. (2018) claim more textual but fewer interpersonal ones of Spain NNSs as elaborated in Section 2. On the other hand, the same is true of some more recent longitudinal and inter-group studies on the effects of social or classroom contexts on PMs' learning (Ament et al. 2018; Magliacane and Howard 2019; Polat 2011). In both cases, one type of findings is that NNSs' PM frequencies could not approach NSs' (Fung and Carter 2007; Iwasaki 2011, 2013; Magliacane 2020; Magliacane and Howard 2019). The other is that frequencies of some PMs (e.g., interpersonal PMs) of NNSs could not approach NSs' while others (e.g., the ones of textual PMs) surpassed NSs' (Ament et al. 2018). The results could be even more complicated, for which one instance will suffice. Müller (2005) reports that German NNSs surpassed NSs in their frequencies of using the discourse marker, *well*, whereas Polat (2011) claims that an adult Chinese NNS failed in yielding the marker throughout his yearlong conversations with an NS in a naturalistic setting (American home). Is context or methodology related to the disparities?

The conflicting findings above necessitate further studies on interlanguage PM development, particularly in alignment with contexts from a dynamic and synergetic perspective. It is paramount to examine what goes on within context that drives students to acquire pragmatic abilities, as Taguchi (2015,16) suggests, and future research should more closely "align itself with the dynamic, complex systems perspective". However, except Martín-Laguna and Alcón-Soler's (2018) study on the differences in the dynamic development of written marker functions of Spanish, Catalan, and English, the development of spoken PMs in L2 has been extremely under-studied as claimed by Jackson (2008) and Magliacane and Howard (2019). Given such a lacuna and the poverty of Chinese learners' PMs in EFL classroom contexts (Fung and Carter 2007; Liao 2009), we aim to investigate whether contexts shape the use or development of interlanguage PMs and their multi-functions. Therefore, we focus on how the dynamic development of interlanguage PMs emerges in alignment with film-situated un/equal role relationships in EFL classroom situations.

2.   Functions of PMs and their dynamic development in EFL studies

2.1   Functions of PMs and their empirical studies

Discourse markers or PMs in recent studies have undergone different and convoluted functional classifications (see Aijmer 2013; Brinton 1996; Fung and Carter 2007; Maschler 1994; Redeker 1990) as "there is apparently no consistency" among such functionally based taxonomies, and "studies of individual pragmatic markers yield conflicting and confusing results" (Brinton 1996, 37). To name a few, Redeker (1990) classifies discourse marker into ideational marker and PM, which is reckoned to better delineate discourse coherence via representations of both proposition and non-proposition. Ideational markers refer to propositional devices serving semantic relations, while pragmatic markers relate to non-propositional devices serving pragmatic relations such as attitudinal and intentional ones. The former cover simple connectives, semantically rich connectives, and other temporal adverbials. The latter involve pragmatic employments of conjunctions, connective employments of interjections, and discourse-structuring employments of comment. Maschler (1994) then categorizes discourse marker into five types: referential, interpersonal, medial, structural, and silential. Drawing on Maschler (1994), Fung and Carter (2007) propose their classification, i.e., referential, interpersonal, structural, and cognitive. Overall, "the central function of PM is to express the relation or relevance of an utterance to the preceding utterance or to the context" (Brinton 1996, 30) while some secondary functions in the literature are categorized as structural or interactive, or as response signals or a means to achieve conversation continuity (Brinton 1996).

The above functions of discourse markers or PMs are too variegated to pursue a general framework for application studies. Despite this, we can sort out some PM functions from researchers who share compatible classifications pertinent to our study. As can be seen in Fung and Carter's (2007) four categories above, the first three functions are based on Maschler (1994), while the latter three are analogous to Bazzanella's (2006) three macro-functions, viz. interactional, metatextual, and cognitive functions. Specifically, their referential function concerns such propositional conjunctions as *because, after*, and *whose*, analogous to Redeker's (1990) ideational function. The interpersonal function denotes one of the mechanisms that marks spoken grammar's affective and social functions (e.g., *yeah, you know, well*). The structural function indicates the discourse in progress, the presence of which may affect the subject under discussion or even the distribution of turn taking at either textual or interactional level (e.g., *yeah, well*). The cognitive function signifies constructing a cognitive state of speakers, a mental representation of discourse (e.g., *well, you know).*

Given the characteristics of non-proposition and multifunctionality, we employ PM, a broad cover term, following Aijmer and Simon-Vanderbergen (2006) who hold that PMs are not only devices associated with discourse and textual functions but also signals guiding the addressee's interpretation in the communication situation. Based on Fung and Carter (2007) and others, we concentrate on the three pragmatic functions (i.e., interpersonal, structural, and cognitive) herein, excluding the referential function that is proposition-based and unfit to our purpose. Hence, we solely review some conflicting and confusing findings on pertinent PMs in empirical studies below, with a focus on three PMs (i.e., *yeah, well, you know*).

In Müller's (2005) findings, NSs (Americans) utilize much more markers (*like, you know*) than NNSs (German) whereas the NNSs deploy *well* twice as often as the NSs in its discourse marker functions.[1] Fung and Carter (2007) then find that Chinese NNSs' markers are mostly referential while their employment of *yeah, well, you know* is much less frequent than NSs' and restricted in terms of the category of function. More recently, Ament et al. (2018) examine the effects of full-English media teaching and semi-English media teaching on the application of interpersonal and textual PM functions in the writings of Spanish NNSs at different tertiary levels. Their results reveal that despite the significant gain of the full-English teaching group over the semi-English media teaching group, neither group reached the NSs' frequency for the utilizations of interpersonal PMs, and both groups displayed more employments of textual PMs than the NSs did. Likewise, Buysse (2018) finds that Dutch-speaking NNSs of English deploy much more *actually* and *in fact* than NSs while French-speaking NNSs utilize extremely more *in fact* but less *actually* than NSs, the findings of which betray an incidence from cognates in the learners' first languages (L1s), i.e., their cognitive context or background knowledge.

One point to note in the above-reviewed studies is that all the researchers conduct a cross-sectional or immediate effect study. Such studies have been predominated in the literature, while longitudinal and quantitative studies that can examine PM changes over time are relatively deficient, as claimed by some researchers (Jones 2016; Jones and Carter 2014; Magliacane and Howard 2019). Given this factor, some researchers have commenced to fill the lacuna. Tracking a Chinese adult learner of English over a year in a naturalistic setting (via the researcher's conversations with the adult learner at home), Polat (2011) finds that

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1. Müller (2005, 138) classified *well* into six functions at textual and interactional levels respectively. Textual: searching for the right phrase, rephrasing/correcting, quotative *well*, move to the main story, introducing the next scene, conclusive well; Interactional: indirect answer, direct answer, response to self-raised expectations, contributing an opinion, continuing an opinion/answer, evaluating a previous statement.

the learner's markers (*you know, like, well)* are limited to certain use frequencies, with *well* not employed at all. In Magliacane and Howard's (2019) study, significant differences in the PM use (i.e., *like)* are found not only between the university study group and the au-pairs group during a six-month sojourn in Ireland but also between the NS group and the two NNS groups. Additionally, both NNS groups have a significant gain over time, though. Nonetheless, the au-pairs group's function typology is closer to that of the NS group. More recently, Magliacane (2020) conducts a longitudinal and quantitative study that tracked the frequency and production of the two PMs, *like* and *well*, in study-abroad contexts. By comparison with English NSs, the results indicate an increase in frequency and constraints on the output of the PMs.

A critical point to infer from the above longitudinal studies is that even studying abroad in the target language country, different social contexts cause discrepancies in interlanguage PMs' learning or development. The results may indicate more interactional alignments of the NNSs with NSs in the homestay settings than in the university settings. More situational variables such as social roles and activities are probably involved in the diversified homestay settings, even in contrast with Polat's single home setting for data collection. What seems constructive herein needs more evidence for the effects of situational contexts on interlanguage PM development. More importantly, how PMs relate to specific situational contexts, especially EFL classroom contexts, in the learning process needs to be unraveled, and the process of interlanguage PMs' dynamic development remains nebulous.

2.2   Complexity theory and dynamic development in interlanguage PM studies

Complexity theory (CT), though hard to trace its source, is generally presumed to emanate from natural sciences (Larsen-Freeman 2017b). While acknowledging the existing individual differences (Larsen-Freeman 1997), Larsen-Freeman (2019) asserts that CT as an ecological theory is a metatheory or a transdisciplinary conceptual framework, viz. a holistic perspective on ways of thinking, context-dependent systems view, and dynamic systems view. CT views language as a dynamic complex system in which various system components are interconnected and changeable in interaction. The language system adapts itself to environmental stimuli through self-organizing behaviors, and then new language structures and functions or meanings emerge (Larsen-Freeman 1997, 2006, 2017b). Dynamic, emergentism, and adaptivity are three essential tenets of CT. Furthermore, other tenets in line with ecological theory include timescales as an exploration mechanism for cognitive purposes, fractals referring to the patterns

of activities and events that have self-similarity at different levels of dimensionality, open-endedness in the open or inconclusive analysis of discrete events, and nonlinearity in language development (cf. Kramsch and Whiteside 2008; Larsen-Freeman 1997, 2006, 2017b).

In empirical studies, Larsen-Freeman (2006) applies CT to L2 studies and explores the dynamic development process of speaking and writing abilities via accomplishing the same topic task in a time-series design experiment. Since then, researchers have been interested mostly in the dynamic development of grammatical or lexical competence or writing ability (Martín-Laguna and Alcón-Soler 2018; Larsen-Freeman 2006; Verspoor et al. 2012). Other contextual factors to be measured in a time series design for spoken language learning (let alone for PM learning) remain understudied. Contextual factors may influence the dynamic development of learners' pragmatic competence, which requires preferably tracking in a time series design experiment given the role of different contexts in shaping different PM employments. Even Larsen-Freeman (2017a, 2019) herself states later (but not verifies) that dynamic development depends on the context.

However, regarding the studies of dynamic development of interlanguage PMs, to our best understanding, only Martín-Laguna and Alcón-Soler (2018) investigate the dynamic development of interpersonal and textual functions of 'discourse-pragmatic markers' (in their term) in three compositions written respectively in three languages (L1, L2, and L3) three times in a year. Little research has considered the effect of aligning with more specific contextual factors such as role types on the dynamic development of spoken PMs, i.e., the effect of "variable performance that could be due to differences in topic tasks or contexts" (Larsen-Freeman, 2006, 595). Given the role of situational contexts in L2 development, what follows is to introduce the alignment theory, which further explains why the complex system of L2 development should be adaptive to the changes in the learning environment.

3.   Situational alignment

The alignment theory/synergetics proposed by the German physicist Haken[2] (1997), holds that in the whole environment, there are synergetic effects of different attributes and disparities as well as cooperation and impacts between various systems. Subsequently, applications of the theory to various disciplines sprang up. The studies on alignment and situation hold that alignment with situation models

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2. Haken's synergetics is viewed as one of the sources of Complexity theory (see Larsen-Freeman, 2017b, 11–25).

lays the foundation for successful understanding and communication (Pickering and Garrod 2004, 2006). Situational models refer to the multidimensional representations of text comprehension involving five key dimensions, i.e., space, time, causality, intentionality, and reference to prominent individuals, the construction of which promotes communication (Zwaan and Radvansky 1998). The synergetic effect of the multidimensional representations can assist the comprehension of PM functions (meanings) in context, and the matching of PM functions with central individuals, e.g., the leading social roles of interlocutors in our study. Drawing on Zwaan and Radvansky (1998), Pickering and Garrod (2004) propose the 'Interactive Alignment Model' in favor of the existence of an alignment phenomenon between interlocutors who align their situation models for text comprehension. Such alignment facilitates mutual understanding. They further state that situational models are interrelated with other levels of representations. For instance, linguistic representations and their alignment with situational models can yield automatic language alignment upon structure priming. In other words, interlocutors tend to repeat the linguistic and pragmatic features encountered recently during communicative interactions.

Atkinson et al. (2007) apply the alignment theory to L2 studies, emphasizing the crucial role of learning alignment. They hold that learning is the process of learning and integration of learners and the environment. Atkinson (2010) further discusses the alignment of "mindbodyworld" in the learning process, viewing alignment as the engine of interaction. Namely, there is an interactive, collaborative learning process among language learning, the mind, the body, and the world (i.e., social and natural environments). Hence, facilitative classroom learning contexts can promote significant interaction and alignment in the EFL learning process.

Empirical studies on situation and alignment are rare and mainly manifested in what follows. Wang and Wang (2015) validate the different effects of aligning with two types of contextual (background) knowledge on grammatical and lexical features (but not on PMs) in writing rather than speaking. Furthermore, as reviewed above, Ament et al. (2018), Buysse (2018), and Magliacane and Howard (2019) have investigated the role of different contexts recently, i.e., instructed settings, cognitive contexts, and study-abroad contexts respectively, in the use of PMs. In Xiao et al.'s (2017) longitudinal and quantitative study, the sustainability effect of film-situated role-based interaction aligned respectively with Chinese and English-hinted tasks on the learning of spoken grammar (excluding PMs) is also found significant, with a priority of the alignment with English-hinted tasks. Nevertheless, these studies did not involve PMs' dynamic development or time series method in measuring situational alignment. In sum, to date, the existing literature lacks longitudinal and quantitative or time-series research on the dynamic

development of PM functions in alignment with situational variables such as topics, social roles, and role relationships.

Context and language are closely related. Such relatedness finds support in Eggins' (2004, 101) "formal vs. informal situations", a tripartite complex of situational variables in which formal situation correlates with unequal power, low affective involvement, and infrequent contact or vice versa. In our study, exposure to English film-situated conversations provides various situational contexts and helps students align with multidimensional representations or situational variables. Situational variables influence pragmatic development, as documented in Taguchi's (2011) research that some target language contacts and experiences facilitate pragmatic development while others counteract with the development. Bazzanella (2006) holds that the activation of PM meaning depends upon the co-occurrence of cotextual (textual, paralinguistic, and gestural) and contextual (sociolinguistic, pragmatic, and emotive) parameters. In light of the probabilistic realizational relationship between text and context in Systemic Functional Linguistics, Gruber and Muntigl (2005) observe that different coherence relations may appear more or less frequently in different generic stages across different genres. This view also gains evidence from Haupt's (2014) analysis of variables indicating an association of coherence relations with generic structure. For pedagogical concern, Gruber and Muntigl (2005, 107) draw teachers' attention to such two aspects: On the one hand, "certain situations demand the production of certain genres of text." On the other, "genres have certain internal structures." In so doing, language use in a specific situational context reflects students' ability to demonstrate such text-context mapping knowledge. The utilization of interlanguage PMs then is an essential manifestation of such knowledge in the synergetic developmental process no matter whether PMs are supposed to signal the shape and structure of talk (National Curriculum 2004) or relate to the context or achieve other functions (Brinton 1996). Therefore, we expect to corroborate interlanguage PMs' dynamic development in aligning with such situational variables as role relationships in EFL classroom learning contexts by adopting a time-series design.

In line with the contentions above, the following research questions (RQ) have been provided for guiding the present empirical study:

1. Is there a dynamic development in the longitudinal use frequencies and function types of the participants' PMs, *yeah, well*, and *you know*? If yes, how does the dynamic development manifest itself?
2. Does the alignment with situational variables, i.e., equal and unequal role relationships, have different effects on the use or learning of the PMs in EFL classroom learning contexts?

3. Are there any differences in different proficiency learners' frequencies and function types of PMs in the contextualized learning process? If yes, what do the differences mean?

4. Methodology

4.1 Design

For a dynamic description, a time-series design is desirable (Larsen-Freeman 2006; van Geert and Steenbeek 2005), which inspired the present longitudinal and quantitative study. Given Larsen-Freeman's (2006) adoption of performance variability (four times' oral and written production on the same topic tasks accomplished by five Chinese learners of English in a semester), our design focused on variable performance in a more extended time-series design (about 1.5 year). Given the lack of authenticity, e.g., the fragmentary aspect of spontaneous spoken language in the textbook (script)-bound EFL classrooms, we chose film-situated conversations as they contained a proper amount of PMs. The film-based conversations took place between social roles with un/equal role relationships in situational contexts. The two types of role relationships had four tasks, respectively (see Table 1). Learners were organized in class each time to see and listen to a short English film-situated conversation (2–3 minutes' play) first, and then role-play with the assistance of follow-up prompt content tasks[3] (turn-oriented reminders of fragmentary keywords or indirect speech descriptions) in a laboratory.

Table 1. Situational topics and types of role relationships

Times	Topics	Types of role relationships
1	Interview on employee's work	Unequal /managers and staff
2	Complaining about work	Equal / colleagues
3	Job interviews	Unequal/managers and candidates
4	Learn from the peers	Equal/ peers
5	Talking about cooperation matters	Equal /partners
6	Convening staff meetings	Unequal/managers and employees
7	Discussion of personnel dismissal	Unequal/managers and employees
8	Discussing travel matters	Equal /friends

Note: Times 1, 3, 6 & 7 = unequal role relationships, the rest =equal role relationships

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3. The sample task material may be available from the corresponding author if not attached behind.

To address the afore-reviewed inconsistent findings, we hypothesized that to align with the two different types of role relationships in situations where other variables are the same would result in different effects on interlanguage PM use and development. For this, utilizing the situation types with un/equal role relationships as independent variables was to test their effects on the dependent variable, namely, the use/learning of the PM functions via Independent Sample T-Test. Furthermore, the learner corpus data needed comparing with the pedagogic sub-corpus data from CANCODE,[4] a British spoken corpus built according to types of contexts (see Fung and Carter 2007; McCarthy 1998) in that both corpora were context-dependent. Such a measure would enhance the comparability of the two data as well as the reliability and validity of the study.

4.2   Participants

In this longitudinal study, the participants ($N = 28$), 24 females and 4 males ranging in age from 19 to 23, were from a class of 32 Business English majors in a university in China. At the beginning of data collection, they were sophomores who had a two-period class once a week for the visual-audio-oral course. Upon completion of the data collection, they were in junior year. Thanks to some learners' leave-takings and invalid recordings, the final number of participants was 28 who completed all the eight times' tasks. They all had more than 10 years of learning experience in EFL classrooms. All of them spoke standard Chinese, EFL, and a local dialect. None of them reported having stayed in English-speaking countries for more than two weeks. In order to reveal more clearly the learning process and data analysis, the 28 students were categorized into two subgroups, i.e., the higher and the lower proficiency learners, according to the median score of an intermediate comprehensive English proficiency test[5] they took shortly before the project.

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4.   CANCODE (Cambridge and Nottingham Corpus of Discourse in English) which forms part of the 1 billion word CIC (Cambridge International Corpus) is a five million-word spoken corpus developed at Nottingham University in the late 1990s, made up of recordings from a variety of settings in the countries of the United Kingdom and Ireland. Its pedagogic sub-corpus has 460,055 words in size (see Fung and Carter, 2007; McCarthy, 1998).

5.   This test consisting of grammar and vocabulary, listening, reading and writing was based on a standardized sample test for TEM 4, a national proficiency level test for English majors (for Year 2 college students) in China.

4.3   Materials and tools

The researchers chose the audiovisual materials (conversations) from films or TV series[6] for the input based on which they wrote the corresponding follow-up prompt content tasks for learners' output. The NSs' and NNSs' conversations then share the same eight different business situations in films (including one TV series). Each follow-up task (handout) provides turn-taking, prompt content information, contextual (background) knowledge/situational variables such as topic, social roles and role relationships, location and time, purpose, and language style, nearly identical to the multidimensional representations of the situational models. The eight situational topics and role relationships are presented in Table 1, with four equal role relationships and four unequal ones alternatively assigned. These equal and unequal role relationships were treated as different situational variables to examine whether the learners' alignment with the two types of role relationships would result in different productions of interlanguage PMs. The film-situated conversations and role-play tasks were utilized as tools for collecting data. They were carried out as usual practice, with both listening comprehension and speaking ability involved. Each of the eight tasks (including both film watching and follow-up role-playing or dyadic conversation) followed the same requirements or procedure as elaborated below.

4.4   Procedure

In the longitudinal learning process, the students randomly formed dyads, and were required to conduct a follow-up prompt content task after exposure to a short clip of film in the visual-audio-oral class.

Each time, the teacher firstly allowed all the students to see a film clip twice in the laboratory and explained where students had difficulties understanding. The teacher then assigned the follow-up prompt content task in A/B role electronic version separately to the dyads' mobile phones. After all the dyads' preparation for the prompt content task, one or two dyads were selected randomly to perform it at the teacher's desk. Finally, all the dyads' conversations were recorded simultaneously in the laboratory, the whole process of which lasted about five minutes.

There were twelve tasks and recordings conducted in the project. Recordings of four data collection points were excluded because of some dyads' invalid recordings or absences. Only eight data collection points' recordings were valid.

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6. The film-situated conversation each lasted 3 minutes or so, chosen from films such as Glengarry Glen Ross, The Devil Wears Prada, and a TV series, i.e., House of Cards, available from the website: www.youku.com.

Few were even re-recorded due to one or two malfunctioning laboratory recorders on student desks; some were recorded after returning from short leaves of absence. For this, these individuals' complementary recording was arranged one or two weeks later, which was supposed to decrease repetitive effect. The last two tasks were completed after the visual-audio-oral course ended.

4.5 Data collection and analysis

Each dyad completed a follow-up conversation task after seeing a film clip each time. By the end of the project, 111 copies of intact recordings were collected. Three researchers were involved in transcription and checking, given the load of data of eight data collection points and pragmatic tagging. Functional annotations were exclusively confined to the three pragmatic functions (interpersonal, structural, and cognitive) and the three selected PMs (*yeah, well, you know*) that incorporate the functions based on Fung and Carter's (2007) classification. After printing the transcription, two researchers separately annotated the functions on printed copies first according to the categories in Table 2. They marked the PM functions with abbreviations in the square bracket, e.g., [WIF] stands for 'well, interpersonal function' (see Table 2). To make the annotations more consistent and objective, they calculated the inter-rating score, for which they got 97.9%. The discrepancies were discussed and checked by a professor until a final agreement was reached. The annotated PM functions in the printed copies were then tagged in the corpus' electronic documents for the convenience of retrieving these annotated PM functions via a concordance. The tools used included Word for tagging

Table 2. PMs and their function types

Pragmatic markers	Functions		
	Interpersonal function (IF)	Structural function (SF)	Cognitive function (CF)
Yeah	[YIF] A response to indicate understanding or admission	[YSF] marking continuation of the current topic	
Well	[WIF] indicating a retaining or hesitating attitude towards a topic	[WSF] starting or ending a topic or shifting topic	[WCF] denoting the thinking process or marking hesitation
You know	[YKIF] supposing interlocutors' shared or received information		[YKCF] assessing the listener's knowledge of the discourse

and editing, Excel for calculation and figures, AntConc for corpus analysis, and SPSS for statistical analysis.

5.   Results

5.1   The overall picture of interlanguage PM development

The total words of the learner corpus are 39,409. As for the PM production, on the one hand, the results cumulatively from all the diachronic data in Table 3 show that the most frequently used marker of the students is *yeah* (0.87%), followed by *well* (0.47%), while the frequency of *you know* (0.19%) is the least among the three. Then, are the learners' PM productions overused or underused? This question necessitates comparing the NNSs' data with NSs' data as NSs' normalized PM frequencies function as a baseline, conducive to gauging the extent to which the learners' PMs were developing. Following Fung and Carter (2007), the word frequency ratio is comparable between +0.14% and −0.14%. Therefore, as indicated in Table 3, the frequencies of the first two markers are comparable to those of NSs (except *you know*).

On the other hand, as far as a single task is concerned, a calculation of the scarce PM utilizations in Task 2 (*yeah* = 0, *well* = 0.22, *you know* = 0.26) or Task 3 (*yeah* = 0.71, *well* = 0.30, *you know* = 0.02) invites a fundamental question. Namely, why can frequency percentages from a single task be so low?[7]

Table 3. Word frequencies of learner corpus（39,409w）and CANCODE educational sub corpus（460,055w）

Markers	Learners' word frequency	%	NSs' word frequency	%
Yeah	346	0.87	4,118	0.90
Well	187	0.47	1,637	0.36
You know	77	0.19	1,659	0.38

Note: The percentage is obtained via dividing the word frequency by the total words.

Concerning the dynamic development, Figure 1 shows that the three markers' respective frequencies manifest themselves in fluctuations despite their mutual differences, indicating that the development trajectories of the three PMs in the learning process are nonlinear.

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7. Cf. Fung and Carter's (2007) low results: *yeah* = 0.47, *well* = 0.01, *you know* = 0.16 (Cf. Section 6.1)
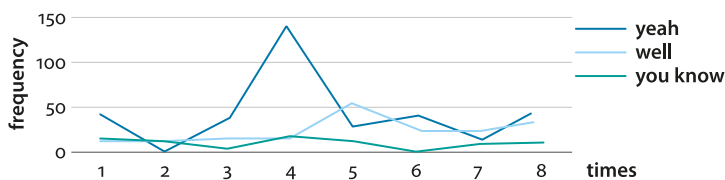
Figure 1. Diachronic changing trajectories of individual markers

Figure 2, then, indicates that all the PMs' functional frequency tends to demonstrate a fluctuating but rising trend in the longitudinal learning process. Given the fluctuation in this three-in-one trajectory, the learners' development and utilization of the PM functions may have been reshaped by or readapted to the different contexts distributed at the different data collection points in the tasks. Overall, the learners' ability to use the PM functions may have developed despite its regression and progression in the longitudinal process.
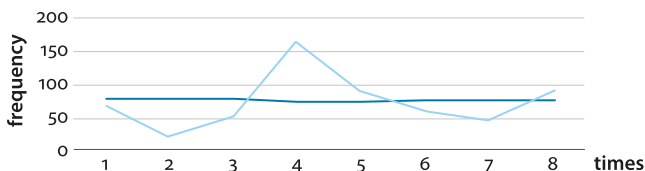

Figure 2. A diachronic changing trajectory of the three markers

In order to confirm the learners' PM progress in the learning process, we deployed the Paired Samples Test to verify whether there is any significant difference between the first time (beginning) task and the last task. Table 4 shows such a significant difference ($t = -4.032$, $p = .000$), indicating that the learners have made progress or developed their PM competence. To date, however, we still wonder whether there is any nonlinearity of the change trajectory in terms of the PMs' specific functions. Thus, it is necessary to examine such dynamic nonlinear development of specific PM functions that manifest themselves in each PM's function types.

Table 4. Paired Samples Test results of the learners' PM development

	(tasks)	Mean	SD	SEM	95% CID Lower	Upper	t	df	p (2-tailed)
Pair	1–8	−.785	1.031	.194	−1.185	−.385	−4.032	27	.000

5.2   Dynamic changes and development of interlanguage PM functions

Regarding RQ 1, our results indicate the dynamic changes and development not only in the above overall data but also in the ones of the individual PMs below. We deployed figures to uncover such a conundrum relating to each PM's multi-functions in that figures are visually apparent and highlight each PM's trajectories of functions.

5.2.1   *The frequencies and functions of 'yeah'*

Figure 3 shows that the interpersonal and the structural functions of *yeah* have the highest frequencies in the fourth and sixth tasks, respectively, with little fluctuation in the other tasks. Overall, the interpersonal function frequency of y*eah* is characterized by a high middle and low sides, while the structural function is less frequently deployed and has little fluctuation. It is worth noting that the students did not use any *yeah* in the second task.
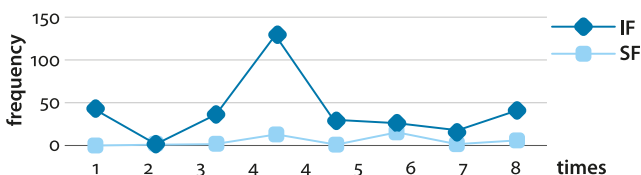

Figure 3. Dynamic development of yeah

5.2.2   *The frequencies and functions of 'well'*

Figure 4 reveals that the frequencies and functions of *well* changed dramatically with a relatively broad fluctuation range in the learning aligned with different movie situations. Understandably, the lowest frequencies of both interpersonal and cognitive functions of *well* emerged in Task 1 at the beginning. However, the frequency of the cognitive function of *well* peaked in Task 5, and so did the other two, indicating the relation of a particular function of the marker to a specific context. The frequencies of all the three function types remained the second in the last task. The fluctuation of the interpersonal function of *well* was not enormous but relatively stable, indicating that the learners deployed this function more frequently than the other two. Conversely, the cognitive and structural functions had larger fluctuations throughout the whole learning process. In sum, the frequency of each function of *well* has fluctuation, but the trend of the learning trajectory ascends.
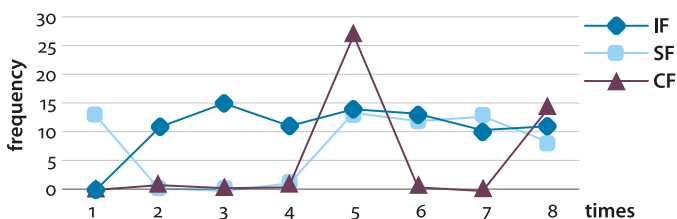
Figure 4. Dynamic development of well

5.2.3   *The frequencies and functions of 'you know'*

Figure 5 shows that the use frequencies of the different functions of *you know* were continually fluctuating with the movie situation changed in each task. In a situational alignment, generally, the students only utilized a single function rather than two functions of the pragmatic marker in the same situation. As a result, the two functions manifested themselves in considerable fluctuations in the learning process. Overall, the frequency and functions of *you know* rise alternatively and are inferior to those of the other two PMs.
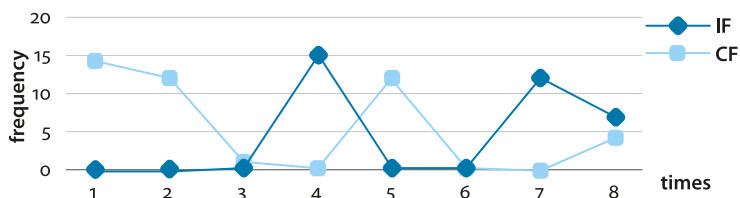

Figure 5. Dynamic development of you know

In sum, the PMs manifest themselves in more interpersonal functions (IF) than other functions (especially in the first four times). Longitudinally, one point to note is that the first half-learning process' interpersonal function frequency gradually decreases in the second half, whereas the structural and cognitive functions gradually increase. This, however, differs from the case of *you know*.

5.3   The influence of types of role relationships on the learning of interlanguage PMs

Regarding RQ 2, our results indicate that the mean of the unequal role relationship is 8.321 ($SD = 2.789$) and the mean of the equal role relationship is 13.464 ($SD = 3.553$), which means that the latter had more effect on the learners' production of PMs than the former. Table 5 then shows that the PM learning in alignment with the two role relationships demonstrates a significant difference

($t=-6.024$, $p=.000$), indicating that the situations with equal role relationships are more facilitative for the production and alignment of the PMs. Thus, equal role relationships promote more effectively the learning of PMs in EFL learning contexts.

Table 5. Independent samples t-test for the effect of un/equal role relationships

	M	SD	df	t	p	MD	SED	95% CID lower	upper
Un/equal role relationships	8.321/ 3.464	2.789/ 3.553	51.118	−6.024	.000	−5.142	.853	−6.856	−3.428

5.4   Differences between the subgroups in the use of interlanguage PMs

Regarding RQ 3, our results show that there are significant differences between the two subgroups in the functional frequencies of the PMs in the last and the sixth tasks ($F=29.885$, $p=.000$; $F=5.200$, $p=.031$), whereas there are no significant differences in the rest of the tasks (Table 6). A tendency of increasing differences can be observed in the longitudinal development despite some fluctuations in Tasks 2 and 7. This finding indicates that the higher proficiency learners performed and developed better than the lower proficiency learners did in the PM functions' use and learning. Hence, this also demonstrates the existence of dynamic development in the longitudinal process as there reappears even no significant difference in the seventh task data between Tasks 6 and 8.

Table 6. Differences between the subgroups by One Way ANOVA

Nos.	Subgroups	Sum of Squares	df	Mean Square	F	p
1	Between Groups	.143	1	.143	.553	.464
2	Between Groups	.143	1	.143	.174	.680
3	Between Groups	.321	1	.321	.709	.407
4	Between Groups	1.750	1	1.750	.720	.404
5	Between Groups	.571	1	.571	.832	.370
6	Between Groups	1.286	1	1.286	5.200	.031
7	Between Groups	.000	1	.000	.000	1.000
8	Between Groups	14.286	1	14.286	29.885	.000

As far as the one-way ANOVA statistical results are concerned, we have not discerned how the statistical differences manifested themselves in the development of PM function types between the subgroups. Therefore, to uncover the dif-

ferences between the subgroups in the development of PM function types, we then turn to deploy a figure that can visually present a diachronic development.

Figure 6 indicates the dynamic development of PM function types and the effect of aligning with contexts. The higher proficiency learners outperformed the lower proficiency learners in the PM function types, especially in the later periods, indicating that the former acquired or expanded PM function types earlier than the latter in the development process of interlanguage PMs.
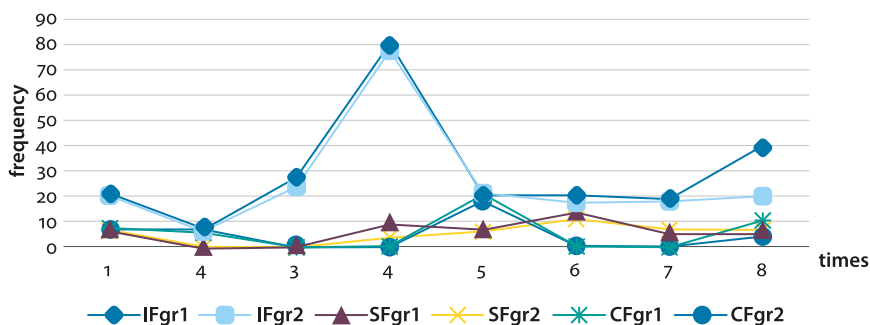

Figure 6. Development of function types of the low and high proficiency subgroups

6. Discussion

6.1 The dynamic development in the frequencies and functions of interlanguage PMs

Regarding RQ 1, our results indicate that the learners' frequencies and functions of the PMs developed dynamically in contextualized learning. Such dynamic development manifests itself in what follows. Respecting the single tasks, relatively low are the frequencies of the three PMs in Tasks 1 and 2, which are even lower (while the ones in Tasks 4, 5, and 8 can be higher) than those in the cross-sectional or immediate effect studies, as indicated and reviewed in the previous sections (cf. Fung and Carter 2007; Ament et al. 2018). Indeed, such results collected at a single time point from learners' interlanguage can be far lower or higher than the normalized ones of the adult NSs in CANCODE educational subcorpus. The point is that there emerges a problem of unreliability in comparing a-single-time-point-collected NNSs' data with NSs' data. Although the latter were also collected at a single time point (not longitudinal data), the NSs' language is a fully-fledged mother language of adults, relatively stable and grounded upon large collections of texts and contexts. Conversely, NNSs' interlanguage is a developing language that is dynamic and context-dependent, as Larsen-Freeman

(2017a) states. Thus, cross-sectional or immediate effect analysis cannot reveal L2 dynamic development, and the data of this type can be contingent and unreliable due to PMs' task/text-specific nature.

Moreover, the unreliability also lies in the fact that different contexts shape different PMs' utilizations. Given this factor, had the results or frequencies been from a single conversation in a single context, the findings of cross-sectional or immediate effect analyses in the literature would have been contingent and unreliable. Therefore, from a time series perspective, the total frequency percentages of the PMs (*yeah, well*) in our study that are closer and comparable to the use frequencies of NSs (except *you know*) are comparatively more convincing based on data collected from many texts and contexts. This finding also reflects the dynamic development of the EFL learners' PMs demonstrated through rise and fall or regression and progression.

Longitudinally, reasons for the dynamic changes and fluctuation may be variegated but are strongly related to two aspects. On the one hand, it is evident that the peak value in Figure 2 does not appear at the end of the trajectory but in the middle (i.e., the fourth time), and the valley value is not in the first but in the second time. Thus, a rational explanation for this is that the co-occurrence of both cotextually and contextually relevant variables causes the disparities in PM meaning production. Task 2 illustrates that, apart from the severe topic, i.e., complaining about work (cf. Task 4 has a light topic and a close/equal role relationship suitable for the use of the interpersonal function of *yeah)*, the other factor that constrained the PM use is the setting. The driver was driving while complaining about his work, whereas his colleague, realizing the driving and raining situation, listened most of the time with little eye contact and occasionally gave rapid responses to achieve conversation continuity. Such situational context may reduce the number of turn-takings and the turn-initial markers or require corresponding conversation exchanges, which supports Gruber and Muntigl's (2005) view on the relation of situations to generic structures.

Likewise, the low frequencies of the PMs in the third and seventh times can result from the formal situations that correlate unequal power, low affective involvement, and infrequent contact (Eggins 2004). In other words, such situational variables may confine the utilization of certain PM functions, e.g., interpersonal functions. A glance back at the original film clips verified the finding in that NSs in these film conversations employed fewer PMs, either. In contrast with the PM frequencies in the fourth time and others, our findings have corroborated the afore-reviewed important argument (see also Taguchi 2011) that situational variables influence pragmatic development. Probably, the learners with their shared attention to the multidimensional representations, including the non/linguistic representations in the multimodal settings, are prone to approaching or aligning

with NSs' shared cognition, the norm of PM functions, in their shared contextualized activities. In line with Bazzanella (2006), such contextualized activities, involving the co-occurrence of cotextual and contextual parameters, can activate the PMs' meanings and promote their alignment with text and contexts. Thus, our time series analysis provides evidence for the general view (Atkinson 2010; Atkinson et al. 2007; Pickering and Garrod 2004) on the incidence of alignment with situational context on learning.

On the other hand, the learners' PM competence in the trajectory is on the rise, especially in the development of PM multifunctionality. In other words, in the first four tasks, the students mostly deployed the interpersonal function of the PM, *yeah*. After practices aligned with different situational contexts, the structural function type of *yeah* emerged out of the contextual affordances. As for the multi-functions of *well*, its structural and interpersonal functions developed better than the cognitive function. In the case of *you know*, its functions' frequencies are different in that its cognitive function developed earlier than (and outperformed) its interpersonal function. The PMs differ from one another as they have different frequencies in use and different relations to utterances or context. Specifically, in the dynamic developmental process of Interlanguage PMs, the dominating frequency of the interpersonal function of *yeah* may be gradually leveled off by the use frequencies of the other function and functions of other PMs in the subsequent tasks. Despite some inconsistent findings by Ament et al. (2018) that NNS learners tend to use more structural or textual PMs and fewer interpersonal PMs than NSs, our findings show that the interpersonal functions of *yeah* and *well* except *you know* have more frequencies than other functions. However, what counts is that there is no comparability between as their results are subject to written L2 data with different PMs and contexts, especially their cross-sectional and immediate effect study method. Data collected at a time point within a specific context can be static and contingent, as mentioned above, and cannot reflect the dynamic development of interlanguage PM functions.

In sum, the interlanguage PM functions' adjustments or changes are also part of dynamic development, as can be seen obviously in Figure 6. Such dynamic changes and development manifest themselves not only in the mapping of situations with conversational structures via different PM functions but also in the meaning-making resulting from the multidimensional simultaneity of language creation in context. Namely, PMs correlate larger situational and conversational patterns or structures; on the other hand, PMs per se are relatively dynamic in terms of their incompatible multi-functions or diachronic and synchronic meanings, emerging from the dynamic of timescales in context (Kramsch and Whiteside 2008), which may better explain the conflicting complex classifications

of PM functions in the literature. Thus, our findings support Larsen-freeman's (1997, 2006) view on CT or dynamic development in EFL learning.

6.2   Influence of types of role relationships on the use of interlanguage PMs

Regarding RQ 2, our results indicate that the types of role relationships had effects on the employment of the PMs. Based on this study's design, the interlocutors of the equal role relationships in Tasks 2, 4, 5, and 8 used the PMs more frequently than those of unequal role relationships in Tasks 1, 3, 6, and 7. The reason for this may be that the language used in the equal relationship is more casual and intimate, and opinions are expressed more directly, which invokes more choices of the functions of the PMs, in particular, interpersonal functions. This finding is consistent with that of Eggins (2004) that informal situations correlate equal power, high emotional involvement, and frequent contact in natural conversations, or vice versa. Such interpersonal interactions require learners' collaborative or synergetic learning in alignment with the film-situated role-plays. The alignment theory holds that there is a synergetic influence on learning among the mind, body, and the world (Atkinson 2010). In enacting the equal role relationships, the dyadic role-playing depends upon reciprocal conversations realized by question and answer and high affective involvement manifested chiefly by PMs' interpersonal functions and/or facial expressions. One may obtain assistance from the other when confronted with difficulties in sustaining their ongoing conversation. Moreover, the dyads should be willing to cooperate in playing the roles. Should one be unwilling to be friendly to 'a good friend' in a role-play situation, the other will find it hard to act or speak intimately via the PMs' interpersonal functions.

Given the different effects of different types of role relationships on the students' language expression, the diversity of situation, particularly affective involvement, is ecologically crucial to the PMs' learning and development in EFL classroom environments. Nevertheless, this is something neglected in the literature. Owing to the different results caused by the differences in role relationships and sampling, cross-sectional design, case tracking research and even pre-and-post-test studies without a control group or delayed post-test may have their respective limitations betraying the role of contexts and the dynamic development. The reason is that a single test based on a single text/context at a specific point of time generates utilization of text /context-specific PMs and functions. Such utilizations or frequencies of PMs and functions are locally situated within a single text, which cannot reflect PMs' complex system (norm of PMs in use) or the dynamic changes and development of Interlanguage PMs. Our time series study reveals the

interlanguage PMs' dynamic development and dependence upon or relevance to the context through alignments with the two types of role relationships.

Despite EFL learners' difficulty reaching NSs' breadth and depth of markers (Fung and Carter 2007), our learners' PMs, i.e., *yeah* and *well*, except *you know*, are comparable to NSs'. Among them, the learners used *well* slightly more frequently than NSs (cf. Table 3). Such results undoubtedly owe to the two types of role relationships as equal role relationships in the four situational contexts have been proven to facilitate PM production. In this sense, a task design for data collection is supposed to have balanced roles of un/equal relationships. To sum up, the alignment with the movie business situations with different role relationships and turn-taking scaffolding in the follow-up prompt content tasks is facilitative for matching the PMs' different functions with their corresponding contexts in conversations. This finding supports the general view on PMs' central function as expressing the relation of an utterance to the preceding utterance or to the context (Brinton 1996).

6.3 Subgroups' differences in the frequencies and functions of interlanguage PMs

Regarding RQ 3, our results show that the higher proficiency learners are superior to the lower proficiency learners concerning the frequency and function types of the PMs. In the film-situated alignment, the learners showed their ability to interact interpersonally and align with the film-based texts and contexts. The dyadic alignment in PMs emerged between the higher and the lower proficiency learners. It is evident that during dyadic interactions, the learners may repeat each other's PMs as delineated in the alignment theory; especially, the lower proficiency learners may imitate the higher proficiency learners' PMs used in their dyadic role-plays as the dyads were not fixed but randomly paired. Longitudinally, however, both subgroups have improved their PM competence. Such improvements occurred in accomplishing the turn-oriented tasks aligned with the NSs' film-situated language, especially PMs. Hence, our findings support Pickering and Garrod's (2004) view that the situation models correlate with linguistic representations.

The main explanation for the difference between the subgroups is that the higher proficiency learners manifested their more vital learning ability in cognitive processing in alignment with the situations, especially the relationship between PM functions and coherence or organization in discourse. Therefore, they utilized more PMs and function types by the end of data collection. This finding is consistent with that of Ament et al. (2018). Their cross-sectional study results show a significant increase in the overall frequency and variety of types

of PMs used from Year 2 to Year 3. Despite the discrepancies in the population and learning contexts, their cross-sectional design-based finding and our longitudinal one corroborate each other in the sense that there exist different learning or developmental stages in the process of learning interlanguage PMs. It seems to suggest that some interlanguage PM functions may be acquired late as the learners were already in Year 3 upon the emergence of the significant differences in the later stage of the project, reaching an upper-intermediate proficiency level. The higher proficiency learners deployed more effectively the PM multi-functions in relating to context and structural priming, and their developmental process of the PMs took precedence over that of the lower proficiency learners. The latter may have difficulty organizing syntax and expressing the content to such an extent that they are less likely to master the PMs' various functions.

Furthermore, owing to the increasing differences in the PM functions' use frequencies between the two subgroups, a change emerged from quantity to quality, i.e., the significant differences in the last tasks. This finding also verifies that the learners' pragmatic competence of PMs had a dynamic development in the use frequencies of PMs or the categories of PM function types. Such dynamic development mainly resulted from the learners' learning abilities, especially listening and speaking competencies. Indeed, the lower proficiency learners' listening difficulty in understanding the film conversations may lead to their difficulties in speaking, including the use of PMs and recognition of PM functions, in that listening and speaking naturally relate to and align with each other. Holistically, the significant difference reflects the process of the dynamic development of pragmatic competence and the dynamic changes of different proficiency learners' PMs, though the subgroups came from the same population or the same class. This result then verifies the view (see Larsen-Freeman 1997) that individual differences exist in the dynamic development of L2 learning competence.

7. Conclusion

In compliance with the theories of alignment and CT, this study has tracked and investigated interlanguage PMs' development and learning in alignment with the two types of film-situated role-relationships in EFL classroom learning contexts. As indicated in the results and discussion guided by the research questions, there is a dynamic development, which is not a linear increase but a fluctuation or even stagnation or regression. Longitudinally, the overall learning ability of multifunctional PMs is on the rise. Simultaneously, a leveling effect occurs between the interpersonal function of the most frequent marker, *yeah*, and the functions of the less frequent PMs, *well* and *you know* (cf. NSs' frequency in Table 3). Namely, the

learners have expanded their utilizations of the function types in the later stage while in the early stage they were mainly confined to the employment of the most frequent PM, *yeah*. It is true that the dynamic development changes with time, PMs, and learner differences that can be seen in the higher proficiency learners' precedence over the lower proficiency learners. While such intergroup differences highlight the existence of different learning stages of interlanguage PMs, the types of role relationships influence and are aligned with language use, in particular, pragmatic development in film-situated classroom learning contexts. The alignment with un/equal role relationships causes the fluctuation of PMs' use and promotes the learners' PM development in the quasi-contexts. Thus, dynamic development also changes with the variation of situational contexts.

The findings above have filled the lacuna and even provided solutions to the issue in the existing literature by adopting a more scientifically grounded new method, i.e., variable performance measured in time series design, to unfold the interlanguage PMs' dynamic development and context-dependence. To be specific, the study has clarified the complex situation of inconsistent and confusing findings on interlanguage PMs in the literature and verified the investigation of interlanguage PMs' dynamic development via a time-series study (rather than a cross-sectional or immediate effect one) and in alignment with a variety of contexts. Since interlanguage PMs' development is dynamic and nonlinear, influenced by different texts and contexts, the cross-sectional or immediate effect study results are undoubtedly contingent and unreliable. Evidently, it is of paramount importance to match interlanguage PMs with various linguistic and nonlinguistic contexts in the developmental process. There is a potential matching relationship between types of PM functions and types of contexts, such as in/formal ones with different types of social roles and role relationships. This matching is dynamic as PM meaning emerges from the multidimensional simultaneity of language creation in context. Therefore, the present study has corroborated Larsen-Freeman's (1997, 2017a) view that the development of language learning ability is context-dependent and dynamic.

Based on the paper's findings and given the lack of authenticity (e.g., fragmentary utterances and PM use) in EFL classroom settings, some main pedagogical implications are as follows. EFL teaching may take advantage of the findings by providing learners with various English film-based situations and well-designed multimodal tasks and affordances such as turn-taking with fragmentary hints and un/equal role relationships. The alignment of PMs or other pragmatic features with diversified situational variables, particularly roles and role relationships, promotes EFL pragmatic learning or development in that different contexts shape different deployments of PMs, as verified in our study. Such cotextual (textual, paralinguistic, and gestural) and contextual (sociolinguistic, pragmatic, and emo-

tive) variables or representations can be aligned dynamically in film-situated role-based interactions to develop EFL learners' cognitive, social/interpersonal, and linguistic/structural competencies. PM-rich film-situated interactions between social roles assure eco-contextualized rather than decontextualized inputs in the EFL classroom that can activate students' contextual knowledge and fill their cognitive lacuna with new social/linguistic knowledge via intertextual (between learners' and NSs' texts) comparisons and alignment. Thus, teachers are supposed to provide such scaffolding affordances to help learners map contexts with pragmatic functions and learn how to deploy social roles' speech by role-playing locally in a given specific text/context and cumulatively over many texts/contexts. EFL learners who do not approach NSs' baseline or are singular PM-dominated should adapt or align themselves to such learning contexts.

Another implication is that the present study has found a new way to provide affordances for intertextual and intercontextual analysis and alignment in EFL classrooms by designing film-situated information prompt tasks carried out through role-based interaction. This way of learning or processing is a robust mechanism conducive to avoiding traditional textbook/script-bound rote learning of conversations and establishing an interactional practice community for interlanguage PM development. Only when learners expose themselves continually to the eco-contextualized co-occurrence of cotextual and contextual parameters and struggle to negotiate via turn-oriented fragmentary prompt tasks the relations of PM functions to the utterances in discourse or to the various situational contexts can they develop their pragmatic competencies.

Indeed, this study has limitations, too. One is that results from film-based quasi-contexts may be less convincing than those from naturalistic environments though aligning with them helps achieve our purpose for investigating the learning and development of EFL learners' PMs. The other is that due to the data collections and coding at so many time points, this study should have found a better way for annotation and transcription to enrich PMs' diversity. The confinement to the three markers may affect the scope of research and application. Future research may find solutions to these issues.

Funding

Acknowledgements

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Appendix

(A sample for follow-up prompt content task)
    Title: Discussion about personnel dismissal (in House of Cards)

I.   Situational variables:
1.   Participants: Role A is Claire; Role B is Evelyn, an office clerk.
2.   Relationships: A is the supervisor of B
3.   Time: Office time
4.   Places: In Claire's office/ Evelyn's office
5.   Topic: Whether it is right to downsize the staffs.
6.   Instrumentality: Face to face
7.   Purpose: Role A asks Role B to give the name list for downsizing the staffs because too much money has been spent in paying staffs salaries; Role B thinks that they should not lay off those staffs who have worked for them for a long time and it will bring much trouble to them. Role B is trying to persuade Role A.
8.   In/formality: formal

II.   Attention: Layoff is an important event in workplace. Laying off is not an easy thing. You, as a decapitator, may be hesitant and torturous. The language in discussing layoff is relatively formal, and you need to pay attention to different attitudes towards layoff.

III. Turn-oriented conversation

Role A

A1:   (you start to talk to B) you have to find money to fill in for this donation.
A2:   You have looked over the budget for 13 times and found that you have spent 1.6 million for salary, a large number, and need to cut down half.
A3:   Going to let some people go.
A4:   Explain the reason why.
A5:   a charity, but not for your employees.
A6:   reason: in trouble, time to make some changes.
A7:   Tell B the plan has been proposed to the Board and to be carried out; Ask B to make a list of names.
A8:   Tell B you have made many serious considerations.
A9:   (interrupt) Remind B what her position is and you try to persuade B to trust you and request B to give the list. Then ask B whether it will lead to legal issues.
A10: advise: getting started first thing Friday, and hope: all of the exit interviews done by lunch.
A11: Emphasize that you've discussed this already.
A12: (arguing against B) not easy, but necessary.
A13: (in firm tone) You respect B's opinion, but you're not going to change your plan. Reminding B the deadline again.

Role B

B1:   shocked.
B2:   You say A has suggested…

B3:   Some people, or half of your staff.
B4:   Those people have been with you since the beginning.
B5:   You cannot understand why your charity has to do something you are totally unfamiliar with.
B6:   You do not know anything about digging wells.
B7:   Persuade A to think about the problem.
B8:   You try to let A consider the payoff again.
B9:   No legal issues because of the at-will employment contracts.
B10:   a mistake, in your opinion.
B11:   With your conscience, you blame Claire for –.
B12:   You totally disagree with Claire's decision and try to persuade her to stop it.
B13:   You have to comply with Claire's order.