Does "Experience" Bring about Any Significant Difference in EFL Teacher Talk?

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Abstract

The rationale for the present study is based on the fact that understanding the teaching process and the development of teachers is incomplete unless the teachers' classroom behavior, especially their talk, is objectively explored. To this end, four male teachers offering English as a foreign language (EFL) were recruited and divided into two groups, namely inexperienced and experienced. To secure the objectivity in data collection they were observed in their classes and one lesson of each teacher was audio-recorded. The audio-recordings were then fully transcribed and analyzed through micro structural approach of schema theory. The approach is based on the assumption that any word uttered by the teacher represents a specific concept commonly known as a schema. The schema enters into a hierarchical relationship with other schemata to constitute species, genera and semantic, syntactic and parasyntactic domains of language. The teachers' talks were thus parsed into their constituting schema types, species, genera and domains and certain codes were assigned to them to run statistical analyses. The findings showed that the inexperienced teachers significantly outnumbered their experienced counterparts in all schema categories and thus challenged "experience" as an effective variable in EFL teaching.

*Keywords***:** Teacher talk, schema theory, novice and experienced teachers

Introduction

Teaching English as a second language (L2) in general and as an EFL in particular has witnessed an expanding development and modernity in the last two decades. A

large number of books and articles which examine different aspects of teacher education and behavior from professional, cognitive, social, as well as contextual perspectives is presently accessible (e.g., Bartels, 2005; Borg, 2003; Burns & Richards, 2009; Johnson, 2000, 2005, 2009; Richards, 1998; Richards & Farrell, 2005; Richards & Lockhart, 1994; Tedick, 2004; Tsui, 2003; Woods, 1996). The point of all these studies has been to furnish us with a general picture of what teachers do in the classroom. As Gatbonton (1999, p. 35) stated, "it is clear that these studies have contributed greatly to the current understanding of the teaching process, its procedures and methodologies and as a result have had an impact on teacher training". However, keeping in mind the end goal to pick up a more profound understanding of the teaching process, these studies of teachers' classroom practice should be supplemented with studies of teachers' talk inside the classroom context. Since all dimensions of classroom process involve teacher talk and it assumes numerous parts in L2 classrooms, studying teacher talk has always been one of the most vital parts of classroom research (Rahmani Doqaruni, 2015). Nevertheless, despite the fact that teacher talk has been of extensive enthusiasm for understanding and attempting to develop language teaching pedagogy (e.g., Chaudron, 1988; Cullen, 1998, 2002;

Seedhouse, 2004; Thornbury, 1996; Walsh, 2002; Yanfen & Yuqin, 2010), little attention has been paid to teacher talk from a schema-based perspective.

A schema is defined as a single or phrasal word, whether uttered or written, in an authentic text which comes along with other words to be heard or read at a specific place and time (Khodadady & Seif, 2006). In line with the previous research (e.g., Khodadady & Eslami, 2013; Khodadady & Khosravany, 2014; Khodadady & Lagzian, 2013), this study analyzed teachers' talk in the classroom context by categorizing their spoken words into three linguistic domains: Semantic, syntactic, and parasyntactic. They were further broken into the subcategories of genera and species to account for their specific linguistic functions in teachers' talk (see Appendix A). The reason behind such an analysis is that "the acceptance of schema as the building block of authentic textual products provides linguists and language teachers alike with an objective measure to form their analyses and pedagogy on, respectively" (Khodadady, 2008a, p. 434).

Meanwhile it is interesting to know that most of the previous studies have approached teacher talk by using either experienced or inexperienced teachers as sole subjects. However, as Gatbonton (2008, p. 163) suggested,

Although one can gather insight from novice teachers' thinking and behavior independently of experienced teachers and vice versa, examining both sets of teachers together in the same study allows one to compare them on very specific points and identify more clearly how they differ or how they are similar to each other.

Thus, the purpose of the present study is to address the association between teachers' experience and different types of schemata they use in their talk in EFL classroom contexts. To meet this objective, the following research questions were formulated.

1. *Is there any significant difference in the number of common and distinct semantic, syntactic and parasyntactic domain types employed by inexperienced vs. experienced teachers?*

2. *Is there any significant difference in the number of common and distinct semantic, syntactic and parasyntactic genus types employed by inexperienced vs. experienced teachers?*

3. *Is there any significant difference in the number of common and distinct semantic, syntactic and parasyntactic species types employed by inexperienced vs. experienced teachers?*

Literature Review

The researchers have explored the relationship between teachers' experience and different aspects of their behavior inside the classroom context from different perspectives in the field of L2 education. Mok (1994), for example, conducted a case study with experienced and inexperienced ESL teachers to examine their real concerns and changing discernments after some time. She identified five common categories of concern such as teachers' self-concept, attitudes, teaching strategies, materials used, and expectations. She also asserted that the diverse views expressed by the inexperienced teachers on teaching suggested that they gradually moved beyond the classroom and viewed their profession in a more extensive context more quickly in contrast with the experienced teachers who progressed more slowly. Akyel's (1997) comparative investigation of experienced and novice ESL teachers demonstrated that experienced teachers managed a more extensive scope of instructional options in response to their students in contrast with novice teachers who translated learner responses as deficiencies. In addition, it was found that inexperienced teachers favored the flow of instructional activities but were worried about the suitability of their instructional strategies. The findings were in accordance with the past literature as the research in L2 teacher education had suggested that less experienced teachers were worried about classroom administration and keeping up the flow of instructional rou-

tines (Johnson, 1992; Numrich, 1996). Richards et al. (1998) were interested in how novice and experienced teachers plan the same reading lesson. They found that novice teachers were not able to see the advantages of using a story as a part of a reading lesson because of their restricted comprehension of the nature of L2 reading.

Tsui's (2003) study of four ESL teachers with various levels of experience and expertise showed that novice and experts are qualitatively distinguished on numerous critical viewpoints such as planning and decision-making processes. In light of this finding, she proposed that one can form hypotheses about inadequacies in the novice teachers' pedagogical knowledge by recognizing what parts of pedagogical knowledge are lacking in the novice teachers' repertoire however existent in their experienced counterparts. This in turn may lead to revising teacher training programs to fill the gaps. Mackey et al. (2004) claimed that teachers' use of incidental focus on form techniques is affected by teachers' experience to a substantial degree as experienced ESL teachers make use of more incidental focus on form techniques than novice teachers.

Gatbonton (2008) examined the categories of pedagogical knowledge of novice ESL teachers and compared these categories to those found for experienced teachers in her earlier study (Gatbonton, 1999). The results of her study showed that the pedagogical knowledge of novice teachers were comparable to that of experienced teachers regarding major categories such as language management, procedural issues, and handling student reactions and attitudes but not in terms of details within these categories. She then claimed that the fact that the novice teachers were similar to the experienced teachers may suggest that they had already been in the process of acquiring many skills expected of experienced teachers. Pouriran and Mukundan (2012) reported the findings of an empirical study that examined whether EFL teachers' use of incidental focus on form techniques was affected by their level of experience. They found that experienced teachers were different from less experienced teachers in terms of type and frequency of corrective feedback types they used in their classes. Moreover, the results revealed that experienced teachers used incidental focus on form techniques more frequently than novice teachers which has previously been reported in the literature (e.g., Mackey et al., 2004).

As the literature reviewed within the context of L2 shows, despite the fact that teaching experience has been regarded by applied linguists as an important variable in language teaching, no study, to the best of our knowledge, has ever tried to explore the relationship between teachers' experience

and their talk in classrooms from an empirical perspective. By resorting to the micro-structural approach of schema theory (MICAST) the present study was therefore conducted to fill the gap and find out whether experienced and novice teachers differ significantly from each other in the schemata they employ to teach EFL to their learners.

Methods

Participants

The participants were four EFL teachers who were teaching general English courses in two private language institutes in Babolsar, northern Iran. All teachers were male and their ages ranged from 23 to 47. The literature in L2 teacher education has revealed that experienced teachers are those with many years of teaching behind them, with many interpreted in various studies as at least four to five years (e.g., Gatbonton, 1999; Tsui, 2003, 2005). Novice teachers are those who are still undergoing training, who have just completed their training, or who have just commenced teaching and still have very little (e.g., less than three years) experience behind them. In accordance with the previous literature, the participants' teaching experience in this study varied from less than 3 to more than 15 years; two of the teachers with less than three years of pedagogical practice were labeled as less experienced and the other two teachers with more than fifteen years of pedagogical practice were viewed experienced. All four teachers had completed their B.A degree in English language and gone through Teacher Training Courses in the institutes in which they were teaching. All the participants consented to taking part in the study.

Data Collection

To collect the required data for this study, one of the researchers observed the classrooms as a non-participant and made audio-recordings from one lesson of each teacher. One class at pre-intermediate level was selected from each teacher. Each class had between 10 to 15 students who were between 14 and 20 in age. A tape-recorder was used for making the audio-recordings of the whole class. An MP3 Player/Recorder was also placed near the teacher in each class both to record whole-class interaction and to capture teacher's voice more clearly. Using the above-mentioned method, seven hours of naturally occurring data was obtained from the four teachers participating in this study. The audio-recordings were then fully transcribed and analyzed quantitatively and qualitatively.

Theoretical Foundation

This study employs the MICAST to explore the experienced and inexperienced teachers' talk. It provides researchers with a more precise tool for the analysis of dis-

course than other approaches. The MICAST treats single and phrasal words constituting authentic texts as schemata (Khodadady, 1997) and assigns them into three main domains: semantic, syntactic and parasyntactic. Each domain is hierarchically formed by its genera, which are in turn composed of species and types. The semantic domain, for example, consists of four genera, i.e., adjectives, adverbs, nouns, and verbs, which are open in type. Similarly, each genus contains specific species. The genus of nouns is, for example, subsumed under adjectival, complex, compound, conversion, derivational, gerund, nominal, and simple noun species. And finally each species comprises schema types such as "age", "belt" and "box", to name a few. The syntactic domain which is closed in nature includes conjunctions, determiners, prepositions, pronouns and syntactic verbs. As the last linguistic category, parasyntactic domain consists of abbreviation, interjection, name, numeral, para-adverb, particle and symbol genera. (Appendix A provides the schema species and genera semantic, syntactic and parasyntactic domains employed by teachers.)

Procedure

After transcribing the audio-recordings of the teachers' talk, their talk was broken into single word and phrasal schemata. Following Khodadady (1997, 2008a), the parsed schemata were assigned to three domains, i.e., semantic, syntactic and parasyntatic. The genera and species of these domains (see Appendix A) were then specified and codified in Microsoft Office Excel.

Data Analysis

In order to find out whether experienced and novice teachers differ from each other significantly in terms of the schema tokens and types they use in their talk, Chi-Square test was employed. SPSS software was used to run the statistical analyses. In addition, the data were analyzed qualitatively to find out why they differed in their talk.

Findings

General Patterns

Table 1 presents the domain tokens and types by teachers cross-tabulation. As can be seen, experienced teachers have used 5795 semantic, syntactic and parasyntactic schema tokens. This number, however, rises to 6378 for their inexperienced counterparts. As it can also be seen, the schema types employed by inexperienced teachers (985) are almost 10% more than those of experienced teachers (811). The difference becomes more obvious when semantic schema types are taken into consideration. The experienced teachers, for example, have used 93 different adjec-

tives among which "good" has a token of 24. Their inexperienced counterparts have, nonetheless, employed more adjectives, i.e., 108, but in less frequency. For example, they have used "good" 19 times.

Table 1
Domain Tokens and Types by Teachers Cross-Tabulation

Schema domains	Tokens			Types		
	Experienced	Inexperienced	Total	Experienced	Inexperienced	Total
Semantic	2127	2444	4571	538	687	1225
Syntactic	2600	2750	5350	110	127	237
Parasyntactic	1068	1184	2252	163	171	334
Total	5795	6378	12173	811	985	1796

Table 2 shows the number of schema domain types used by experienced teachers and their inexperienced counterparts. In order to take into account schema types common to both experienced and inexperienced teachers and explore the significance of their difference, a third category was added to the analysis, i.e., common, as shown in Table 2. The overall pattern which emerges from Table 2 is that the inexperienced teachers have outnumbered their experienced counterparts in all domain types. However, as can be seen, most of the distinct domain schema types employed by inexperienced (n=471, 77.2%) and experienced (n=320, 73.7%) teachers are semantic in nature. Parasyntactic domain schema types come in the second place. The fewest schema types employed by teachers are syntactic in domain.

The data presented in Table 2 above also reveal that most of the schema types shared by both experienced and inexperienced teachers are semantic (n=216, 57.6%), highlighting their superiority over their syntactic and parasyntactic counterparts in teachers' talk. The Pearson Chi-Square p-value shows that inexperienced teachers have used significantly more semantic, syntactic and parasyntactic domain types than experienced teachers have (x^2=1.522, df=4, p<.05). Answering the first research question, there is a significant difference in the number of semantic, syntactic and parasyntactic domain types employed by inexperienced and experienced teachers.

Table 2
Experienced/Inexperienced vs. Domain Type Cross-Tabulation

			Experience			Total
			Experienced	Inexperienced	Common	
Domain	Semantic	Count	320	471	216	1007
		% within Domain	31.8%	46.8%	21.4%	100.0%
		% within Experience	73.7%	77.2%	57.6%	71.0%
	Syntactic	Count	13	30	97	140
		% within Domain	9.3%	21.4%	69.3%	100.0%
		% within Experience	3.0%	4.9%	25.9%	9.9%
	Parasyntactic	Count	101	109	62	272
		% within Domain	37.1%	40.1%	22.8%	100.0%
		% within Experience	23.3%	17.9%	16.5%	19.2%
Total		Count	434	610	375	1419
		% within Domain	30.6%	43.0%	26.4%	100.0%
		% within Experience	100.0%	100.0%	100.0%	100.0%

Genus

Table 3 presents the schema genus types by teachers cross-tabulation. As can be seen, the three most frequent exclusive schema genus types are semantic in nature, i.e., nouns (n=384), verbs (n=250) and adjectives (n=135), respectively. The same pattern appears for common schema genus types, i.e., nouns (n=94), verbs (n=83) and adjectives (n=33). The names genus of parasyntactic domain come next in terms of exclusive schema types for both experienced (n=55) and inexperienced (n=54) teachers. Similar to the domain types, the Pearson Chi-Square p-value shows that inexperienced teachers have used significantly more semantic, syntactic and parasyntactic genus types than experienced teachers have (x^2=2.261, df=30, p<.05). Answering the second research question, there is a significant difference in the number of semantic, syntactic and parasyntactic genus types employed by inexperienced and experienced teachers.

Species

The number of semantic, syntactic and parasyntactic species types used by experienced and inexperienced teachers are given in Appendix A (due to its length). As can be seen, the two most frequent exclusive species types are semantic in nature, i.e., simple nouns (n=288) and simple verbs (n=88). The third most frequent schema species type is parasyntactic in domain, i.e., names (n=86). The simple adjectives (n=82) take the fourth place in the species types. Similar to the domain and genus types, the Pearson Chi-Square p-value shows that inexperienced teachers have used significantly more semantic, syntactic and parasyntactic species types than experienced teachers have (x^2=3.993, df=170, p<.05). Answering the third research question, there is a significant difference in the number of semantic, syntactic and parasyntactic species types employed by inexperienced and experienced teachers.

Table 3

Experienced/Inexperienced vs. Genus Cross-Tabulation

			Experience			Total
			Experienced	Inexperienced	Common	
Genus	Adjectives	Count	60	75	33	168
		% within Genus	35.7%	44.6%	19.6%	100.0%
		% within Experience	13.8%	12.3%	8.8%	11.8%
	Adverbs	Count	10	12	6	28
		% within Genus	35.7%	42.9%	21.4%	100.0%
		% within Experience	2.3%	2.0%	1.6%	2.0%
	Nouns	Count	162	222	94	478
		% within Genus	33.9%	46.4%	19.7%	100%
		% within experience	37.3%	36.4%	25.1%	33.7%
	Verbs	Count	88	162	83	333
		% within Genus	26.4%	48.6%	24.9%	100.0%
		% within Experience	20.3%	26.6%	22.1%	23.5%
	Conjunctions	Count	0	4	6	10
		% within Genus	0%	40.0%	60.0%	100%
		% within Experience	0%	.7%	1.6%	.7%
	Determiners	Count	1	12	25	38
		% within Genus	2.6%	31.6%	65.8%	100%
		% within Experience	.2%	2.0%	6.7%	2.7%
	Prepositions	Count	4	4	16	24
		% within Genus	16.7%	16.7%	66.7%	100%
		% within Experience	.9%	.7%	4.3%	1.7%
	Pronouns	Count	5	6	30	41
		% within Genus	12.2%	14.6%	73.2%	100%
		% within Experience	1.2%	1.0%	8.0%	2.9%
	Syntactic verbs	Count	3	4	20	27
		% within Genus	11.1%	14.8%	74.1%	100%
		% within Experience	.7%	.7%	5.3%	1.9%
	Abbreviations	Count	13	17	15	45
		% within Genus	28.9%	37.8%	33.3%	100%
		% within Experience	3.0%	2.8%	4.0%	3.2%
	Interjections	Count	9	2	9	20
		% within Genus	45.0%	10.0%	45.0%	100%
		% within Experience	2.1%	.3%	2.4%	1.4%

Table 3

Experienced/Inexperienced vs. Genus Cross-Tabulation (continued)

Names					
Names	Count	55	54	5	114
	% within Genus	48.2%	47.4%	4.4%	100%
	% within Experience	12.7%	8.9%	1.3%	8.0%
Numerals	Count	6	14	10	30
	% within Genus	20.0%	46.7%	33.3%	100%
	% within Experience	1.4%	2.3%	2.7%	2.1%
Para-adverbs	Count	12	18	23	53
	% within Genus	22.6%	34.0%	43.4%	100%
	% within Experience	2.8%	3.0%	6.1%	3.7%
Particles	Count	6	1	0	7
	% within Genus	85.7%	14.3%	0%	100%
	% within Experience	1.4%	.2%	0%	.5%
Idioms	Count	0	3	0	3
	% within Genus	.0%	100.0%	.0%	100%
	% within Experience	.0%	.5%	.0%	.2%
Total	Count	434	610	375	1419
	% within Genus	30.6%	43.0%	26.4%	100%
	% within Experience	100.0%	100.0%	100.0%	100%

Discussions

Teacher knowledge cannot well be comprehended unless it is approached from the point of view of *schema* employed by cognitive psychologists to portray how knowledge is stored in memory subjectively or macro-structurally (e.g., Rumelhart, 1980) and how it is utilized objectively or micro-structurally in testing (Khodadady & Herriman, 2000), reading comprehension ability (Khodadady, 1997) and translation (Khodadady, 2008b). The results of previous studies and the present one show that approaching the schema from these two perspectives yields two different results regarding experience. Macro-structuralists believe that the schemata of both expert and novice teachers affect their specific characteristics (Tsui, 2003). For example, Livingston and Borko (1989, p. 37) state that,

...the cognitive schemata of experts typically are more elaborate, more complex, more interconnected, and more easily accessible than those of novices...Therefore, expert teachers have larger, better-integrated stores of facts, principles, and experiences to draw upon as they engage in planning, interactive teaching and reflection.

The quotation above is based on the macro-structural approach of schema theory (MACAST) whose advocates, according to Khodadady (1997), define schema in broad and

vague terms such as "elaborate", "complex", "interconnected" and "accessible" (Livingston & Borko, 1989, p. 37), to name a few. They are too subjective to be verified by empirical research. In contrast to MACAST, the MICAST defines schemata as concepts represented by the words produced by individuals such as teachers. They can be analyzed, categorized and assigned to various linguistic domains, genera, and species and thus be objectively explored not only by themselves but also in relation to variables such as teaching experience.

Following MACAST, Carter et al. (1987), for example, provided their expert, novice and postulant participants with a hypothetical scenario, "a short note left by the previous teacher, a grade book with grades and attendance recorded, student information cards containing demographic information on one side and teacher comments about the student on the other, corrected tests and homework assignments" and then asked them "to write a lesson plan for the first two days of instruction" (p. 149). The very scenario and using lesson plans for mathematics and science classes instead of the participants' class performance in EFL classes render their "nine propositions representing *qualitative* differences…among expert, novice, and postulant teachers" (p. 149; emphasis added) questionably simple because lesson plans are not the same as actual teaching.

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However, Carter et al. (1987) found that the rich and elaborate schemata of expert teachers fundamentally empower them to allocate the importance and the relevance of information to their planning and teaching. This clarifies why expert teachers can give careful consideration to information that is critical to teaching. By contrast, their novice counterparts' schemata are still in the beginning phase of decision-making. Consequently, they are less efficient in figuring out whether the information is pertinent, and they analyze substantially more information before they reach decisions. This in turn affects both their planning and teaching, and results in less efficiency on novice teachers' part (Livingston & Borko, 1989). Bereiter and Scardamalia (1993), however, attributed these characteristics of expertise identified in the literature to experience which enables experts to perform with effortless automaticity. They argue that one of the main differences between experts and novices is the experts' propensity to reinvest the resources unchained by the use of routines to deal with more advanced problems and to challenge what appears to be unproblematic and routine.

In the same way, different patterns of teacher talk between experienced and inexperienced teachers in the present study can be attributed to their cognition, however, from a different perspective. Considering teacher development as a continuum, Gatbonton (2008) believed that we could put inexperienced teachers and experienced teachers in the early and later stages of this continuum, respectively. Taking this continuum into account, it is not far from reality to contend that the thinking and classroom behavior of experienced teachers are likely to be more stable and less variable in comparison to their novice counterparts. As Gatbonton (2008, p. 162) stated, "the stability arises because they [experienced teachers] already have had ample opportunities to deal with recurring issues and, consequently, have had occasions to retain what works and eliminate what does not". This statement does not,

however, hold true within the real EFL context of the present study. This is because unlike Gatbonton who followed the MACAST and based her recurring issues on "pedagogical knowledge *inferred* from the novice teachers' reports of their thoughts" (p. 164; emphasis added), the present study has followed the MICAST and recorded what teachers do in their classes from the beginning to the end of their teaching sessions. While inferences made from teachers' thoughts might never materialize in real situations, what they teach in their classes does represent their "pedagogical knowledge" objectively.

This study is, therefore, based on the assumption that the more teachers' schemata the learners are exposed to in their EFL classes, the more likely they would use their sentential and discoursal context to internalize the teachers' schemata as their own intake. As its results show, the number of schemata the inexperienced teachers employed in their classes was significantly more than the experienced ones in linguistic semantic, syntactic and parasyntactic domains, indicating that their "pedagogical knowledge" is superior to that of experienced teachers and thus challenges the nature of "recurring issues" linguistically. Another explanation might be related to the "recency effect" of the teachers' past training. The inexperienced teachers are more likely to remember theoretical constructs and pedagogical ideas they have recently learned from their recently completed studies. This could explain their richer schema compared to the more experienced teachers who have completed their studies many years earlier.

In order to explore the linguistic richness of schemata employed by teachers, their talk was further examined using the measure of lexical variation (LV) adopted by Meara et al. (1997). LV is the type-token ratio which is used to assess the lexical richness of teacher talk. In other words, LV ratios show the diversity of words in teacher talk. The higher a ratio, the fewer repetitions there are. Its calculation is straightforward:

However, Carter et al. (1987) found that the rich and elaborate schemata of expert teachers fundamentally empower them to allocate the importance and the relevance of information to their planning and teaching. This clarifies why expert teachers can give careful consideration to information that is critical to teaching. By contrast, their novice counterparts' schemata are still in the beginning phase of decision-making. Consequently, they are less efficient in figuring out whether the information is pertinent, and they analyze substantially more information before they reach decisions. This in turn affects both their planning and teaching, and results in less efficiency on novice teachers' part (Livingston & Borko, 1989). Bereiter and Scardamalia (1993), however, attributed these characteristics of expertise identified in the literature to experience which enables experts to perform with effortless

automaticity. They argue that one of the main differences between experts and novices is the experts' propensity to reinvest the resources unchained by the use of routines to deal with more advanced problems and to challenge what appears to be unproblematic and routine.

In the same way, different patterns of teacher talk between experienced and inexperienced teachers in the present study can be attributed to their cognition, however, from a different perspective. Considering teacher development as a continuum, Gatbonton (2008) believed that we could put inexperienced teachers and experienced teachers in the early and later stages of this continuum, respectively. Taking this continuum into account, it is not far from reality to contend that the thinking and classroom behavior of experienced teachers are likely to be more stable and less variable in comparison to their novice counterparts. As Gatbonton (2008, p. 162) stated, "the stability arises because they [experienced teachers] already have had ample opportunities to deal with recurring issues and, consequently, have had occasions to retain what works and eliminate what does not". This statement does not, however, hold true within the real EFL context of the present study. This is because unlike Gatbonton who followed the MACAST and based her recurring issues on "pedagogical knowledge *inferred* from the novice teachers' reports of their thoughts" (p. 164; emphasis added), the present study has followed the MICAST and recorded what teachers do in their classes from the beginning to the end of their teaching sessions. While inferences made from teachers' thoughts might never materialize in real situations, what they teach in their classes does represent their "pedagogical knowledge" objectively.

This study is, therefore, based on the assumption that the more teachers' schemata the learners are exposed to in their EFL classes, the more likely they would use their sentential and discoursal context to internalize the teachers' schemata as their own intake. As its results show, the number of schemata the inexperienced teachers employed in their classes was significantly more than the experienced ones in linguistic semantic, syntactic and parasyntactic domains, indicating that their "pedagogical knowledge" is superior to that of experienced teachers and thus challenges the nature of "recurring issues" linguistically. Another explanation might be related to the "recency effect" of the teachers' past training. The inexperienced teachers are more likely to remember theoretical constructs and pedagogical ideas they have recently learned from their recently completed studies. This could explain their richer schema compared to the more experienced teachers who have completed their studies many years earlier.

In order to explore the linguistic richness of schemata employed by teachers, their talk was further examined using the measure of lexical variation (LV) adopted by Meara et al. (1997). LV is the type-token ratio which is used to assess the lexical richness of teacher talk. In other words, LV ratios show the diversity of words in teacher talk. The higher a ratio, the fewer repetitions there are. Its calculation is straightforward:

$$LV = no.\ of\ types\ /\ no.\ of\ tokens\ x\ 100$$

In this study, *types* were defined as all the different words in the corpus, and *tokens* as the total number of running words. *Type* was taken to include both the base form and all its derivations, despite any differences in orthography and pronunciation.

As Table 4 shows, the LV ratio of experienced and inexperienced teachers varied. Lexical variation ratios were higher for inexperienced teachers (15.44%) than their experienced counterparts (13.99%). This finding shows that the experienced teachers' classes are lexically poorer than those of their inexperienced counterparts. In other words, contrary to what Bereiter and Scardamalia (1993) claimed, inexperienced EFL teachers perform with more effortless automaticity than the experienced teachers in employing schemata in their classes.

Table 4:
Lexical Variation of Experienced/Inexperienced Teachers

	Types	Tokens	LV Ratio
Experienced Teachers	811	5795	13.99%
Inexperienced Teachers	985	6378	15.44%

The findings obtained via the MICAST are not only superior to those of MACAST objectively, but also multidimensional in analysis in that the MICAST approaches schemata both linguistically and cognitively (Khodadady & Yazdi, 2015). While the schema "older", for example, belongs to the linguistic species of comparative modifiers within the linguistic genus of adjectives comprising the linguistic semantic domain, it was juxtaposed by one of the experienced and inexperienced teachers with other words to produce a sentence representing a single concept called *cognitive* species (Khodadady & Bagheri, 2014). A comparison of the species produced by the teachers shows which one places "older" within an unambiguous species presented as input to his students:

Experienced teacher:

You said number one is the man in the middle. Yes, why you say he's number one, Saeed? How can you understand that what in the picture? I mean the person on the CD say that. We say he is number one. Do you remember any descriptions of this man older thirty?

Inexperience teacher:

I'm not talking just about the kids, old people, your parents. What do they like to talk about: Their jobs, work, their career, games, computer games, voting. These days they're talking about government, yes government politics. Mostly older people are talking about politics a lot.

It seems that EFL teachers undergo some sort of attrition over years in which teaching becomes a routine job for them and they produce species whose constituting schemata are not pedagogically presented in appropriate syntactic order such as "this man older thirty". While the experienced teacher's four species appearing before the species of which the schema "older" forms a part, provide no background knowledge for his learners to compare "this man" in terms of his age, the inexperienced teacher brings up "kids" and then moves to "old people" like the learners' "parents" leading to their comparison with "older people" whose hobby is talking about politics in Iran.

Conclusion

With a specific end goal to pick up a more profound knowledge of teacher talk, this study examined the use of schemata by EFL teachers in their talk. The rationale for this exploration is that understanding the teaching process and the development of teachers is incomplete unless the teachers' classroom behavior, especially their talk, is taken into consideration. Despite such an importance, however, there are relatively few studies that address the question of how background knowledge is developed and the ways in which experienced teachers' knowledge development differs from less experienced and novice teachers. The scarcity of such studies is partly attributed to the nature of knowledge which is tacit. Unlike performance in the classroom, teachers' knowledge is not only unobservable but also often very difficult to elicit. Yet, as Bereiter and Scardamalia (1993) convincingly asserted, understanding teachers' knowledge and how it is developed as teachers live through their experiences is vital to the understanding of other aspects of their professional life.

The results of the present study showed that the number of schemata the inexperienced teachers employed in their classes was significantly more than the experienced ones in linguistically established semantic, syntactic and parasyntactic do-

mains. In addition, this study is a further proof of superiority of the MICAST over the MACAST as the former deals with the objective reality inside the classrooms while the latter is principally of subjective nature. The authentic data collected in this study through observations of real classes are hoped to reinforce "the links between research and teacher development, creating in teachers an awareness of the contribution which research in their own classrooms can make to their professional growth" (Borg, 1998, p. 281).

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