Re-examining the Potential for Schema to Aid Students towards Developing EFL Reading Skills

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The current study reported on the continuing relevance of the schema theory for reading as it relates to the field of teaching and SLA, whilst highlighting the inherent limitations affecting individual learners. A relevant study was conducted for this article focusing on the extent to which university teacher trainees of English Education are exposed to second language readings with an adherence towards utilizing prior knowledge and drawing upon schemata to support their comprehension. Results from quantitative and qualitative data measured and collected from two groups of university students respectively, indicated certain advantages to this strategy use in respect of increased understanding, familiarity, and comfort level in SL reading. However, those same results identified existing limitations associated with cultural bias, stereotyping and a tendency to focus on wrong information when activating said schemata. As such, the purpose of this study is to promote awareness of the schema theory as an effective strategy option whilst reinforcing a need to pay heed to the concerns associated with strict reliance upon such theory to aid reading skills. Further discussion of these issues and pedagogical implications has been provided along with both suggested considerations regarding teaching for EFL teachers and evaluators.

[schema theory/familiarity/cultural bias/stereotyping/bias]

I. INTRODUCTION

Reading is one of those crucial areas in an English as a Foreign Language (EFL) context

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which needs continual development to support the acquisition of further second language skills. The schema theory of reading in a second language and more importantly from an EFL context is both a complex cognitive endeavor and an area of contention for students in respect of the background knowledge required to improve upon such. It relates to the understanding that organized knowledge is an extensive network of abstract mental structures which represent one's underlying view of the world and is useful for providing a foundation through which the reader's prior background knowledge in the process of interpretation is recognized. Though the term Schema was first used by Piaget in 1926, the theory is generally considered to have been developed by Bartlett who developed the schema construct in the 1920's and expanded upon in the 1970's by theorists such as R.C. Anderson, a respected educational psychologist, and P.D. Pearson. Whilst this theory has its advantages, having contributed to improving First Language (L1)/ Second Language (L2) comprehension strategies, the authors suggest that there are limitations in respect of the necessity of roles both intrinsic and extrinsic that are prescribed to the learner and foreign language instructor in order to ensure the learning is of value.

For the learner, there is a vital requirement for the activation of knowledge structures and a presupposition as to the extent of background knowledge that is brought forward to the task. Oh (2001) notes that much FL research by Krashen et al. (cited in Oh, 2001) has focused on input comprehension whereby the learner must comprehend the input to assist the acquisition process. Given that is so, in terms of the instructor, certain principles need be applied in class including the instruction of cross-cultural general knowledge and generic concepts, though even then further considerations need be met. That is, building schemata and making connections related to ideas, and assisting the students to develop the prerequisite knowledge as well as reminding them of what is already known. From an EFL context, this may be an issue for nonnative English speaking teachers (hereinafter referred to as NNESTs) whose own in-depth foreign cultural knowledge may be contextually insufficient to the task.

Lazaraton (2003) refrains from addressing culture as an outdated perspective and reinforces the concept that L2 educators need integrate culture with language learning for both meaning and identity. However, though the schema theory has enlightened the need for certain learning strategies to be implemented prior to reading with the aid of instruction, there remain some concerns that relate to the acceptance of completely new information and a lack of explicit definitions or predictions of the comprehension process associated with the schema theory. Such concerns according to Kramsch (cited in Lazaraton, 2003), may be addressed through the use of different strategies appropriate to cultures which can be then adopted and adapted to the students' own needs. In addition, the various affective factors including reader's belief and attitude may limit the impact of the schemata. Further to this, the reader's first language reading proficiency as well as

'culture-blindness' as evidenced by stereotyping, will have an impact upon the effectiveness of the schema theory. As such, this study will discuss the appropriate application of the schema theory of reading whilst detailing the practical limitations to the theory and what implications it may have upon second language acquisition in an EFL context.

II. THEORETICAL FRAMEWORK

1. Usage and Instruction in Schema Theory

During the previous two decades, the schema theory of reading has been investigated from a number of perspectives and continues to have a strong impact in the areas of discourse analysis and reading theory. Research conducted on schema examined disruptions or issues related to the reader's comprehension that result from inappropriate, inactive, or abstract schemata. There have subsequently been a number of definitions related to the schema theory as they have been used to describe the structure of knowledge in a variety of domains (Nassaji, 2007). For the purposes of this discussion, this study will propose an appropriate overall idea of schema theory as it was identified by Anderson and Pearson (1984). Anderson and Pearson suggest that the theory relates to the basic processes of reading comprehension and develop the notion of schema and its relation to first language reading whilst a reader's schemata, or knowledge already stored in memory, functions in the process of interpreting new information and allowing it to enter and become a part of the knowledge store.

Schema when considered from this approach is an abstract knowledge structure in that it is structured in the sense that it represents relationships among its component parts (Anderson & Pearson, 1984). Ajideh (2006) promoted the schema theory as an active strategy coding technique necessary for facilitating the recall of knowledge. Widdowson (1983) interpreted the schema theory from an applied linguistics perspective whereby two levels are postulated; a systematic and a schematic level. Systematic refers to the phonological, morphological and syntactic elements of language whilst for the schematic level it relates to the background knowledge. In terms of this discussion, it would then be proposed, in respect of the Schema theory for reading, from this interpretation that the schematic level is appropriate for the students in an EFL context provided assistance is enabled from the instructor.

Widdowson (1983) similarly describes schema as a cognitive structure which allows for the organization of information in long term memory. In this instance, the schemata serve to represent our knowledge about all concepts such as the underlying objects, situations,

events, actions and sequence of actions (Rumelhart, 1980). Schemata, which are recognized as the building blocks of cognition, are characterized by a number of features including; being packets of knowledge, representing knowledge at all levels of ideologies related to a concept, having relationship to a collection of variables, being embedded within one another, acting as active processes and serving as recognition devices (Widdowson, 1983). Anderson (1977) outlined particular characteristics of schemata that include the following:

- Schemata are always organized meaningfully, can be added to, and , as an individual gains experience, develop to include more variables and more specificity,
- Each schema is embedded in other schemata and itself contains subschema,
- Schemata change moment by moment as information is received,
- They may also be reorganized when incoming data reveals a need to restructure the concept, and
- The mental representations used during perception and comprehension, and which evolve as a result of these processes, combine to form a whole which is greater than the sum of its parts (p. 418-419).

Two types of schemata are identified within this context, which include *Formal Schemata* and *Content Schemata*. Formal schemata refer to abstract, encoded, internalized, coherent patterns of meta-linguistics, discourse and textual organization that guide expectations in an attempt to understand meaningful pieces of language. Content schemata are less abstract and relate to text knowledge content. Such schemata incorporate background knowledge of the content and subject matter of the text and can be exampled by differences in genre, differences in structures of topic specific texts, stories, newspapers, magazines, and poetry amongst others.

To achieve understanding, there is a requirement for readers to select the most appropriate schemata for making sense of the incoming vocabulary and expressions since they bring their own schemata to bear upon what is being read. In order for this to be adequately achieved, all aspects of the existing schema must be compatible with the input information which results in the need for two basic modules of information processing; bottom up and top-down processing. Bottom-up processing is invoked by the incoming data that enters the system to best-fit the bottom level of specific schemata and through which the convergence of such schemata is referred to as data-driving processing. Alderson (2000) argued that such an approach is serial whereby the reader identifies the printed word, recognizes graphic stimuli, decodes them to sound, recognizes words, and decodes meaning. However, such an approach could be criticized for being closely related to behaviorism and dependent upon phonics approaches. Despite this, undoubtedly the bottom-up approach has its place for low level learners who are reliant upon basic vocabulary and phrases in order to build upon their reading proficiency.

In consideration of the audience for this bottom-up approach, the onus is upon the instructor to provide the background knowledge and encourage students to attempt to identify some kind of relationship of the words to their own first language experience and understanding their usage. Such an approach would naturally require the instructor to engage in teacher-directed and student-supported learning rather than a student oriented form of education. Ajideh (2003) noted that college students are too reliant on bottom-up processing individual words and analysis of sentence structures without applying the top-down processing for the overall view of the text. However, it may occur due to a lack of appropriate instruction and the practice in application of certain reading strategies.

Top-down processing, in contrast, deals with activation and is a conceptually driven type of processing whereby the processing of the activation begins with the whole and searches for the parts. Schemata, as exampled this instance, are emphasized and more responsibility is given to the reader's contribution to the text for the lesson. The learner in this case can guess or predict the meaning on the basis of minimal use of existing, activated knowledge. Though, such an assumption does not allow for a specific case, for example where students simply are unable to construct meaning, given their limited experience and background knowledge. The authors would suggest that carefully prepared instruction could provide the short-fall of knowledge through pre-reading activities. In order for the learner to be more successful in such a situation, the EFL teacher need provide the student with appropriate schemata for which they lack and instruct them in how to build bridges between existing knowledge and new knowledge (Carrell & Floyd, 1987 cited in Ajideh, 2006). An effective style of top-down processing can be in the form of mental modeling. Teachers are able to assist in this regard by instructing learners in the use of strategies such as 'Mental Modeling.' 'Mental Modeling' is a technique that informs the learners about the reasoning processes that lie behind strategic reading and has the potential to develop reading strategies such as text-reading whole, using background knowledge, identifying relationships between different parts of the text, and asking visible questions (Pani, 2004).

III. ISSUES

1. Advantages Related to Schema Theory

Learners are not passive when it comes to the schema theory. It would seem that most pre-reading activities are interactive given that the students are active participants. Added to that, in-class discussion prior to the task anticipates what will appear and therefore such activities are predictive in nature (Ajideh, 2006). This discussion is part of the exploration

process that leads to inquiry-based learning. For every problem based on culture-specific interference, there is an opportunity to explore and build upon culture-specific schemata.

Oh (2001) notes that it is a central issue as to how learners' experience of a target language contributes to their language learning. However, there are certain benefits that the learner brings to the table that imply an advantage which include rapid recognition, acceptance, understanding and even dissemination of cultural information from a unique perspective. Learners are by nature individuals, and as such remain individuals that are the by-products of their life experiences, skills, accumulated background knowledge, and personal tastes. These are attributes for the main part that can be called upon in reading tasks to provide a rich source of potentially new ideas and personal reasoning.

A further advantage might be viewed in the adoption of useful strategies that can be applied to all types of reading. While being pre-reading activities, still there are others that may be applicable at any stage of the learning. For example, in terms of the reading aloud strategy, for young learners, it is argued that this assists them in reading larger semantic units as opposed to focusing on graphic cues and also helps them to discover units of meaning through phrases instead of word by word (Amer, 1997).

Given the increased role of the student in the learning, the pre-reading activities related to the schema theory are student centered and likely to result in improvement in motivation. Brown (2000) noted that individuals approach problems, learn facts, and organize a combination of feelings from a unique perspective. Of course there exist a number of barriers to learning including affective, cognitive and socio-cultural factors. Yet those are often varying in degree from individual to individual and need be addressed by the instructor to assist the student in reaching their full learning potential. Engaging the learners in active and interesting material will undoubtedly raise attitudes to the acceptance of what otherwise could be a difficult lesson. Further to this, an additional consideration relates to the recent integration of team teaching of a native English speaking teacher and Korean teacher in middle school. Kim (2009) noted in her study that the focus of Korean education has shifted with more emphasis upon realistic goals of effective communication and utilizing speakers to provide an understanding of western culture. This in turn, serves to overcome the lack of schemata caused by insufficient background knowledge and experience on the part of the learner.

2. Disadvantages Related to Schema Theory

Differing background knowledge may have an adverse effect upon the individual L2 learners. Problems in comprehension occur from inactive, inappropriate, or absent schemata. In addition, while readers' might think they have understood a text, their interpretation may be different from the writer's meaning (Stott, 2004). First language

stereotyping may color the judgment of the reader which may result in what could be referred to as 'Culture-blindness.' As a result it might be argued that teachers should not make prior assumptions about what would benefit the class in terms of cultural familiarity. Stott (2004), from his research conducted on Japanese university student EFL learners, noted that while there are valid arguments for teaching students using texts that contain familiar content, teachers should not conclude that this will always result in better learning. The point to be understood here is that teachers should not make the mistake of using prior assumptions concerning the material and instead need evaluate the text on an individual case and relate it to the situation. Rather, they should evaluate the reading materials based on text and situation. Poor test results or limited evaluation could be affected by inherent cultural limitations and the instructor must be able to identify student's lack of interpretation in such cases.

Owing to the concept that schema is an organized abstract framework of objects and relations, the default values attributed to such consist of a specified set of expectations. However, given the extreme differences in given EFL nations, those expectations are unable to be met and will, of course, place an overdue burden upon the instructor to fill in the gaps. In this case, Korean English teachers (KETs) may be disadvantaged in comparison to the native English-speaking teachers (NETs) based on the NETs innate and natural understanding of the cultural information imbedded in specific material. Yet, the opposite may occur in some instances as KETs are likely to be more sensitive to the identification of cultural cue, whereas NETs may accept it without consideration of the target audience.

Activation of appropriate schemata is an ongoing issue for the acceptance of the schema theory. Bensoussan (1998) in his study hypothesized seven conditions under which the wrong schemata could be activated:

- Faulty top-down processing
- Faulty bottom-up processing or lack of automaticity in decoding the surface level of the text
- Level of the student's English reading proficiency – use of different types of strategies and make different kinds of errors
- Lack of motivation – which may occur when the reader is uninterested and bored by a text or even have an aversion to the subject matter.
- Over-involvement – whereby the reader may become so emotionally involved with a text that they may hastily activate a schema before fully processing textual clues
- The topic is unfamiliar or too abstract – may occur when completely new information or a specialized professional text
- Misleading or unfocused questions – which may hinder comprehension since the text questions constitute part of the task of reading comprehension (p.216).

Stott (2001) reinforced these concerns by noting that schema-theoretic applications may not improve comprehension when there is insufficient attention to textual detail or increased schema-interference by issues such as the activation of dominant or negative schemata. In addition, the schema theory cannot account for the variance in individual affective factors, more specifically, reader attitudes and beliefs. Reading strategies and conscious strategy use in text understanding are invariably being employed by reading students (unknowingly in some cases) and the level of experience in such will derive some impact upon the acceptance of the material despite acknowledgement of the schema theory. Kami-stein (2003) and Carrell (1987) suggest that for reading, affective factors, including those views of the reader's home language and reading beliefs, may play an important role in the cross-lingual reading process.

Finally, it could be argued that the underlying individual reading proficiency in the reader's native language reflects the opportunities for success in the second and thus limiting the effectiveness of the activation of schemata. Being proactive, inquiring-minded, and engaged in extensive reading can only benefit those that seek to become proficient in their Second Language (SL) reading. Devine (1988 as cited in Kami-stein 2003) determined that L2 readers exhibited three sets of beliefs about reading; sound-centered, word-centered, and meaning-centered. Such beliefs it was concluded, restricts to some extent the L2 reading ability based on the low proficiency in the first language.

IV. METHOD

In order to determine how university teacher English education trainees at a national university in Korea perceived the relevance of the schema theory and the significance of the resulting relationship between it and the effect upon their reading comprehension performance, this research design employed a mixed methods format, according to the understanding derived from Creswell's 2003 text on research design. Within the survey, responses obtained fell into the categories of what the authors classify as both predetermined (expected) and emerging (previously undetermined and rationalized through data collection) whilst the interview provided the opportunity for the use of open ended questions. Multiple forms of data drew upon possibilities, statistics and text analysis. This effectively entailed the usage of both qualitative and quantitative methods of research. Despite the idealistic need for an objective research basis, the epistemological direction of this study means that subjectivism (Creswell, 2003) is unavoidably embedded in the research. Therefore whilst certain assumptions of meaning may be constructed there remains a need for further research to critically assess certain long term research issues

such as the impact of cultural adaptation regarding globalization and both the continuing drive towards and gradual emergence of an ESL environment within South Korea.

1. Participants

The participants in this study comprised of 20 (quantitative survey) and 15 (qualitative interview) university sophomore and junior grade teacher trainees respectively from two classes at a national university near Daejeon city, South Korea. Participants were of a mixed gender, aged 20-25 years of age and enrolled in an elective university English class that placed emphasis on speaking and reading research followed-up with written taskings. All students had already studied English for over 10 years and were engaged in studies to become English education teachers within Korea. These students had motivation to learn English and most had overseas experience prior to the research. Participants were chosen based on their English competence, ability to respond in English and likelihood of understanding the subject matter. Two classes, a total of 20 chose to participate in the survey whilst 15 agreed to the interview.

2. Procedure

All participants were informed of the survey requirements and provided sufficient instructions on how to complete it. The first phase questionnaire was completed by the participants, and consisted of items representing a few variables based on individual-difference that included second language reading hours, learner strategies, use of background knowledge and experience, and understanding gained through prior knowledge. The second phase interview contained mostly questions that were designed to elicit a response in the form of an explanation based on open-ended questions. Questions were provided on a separate sheet in English and an explanation was offered to the student to assist in understanding the relative complexity of the topic. The interviews were conducted in a lecture room (at a time when no class was in session) at the national university with each student by one of the authors (Nairn).

Participants were asked the questions and responded to each question which they then wrote on the interview sheet provided without assistance from the interviewer. The style of interviewing focused on possible responses in the form of indicated perceptions, beliefs and attitudes in respect of the schema theory. The style of the interview was informal and participants were provided sufficient time as they deemed necessary to respond to each question. The questions were open-ended though simplified so as to allow the students to generate their own response at a basic level. This was done so as obtain information that could not otherwise be gained from the survey data, thus this interview provided the

qualitative supporting data. The responses, however, being of a general nature, did not appear to warrant any particular quotation from an individual participant. Though, were important in providing an overall direction of the participants' group mindset towards the topic.

3. Instrumentation

The authors utilized Excel for the initial spreadsheets and then conducted an analysis of the data using SPSS for Windows for the purposes of coding the survey data. Frequency and mean tables corresponding to the results of the data gathered from the students of the university classes were examined.

The items that appear in the survey tables have been marked as the following:

UE1-1 until UE1-6: University Survey 1 – Questions relating to Hours of Study
UE2-1 until UE2-4: University Survey 2 – Questions relating to Use of Schema
UE3-1 until UE3-5: University Survey 3 – Questions relating to Prior Knowledge

For the purposes of assessing the non-quantifiable responses resulting from the interviews, content analysis in the form of qualitative data was gained through an examination of the direct responses of the participants.

V. RESULTS AND DISCUSSION

The results and tables below are divided into distinct research inquiry sections. Items and questions were designed to provide quantifiable results that indicated the following: the first section deals with the quantifiable results that indicate the extent of second language reading and usage of schema; while the second section addresses how the students perceive the relevance of the schema theory and the significance of its relationship towards Second Language Acquisition (SLA) of reading skills. With respect to survey questions UE1-1 thru UE1-6, data collected were used to determine the overall weekly figures for students regarding hours spent in L2 English reading for academic purposes, pleasure, self-learning and pre-reading. Regarding the analysis of survey questions UE2-1 thru UE2-4 and UE3-1 thru UE3-5, frequency data collected were used to discover the ratio of students who use, recognize the relative effectiveness and understand the context of the schema theory during L2 reading study practices.

1. Extent and Usage of Schema

On the basis of the frequency results from two surveys completed by the university

teacher trainee participants, a number of significant factors were identified. Upon assessment of the surveys for the university teacher trainees, it was determined that the majority engaged in more than four hours of general and academic L2 English reading per week (UE1-1 & UE1-2), though less than 50% read more than 3 hrs for pleasure, self-learning, taught reading or even pre-read material as preparation for teaching (UE1-3 thru UE1-6). This indicates that despite the relative high level learning ability and L2 skills of the teacher trainees, L2 reading remains primarily an academic pursuit only.

TABLE 1

University Survey Results: Time Spent L2 English Reading

ITEMS 1 - 6	Mean	0-3hrs	4-6 hrs	7-9 hrs	10-12hrs	13-15hrs	15 + hrs
E1-1 Hours of English reading per week on average?	3.70	Nil	6 (30%)	3 (15%)	6 (30%)	1 (5%)	4 (20%)
UE1-2 Hours spent for academic purposes?	2.85	3 (15%)	8 (40%)	1 (5%)	6 (30%)	1 (5%)	1 (5%)
UE1-3 Hours in reading English for pleasure/ hobby)?	1.60	14 (70%)	3 (15%)	2 (10%)	Nil	Nil	1 (5%)
UE1-4 Hours spent reading as part of a desire for self-learning?	2.15	10 (50%)	2 (10%)	5 (25%)	2 (10%)	Nil	1 (5%)
UE1-5 Hours spent teaching reading to others?	1.80	11 (55%)	5 (25%)	3 (15%)	Nil	Nil	1 (5%)
UE1-6 For teaching, hours spent pre-reading material?	1.30	15 (75%)	4 (20%)	1 (5%)	Nil	Nil	Nil

* Frequency = percentage displayed in boxes

** Means = the averaged responses totaled item figures (Response 0-3hrs= 1…15+=6)

As shown in Table 2 on the following page, a relatively low figure was noted for the application of reading strategy amongst the participants with only 10% actively using strategies to assist reading comprehension (UE2-2). However, interestingly the teacher trainees responded that they sometimes or often (80%) use background knowledge and experience for understanding written material (UE2-3) which in itself is a supposition of the strategic use of prior knowledge. This would suggest a possible confusion on the part of the participants as to what an actual strategy might consist of and how they are

perceived by those who use them. Yet, the question itself was consistently answered in terms of the participants responding to the question regarding the strategy in the form of an overall negative figure. A consideration here, might then be, that while the teacher trainees acknowledge the existence and usage of strategies their complete conscious knowledge of them is not as extensive as the author might have otherwise assumed. Further study implications have been raised within this survey question itself that need greater analysis in a follow-up study to be conducted at some point.

The table below outlines the statistical results:

TABLE 2

University Survey Results: Frequency of Schema Use in Reading

ITEMS 1 – 5	Mean	Never	Rarely	Sometimes	Often	Always
UE2-1 Frequency to read any English material not translated from Korean?	3.25	1 (5%)	2 (10%)	10 (50%)	5 (25%)	2 (10%)
UE2-2 How often do you consciously use a reading strategy when reading in English?	2.65	Nil	10 (50%)	8 (40%)	1 (5%)	1 (5%)
UE2-3 Frequent use of background experience/ knowledge to understand English written material?	3.55	Nil	2 (10%)	7 (35%)	9 (45%)	2 (10%)
UE2-4 Frequency: comparing English to Korean equivalent to understand the topic?	2.95	Nil	7 (35%)	7 (35%)	6 (30%)	Nil

* Frequency = percentage displayed in boxes

** Means = the averaged responses as totaled item figures (Never=1…Always=5)

Whilst in comparison to the above, particularly question UE2-3, as shown in Table 3, again 50% of respondents used Korean knowledge for insight (UE3-1). The table below clearly illustrates that prior knowledge was a significant resource for the majority of the teacher trainees with respect to reading (UE3-2, UE3-3, & UE3-4). However, 45% of participants did note that such prior knowledge may lead to confusion of the issue (UE3-5).

The figures outlined in the Table 3 support this:

TABLE 3
University Survey Results: Prior Knowledge Relating to Schema Use

ITEM 1- 5	Mean	Never	Rarely	Sometimes	Often	Always
UE3-1 Thinking in Korean for insight / understanding?	3.10	Nil	4 (20%)	10 (50%)	6 (30%)	Nil
UE3-2 Before reading, thinking in Korean about the subject?	3.10	Nil	5 (25%)	9 (45%)	5 (25%)	1 (5%)
UE3-3 Relating own prior understanding of topic?	3.45	Nil	1 (5%)	12 (60%)	4 (20%)	3 (15%)
UE3-4 Prior knowledge, advantage - understanding?	3.55	Nil	2 (10%)	8 (40%)	7 (35%)	3 (15%)
UE3-5 Prior knowledge confusing the issue rather than assist?	2.45	Nil	11 (55%)	9 (45%)	Nil	Nil

* Frequency = percentage displayed in boxes

** Means = the averaged responses as totaled item figures (Never=1…Always=5)

2. Significance of Schema

Based on the responses of the interviewees, as outlined below, it appeared that prior background and experience as relating to the schema theory, continues to have a significant impact upon second language reading. Whilst in essence a positive effect, there were identified a few issues that could affect the level of comprehension and learning. However, though it was that determined here that the students themselves were aware of such negative issues, it was likely that this awareness relates more to their particular field of study: English education and current status as teacher trainees. The results below provide a more in-depth overview of the responses.

3. Interview Questions

2. ***How much do you enjoy reading English material when the content is unfamiliar to you?***

In terms of reading unfamiliar content, only 7 of the 15 interview participants responded that they enjoyed reading. That is, over 50% of those interviewed found the challenge of unfamiliar content less than enjoyable.

4. ***How does that past experience and background knowledge assist you when reading a***

topic in English?

As this author expected, all 15 participants (100%) responded positively that familiarity with the content (experience and knowledge) made the reading easier, more interesting, and comfortable.

5. ***How does that past experience and background knowledge assist you in terms of your motivation to read and learn English?***

13 of 15 (over 85%) respondents proposed that their motivation and comfort level was higher due to the past experience and background knowledge.

6. ***Can you describe the advantages and disadvantages to having prior knowledge of the topic?***

While all participants responded that it aids motivation, study comfort and ease of understanding, there were two distinct negative insights that included:

- 5 participants directly advised that prejudice and stereotyping may occur as a result of previous experience and knowledge
- 4 participants directly advised that prior knowledge may lead to boredom and a lack of attention to the topic reading.

7. ***Do you think that prior knowledge and past experience of the topic facilitates learning of English or serves to create barriers to cultural understanding? (if so, how?)***

9 of 15 (over 60%) participants suggested that it facilitates English learning, while only 1 responded that it create a barrier by alienating the student. For this question, 6 participants failed to respond due to the complexity of the question in their L2.

VI. IMPLICATIONS FOR SECOND LANGUAGE TEACHING

It is proposed by the authors that the meaning of a text is not contained in the words on a page but rather constructed by the reader. As such, it must then be accepted that the single most important variable, other than the individuals' basic language skills, in learning with texts is a reader's prior knowledge. It follows then that from an EFL context, the reader's prior knowledge is directly connected to their first language. Even in supposition that the reader has obtained a base of external cultural knowledge prior to gaining skills in reading, such information would likely need be accepted on face value unless properly supported by appropriate instruction and various forms of teaching material. However, notwithstanding the very young learners, much of the information would still have been accepted at a level of understanding that could be perceived from a standpoint of their experience and background knowledge. The assistance of instructors is likewise an ongoing issue. For EFL students, simplification may increase

comprehensibility though result in disjointed text, unfamiliar though culturally crucial elements may be eliminated, and encourage adoption of inappropriate strategies (Oh, 2001). Rather, elaboration of the text by the instructor, according to Oh (2001), will be of greater long term benefit to the learner.

The measurement of language learnt is often subjective to the level of proficiency attained, though for reading they are easier to objectively define apart from the aspect of cultural context. In this situation, there exists a current world imbalance. Whereby European nations benefit in terms of many similarities between those nations' own respective language structures and grammar forms and that of English, the acceptance and proficiency success of English isn't total. Added to that, the basic cultural similarities between European and Western nations are many given the extensive history and interaction between the two types of nations. In fact, a significant portion of the written English language is comprised of various words and root verbs taken from their languages. For the purposes of English SLA, the Asian nations are severely disadvantaged not only in terms of the extent of difference in the varied language structures, grammatical forms and alphabet, but also in relation to cultural aspects, behavioral norms, exposure and history.

Despite their country of origin, it also seems then that how well a reader comprehends a text also depends on their meta-cognitive skills which affect one's ability to think about and control his thinking process before, during, and after reading. Ajideh (2006) noted that individuals attempt to fit knowledge into some structure in memory to assist their understanding of that knowledge when obtaining such. It would make sense then that a key to a successful usage of the schema theory is organization. Prior to organization there are four variables to be considered in order to be more successful when learning how to read: the reader, the text, the strategies, and the goal. After all, to be successful from initial instruction towards autonomy, the strategies employed by the reader is what will make the most difference. It is interesting to note that L2 learners view their home language as a resource and that good readers read for meaning. L2 learners can employ high-level strategies of making inferences when reading in English and approach the material in a linear fashion (Kamhi-Stein, 2003). Added to that, the assistance of NS English teachers to convey cultural knowledge and context will aid in activating the students' schemata to improve comprehension. However, a study conducted by Lazaraton (2003) noted that NNESTs are at a disadvantage when it comes to cultural knowledge and apt to miss opportunities for discovery rather than admit a lack of knowledge.

Since the activity of reading is primarily a student oriented learning process, there are a number of strategies that can be employed by the learner to assist in their understanding of the text and appropriate schematic choice. For the purpose of this study these include primarily pre-reading activities on the part of the student though other activities to be conducted during and even after the task can be considered. These activities were chosen

based on previous experience, in-class practice with students and research conducted by the authors. As the author of this study we would propose certain pre-reading activities that can be utilized by the reader following minimal instruction and practice in a classroom environment. An overview of such can be found in the texts (Richards & Eckstut-Didier, 2005; Mikulecky & Jeffries, 2005) and the pre-reading activities that can be employed are exampled by the following:

1. *Anticipation Guide*: The anticipation guide can typically be used as a pre-reading strategy to assist students in their thought and discussion about ideas and concepts that will encountered in the text.
2. *Checking out the Framework*: This strategy is a pre-reading form that allows students to preview texts to assess content and organization, and recognize and use text features to aid comprehension.
3. *Frame of reference*: Such strategy, after sufficient instruction, enables students to create a mental context for reading a passage. As a typical form of schema theory, the reader is able to relate new information to their prior reading and experience.
4. *Questions only*: In such a case the readers compose their own questions, which in turn encourage them to read more actively as they seek more information.

In addition to the strategies that are employed by the reader, there are others which are facilitated by the instructor so that students can engage in such activities in conjunction with the teacher. As such there are a number of teacher directed activities and recommendations for the instructor that this author proposes that will ultimately assist the reader and are addressed in the following:

5. Brainstorming: Is a useful exploration strategy that will involve interaction between the teacher and learners to seek connections between the material presented and their own background experience.

1. Narrow reading: This strategy is effective for low-level learners who find second language reading particularly difficult. In order to achieve a level of automaticity in word and phrase recognition, a text can be limited in respect of its unfamiliar content.

2. Cultural exploration: Similar in effect to the results of brainstorming, this strategy can be applied in a varied format whereby the reading task is achieved through the provision of culturally-based content material not included in the reading.

3. Inquiry-based learning: Inquiries are the 'bread and butter' of the students' individual learning experience. Paying heed to the students' need for additional information and interest in the topic will have long terms towards their self-autonomy to learn more individually.

4. Promotion of extensive reading: Green (2005) noted that extensive reading may not be the most effective means of promoting acquisition and instead should be incorporated fully into the language curriculum as a component of a tasked-based approach to SLA.

There is an ongoing issue in respect of the need for NETs to engage in cultural training and awareness for teaching in an EFL context. Warschauer (2000) noted that teachers in Korea rather than focus on the imperialistic dictates of the Native English speaking countries can instead create opportunities for communication based on values, cultural norms and needs of learners. Im and Nairn (2009) suggest that there need be a provision of orientation studies that reflect cultural awareness, uses of English for specific purposes, and a deeper understanding of the eventual target audience (including learner strategies, behavioral concepts and socio-affective factors). Such training or acquired knowledge will assist those instructors in identifying the situations where cultural instruction is necessary to assist the students' activation of schemata for the purposes of reading comprehension..

Experience in identifying cultural-based content in reading and embedded cultural cues is another crucial area in which the instructor has to be trained or at least be culturally sensitive to. Ajideh (2006) proposed that schematic knowledge has textual representations in the form of lexical choices constructed by the discourse producer in the encoding process and that it is one of the teacher's duties to assist the reader in recognizing those lexical choices. Therefore, it should be accepted that the background knowledge can be provided as a pre-reading activity prior to reading (Ajideh, 2006). This may then encourage instructors to modify the lesson and content of the reading. Though, as pointed out by Oh (2001), the potential interaction between modification type and learner proficiency remains an important issue. Yong (2009) in her research of strategies amongst high school students in Korea determined that few studies have been conducted on Korean high school students' strategy use in the actual reading test. Further studies on Korean students would yield some worthwhile results and provide greater insight into the relative worth of applying and promoting the schema theory.

Bensoussan (1998) noted that there is an additional consideration related to student acceptance of information. He proposed in his 1998 study that students' attitudes toward test content may be a powerful factor in determining scores resulting from testing. Such a score could as a result misrepresent their actual level of language proficiency and adds to the issue of relevance in respect of the whole testing process and its ability to measure true proficiency. However, we would suggest as a final statement that the L1 reading proficiency of the learner has an impact upon the L2. That is, a poor reader in L1 would therefore most likely follow suit in L2 which then affects any aid of instruction provided by the teacher. Respectfully then, whilst I do accept that schemata can be activated regardless of actual reading ability, improving the reading proficiency level of the learner will be limited based on their present reading skills and past experience of reading itself. Instead the appropriate use of strategies, materials and cultural content instruction will cover that shortfall of comprehension when such schemata are less likely to be activated without assistance.

VII. CONCLUSION

Based on an EFL context, the schema theory of reading in a second language is both a complex cognitive endeavor and an area of contention for students in respect of the background knowledge. This article determined that the application of the theory has a number of advantages attributed to it that relate to the learners not being passive, information is offered by learners from a unique perspective, adoption of useful strategies that can be applied to all types of reading, and student-oriented teaching which is likely to encourage positive affective factors including motivation. However, the results of the study conducted indicated that whilst having contributed to improving L1/L2 comprehension strategies, there are limitations in respect of differing background knowledge which may have an adverse effect upon the individual L2 learners, lack of cultural and personal experience, and the issue that those schematic expectations are unable to be met and subsequently place an overdue burden upon the instructor to fill in the gaps. As such, how well a reader comprehends a text also depends on their meta-cognitive skills before, during, and after reading. In addition, however, of greater concern is that wrong schemata could be activated. To achieve understanding there is a requirement for readers to select the most appropriate schemata for making sense of the incoming vocabulary and expressions since they bring their own schemata to bear upon what is being read. Though the inherent danger to the application of certain (as hinted at during the participant interviews) schemata is the possible prejudice and stereotyping that may occur. To counter this, the schema theory offers greater comprehension of the reading provided that there is an application of strategies by the student alone and also through in-class participation in conjunction with the instructor who is both culturally aware and sensitive to the target audience.

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