

Exploring IELTS Teaching in Listening Part Based on Schema Theory

Xiwen Liang*

Department of Foreign Languages, Sichuan Normal University, Chengdu, 610066, China

Abstract. This paper aims at presenting the preparation for Schema Theory, including language and cognition, construal, and categorization. Also, it shows the definition and history of schema, highlighting the role of schema building as a powerful approach for maximizing International English Language Testing System listening teaching, expounding the benefits and challenges of schema theory in IELTS listening teaching as well as making recommendations for IELTS teachers regarding how to implement schema theory effectively. Two investigations in this work about using schema during classes were implemented for IELTS teachers and students and proved the necessity for teaching with schemas in the IELTS listening part.

1. Introduction

Image schema is a term in cognitive linguistics, that refers to a recurring and dynamic pattern in a user's mind [1]. A logic image schema can be described as composed of a "bottom-up" and a "top-down", which respectively correspond to listening to the recordings and comprehending them by image building in this paper [1].

While many studies have put forward the enlightenment that the schema theory had brought to English listening teaching [1-3], this paper aims to discuss the importance of schema building, especially in IELTS listening teaching. Since IELTS listening includes recordings concerning fast daily communication and abundant cross-disciplinary information, the difficulty level is much higher than regular tests in schools. IELTS listening also tends to show much variety in cultures with unexpected accents. A study in Japan determined that a less familiar accent (e.g., Indian English) was more difficult for these listeners to comprehend than a more familiar North American English accent [2]. Thus, much time for comprehension is required while the recording is continuing.

To better get these issues addressed, image building may accelerate listeners' responses to recordings. Accordingly, this paper will first introduce the definition and history of schema, followed by discussing the proceeding during listening and methodology for better building schema, and the results of data of IELTS teaching and learning situation, coupled with making recommendations for IELTS teachers to implement schema theory effectively.

2. Definition and history of schema

Schema theory complements neuroscience's well-established terminology for levels of structural analysis [3]. And an image schema is a recurring, dynamic pattern of people's perceptual interactions with motor programs that gives logic to our experience.

The term "schema" has been defined by many researchers: Head and Holmes introduced the term schema to neurology in 1911, saying anything which is perceived in the conscious movement of our bodies made the completion of schema. Bartlett applied the schema to cognitive psychology, with a schema being "an active organization of past reactions or experiences, which must always be supposed to be operating in any well-adapted organic response." Schmidt offered a schema theory of discrete motor skill learning. Arbib provided a more tightly constrained need in schema theory to explain the neural basis of behavior, stressing that a schema has a function that has not to be correlated with the activity of a single neuronal circuit [3]. All those explanations of schema share similarities in that schema are somehow related to neuroscience and cognition, which instructs the process of inputting information.

Therefore, the next chapters will explore more about the advantages of building schema, and figure out how to use schema theory properly and acquire the desired input information.

* Corresponding author: Cara.l@stu.sicnu.edu.cn

3. During Listening and Methodology for Better Building Schema

3.1. Language and Cognition during Listening

3.1.1. Language Acquisition

There are 4 stages in language acquisition, the sequentially pre-linguistic stage, the babbling stage, the two-word stage, and the telegraphic stage [3-4]. These stages can be applied to EFL learners if the final objective is the acquisition of the second language, as well as building a schema in the brain.

3.1.2. Language Comprehension

Based on the four stages, language comprehension also consists of three phrases. In phrase 1 “word recognition”, listeners should recognize words while it matters little whether the initial input was by eye from recordings or by ear from printed questions. In phrase 2 “comprehension of sentences,” they need to integrate grammatical and situational knowledge in understanding a sentence. Phrase 3 “comprehension of text” requires listeners’ long-term memory and materials read earlier in discourse [5]. To some extent, these three phrases open up the possibility of schema building because the sketching schema is based on comprehension.

3.1.3. Language Production

After hearing the content of a recording, listeners are supposed to process the critical information by centralizing what to express and implement the phonetic or phonological encoding of target words, schema as an auxiliary may help students confronted with listening materials or examinations.

3.2. Building Your Schema: Using Construal

Construal is the ability to conceive and portray the same situation in different ways, which somehow plays an important role in schema building.

Listeners are encouraged to anticipate the topic in advance by scanning printed description and associating it with their experiences or judgments. Although this advanced self-construal sometimes is frustrated by abstract description, feasibility is suggested of extending Cognitive Grammar's notion of construal into the analysis of non-objective meaning as an intersubjective, context-sensitive angle of communication [6], also listening. 5 characters of construal can be applied in IELTS listening by improving schema building:

3.2.1. Specificity

Listeners are more likely to imagine vivid scenes if they understand information with different specificity. For example, L1 listeners might be obscured by the noun “thing,” while L3 and L4 learners tend to guess the

specific meaning of this sweeping word, be it an implement, or a polaroid. By using these words, these learners can have much exactness of listening description.

3.2.2. Scope

The scope here refers to the base of detecting foundational information in listening materials. It is also closely connected with diagnostic and analytic listening etc. [7], which are featured in IELTS listening. One example can better explain the importance of scope, that is, the scope of “crashed”, which may include the following things: time, the car’s crashing time, and the precedent time [8].

3.2.3. Background

Most of the time background is given at the start of speaking in IELTS listening, mainly covering the topic of it. For example, “you will hear a man phoning, to find out about some children’s engineering workshops” in Cambridge IELTS 16, Test 1, Section 1. And the background will leave space for listeners to imagine themselves in a printed world, and visualize the following schemas.

3.2.4. Perspective

Listeners may paint various schemas as they imagine things from different angles. For instance, there is a sentence: “now industriousness, or hard work. It’s easy to mock people who say they work hard: after all, a hamster running around in a wheel is working hard and getting nowhere. (See in Cambridge IELTS 12, test 5, section 4)”. Some practical listeners reflect on a schema of running a hamster only, while other alert listeners immediately transfer the figure of a hamster to a man because they build schemas from the perspective of mocking people.

3.2.5. Salience

The principle of salience is often dealing with the cognitive ability that dominates the direction of our thought. In other words, the salience of other noise while focusing on listening to recordings and building a schema should be paid much attention to. Since research shows that pupillary response reflects the subjective salience of sounds is heavily influenced by loudness [9-10].

4. Categorization and Schema

Categorization, in some way like taxonomy, is defined as the process of formulating our experiences into different categories based on commonalities and differences, in which three cognitive levels are included: basic level in specific but not too specific fields, superordinate level for most general words, and subordinate level for most specific description.

Although long-held assumptions supposed categorization occurs only after an object has been selected and encoded, a current study suggests that

categorization modulates attention, thereby influencing which information will be encoded in working memory [11].

Thus, as two implements for processing the input, categorization can be naturally connected with schema. Or in other words, categorization boosts schema forming by offering easier access to comprehension during IELTS listening.

4.1. Research Hypothesis

To figure out the situation of teaching the IELTS listening part, and the frequency of using schema theory among the teachers and the students. This paper assumes that building a schema could improve the efficiency of comprehending passages and looks forward to a better teaching methodology in teaching IELTS listening part.

4.2. Research Method

In this research, the Participants are composed of 132 IELTS teachers and 164 students who have taken IELTS exams. The questionnaires of both teachers and students are distributed online for 3 months. All the figures from Question 1 to Question 5 will be stated more clearly through the links in the appendix.

5. Results

5.1. Schema Building as a Powerful Approach for Maximizing IELTS Listening Teaching (Advantages) and Challenges

IELTS listening needs a schema to build better than other listening because IELTS listening includes recordings concerning fast daily communication and abundant cross-disciplinary information, and the difficulty level is much higher than regular tests in schools. IELTS listening also tends to show many varieties in cultures, the speakers include British, American, Australian, Indian, and others, with unexpected accents. Moreover, the recordings are only read once. While regular listening materials used in examinations in China will be read twice at a slow pace, which only covers simple daily communication, and with pure British or American accents.

Luckily, schema building gives access to solving these problems. Carl Rogers's schema has already demonstrated that schema building constitutes high-quality listening [12]. To prove the validity of schema in IELTS listening, this paper gave 164 IELTS students (mostly estimated at 6-7) questionnaires on their feeling about learning IELTS listening part:

When calculating the frequency, the figure of Q3 'Which one most confuses you during listening?' is noticeable where it can be seen much dominance of comprehension delay, at 56.10%, followed by cross-disciplinary information and speed, at 43.90% and 41.46% respectively. Mind absence is also verified as a common issue during listening, as 39.02% of students feel confused about it. Interestingly, vocabulary and accent, which were

typically regarded as two difficult parts for students rank at the bottom (24.39% for vocabulary and only 7.32% for accents).

As predicted in the figure of 'Q4. Will you translate the sentences into Chinese?', many students translate English into Chinese (48.78% sometimes 46.34% always), while only 4.88% of them comprehend recordings directly. Because translation to one's mother tongue turns out to be more acceptable at first [13].

The figure of Q4 shows the resulting issue in the Q3 graph, which can be concluded that translation affects the comprehension speed, in other words, leads to comprehension delay. In this case, schema shows its priority in comprehension. Students are not encouraged to translate listening materials but to describe a vivid scene in their minds. For example, in Figure 1, when a student hears "An apple falls from a tree", rather than translate, it is much more efficient if they draw such schema in mind:

An apple falls from a tree



Figure 1. The Graph of Schema in Listening

But students still face some challenges. As the figure of Q5 'Will you build schema during IELTS listening?' shows, although more than half of students use schema building in IELTS listening, 34.15% of students don't use this method due to difficulty, even 24.39% of students have no idea about the definition of a schema.

Thus, it is IELTS teachers' responsibility to introduce schema theory to IELTS students, as well as the adaption to schema building in pedagogy.

5.2. Recommendation for the IELTS Teachers

To analyze the current situation of IELTS listening teaching, questionnaires were also distributed to IELTS teachers. The content of these questionnaires includes the most challenging part of teaching IELTS listening, translating, or explaining in English, and whether they will encourage students to build schema.

In questionnaires for teachers, all the figures (in Appendix 2) show that comprehension delay takes a leading role in the difficulty in improvement, though almost half of the teachers (48.48%) try to explain in English to reduce such delay. Moreover, 45.45% of teachers always try to help students build schema and 42.42% of teachers sometimes use this method.

IELTS teachers have realized the importance of Schema building to improve comprehension efficiency,

but more explorations are needed in their pedagogy, such as the combination of other teaching methods and using schema theory.

6. Conclusion

Schema, as a powerful teaching tool, has now become a trend in teaching listening. Continuous teaching revolution is needed, especially for IELTS listening. Thus, IELTS teachers are encouraged to adapt schema theory in their teaching by promoting construal and using categorization as an auxiliary. Hopefully, this paper will help IELTS teachers who teach the listening part improve their teaching efficiency.

Appendix

Learning IELTS listening part:

<https://www.wenjuan.com/r/n/76356841a3ea8ee9b5df12167134186a>

password: 123456

Teaching IELTS listening part:

<https://www.wenjuan.com/r/n/9601995f0933788ed755e928174a308b>

password: 123456

References

1. Graham, S., Santos, D. & Francis-Brophy, E. (2014). Teacher beliefs about listening in a foreign language. *Teaching and Teacher Education* 40, 44–60.
2. Hiroko Matsuura, Reiko Chiba, Sean Mahoney, Sarah Rilling, accent and speech rate effects in English as a lingua franca, system, volume 46, 2014, pages 143-150, ISSN 0346-251X.
3. Arbib M A. Schema theory[J]. *The encyclopedia of artificial intelligence*, 1992, 2: 1427-1443.
4. Dulay, H.C., & Burt, M. K. (1972). Goofing: An indication of children's second language strategies. *Language learning* 22, 235-252.
5. Dulay, H.C., & Burt, M. K. (1974). Natural sequences in child second language acquisition. *Language Learning* 24, 37-53.
6. Jiang Xu, Stefan Kemeny, Grace Park, Carol Frattali, Allen Braun, language in context: emergent features of word, sentence, and narrative comprehension, *neuroImage*, volume 25, Issue 3, 2005, pages 1002-1015, ISSN 1053-8119.
7. Möttönen, T. (2016). Dependence of construal on linguistic and pre-linguistic intersubjectivity. *Nordic Journal of Linguistics*, 39(2), 209-229. doi:10.1017/S0332586516000093.
8. Bijsterveld, K. (2019). Modes of Listening: Why, How and to What?. In: *Sonic Skills*. Palgrave Macmillan, London. https://doi.org/10.1057/978-1-137-59829-5_3
9. Bijsterveld, K., & Krebs, S. (2013). Listening to the Sounding Objects of the Past: The Case of the Car. In K. Franinović & S. Serafin (Eds.), *Sonic Interaction Design* (pp. 3–38). Cambridge: MIT Press.
10. Liao, H.I., Kidani, S., Yoneya, M. *et al.* Correspondences among pupillary dilation response, subjective salience of sounds, and loudness. *Psychon Bull Rev* 23, 412–425 (2016).
11. Zivony, A., & Eimer, M. (2022). Categorization templates modulate selective attention. *Journal of Experimental Psychology: Human Perception and Performance*, 48(11), 1294–1312.
12. Rogers, C.R. *Client-Centered Therapy, Its Current Practice, Implications, and Theory*; Houghton Mifflin: Boston, MA, USA, 1951; Volume XII, 560p.
13. Vermes, A. (2010). Translation in foreign language teaching: a brief overview of pros and cons. *Eger Journal of English Studies*, 10(1), 83-93.