


认知二语习得理论本土化研究

——中国英语教学认知策略

The Localization of Cognitive SLA Theories :

Cognitive Strategies for English Teaching in China

牛 强 / 著

 吉林大学 出版社

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Preface

It is generally acknowledged that teachers of foreign languages should be equipped with some metalinguistic knowledge which distinguishes them from native speakers of the target language and bilinguals or even multilinguals. However, it is not enough for language teachers to have merely metalinguistic knowledge, rather, it is more important for them to be informed of metacognitive knowledge which makes learning more efficient and effective plus pleasurable.

Therefore, before going into an introduction to this book at length, I would like to quote from Saville-Troike that “*Being an effective teacher of any discipline requires a steadfast commitment to self-improvement as a scholar, thinker, and communicator over the long haul. No one becomes a master teacher overnight.*” (Saville-Troike, M. 2006). This book is written in the attempt of introducing the basic knowledge regarding the above two dimensions of knowledge which otherwise has to be obtained from a number of linguistic and cognitive works. Provided in here is a repertoire of expertise accumulated over a decade’s years of continuous research and teaching based on the forerunners’ effort. It is written in the hope that the information provided in this book will shed some light on research in SLA and make the teaching and learning of English in a mother tongue environment easier in the context of globalization since, in my opinion, to shorten the duration of English formal instruction, is the only solution to language planning in China and to achieve this goal, to find more efficient and effective methods of teaching and learning, is the only solution for China and all other non-English speaking countries.

SLA Research goes hand in hand with cognitive psychology develop-

ments, whereas, the advances in cognitive psychology depends largely on the findings in neuroscience. The inseparable nature between language and thought makes studies of language acquisition a major component of memory research because information processing is, to a great extent, language processing. Hence, second language research cannot be divorced from cognitive theories.

In the last few decades, SLA research has drawn upon many cognitive theories, such as attention, ACT-R theory, information processing models etc. However, these cognitive theories are mostly explaining the role of conscious learning and functions of explicit memory. As to how implicit memory works and whether there is a division on two memory systems, there are still a lot of debates going on. In this book, the author posits one major hypothesis concerning implicit memory, that is, the working of the implicit memory or unconscious memory depends on, above all other factors, frequency of occurrence, which is especially true in language acquisition and learning. In other words, implicit or unconscious learning takes place through frequency effect. Although other affective factors, such as emotional needs, interests and levels of priority may also come into play, the major factors that make the transformation from receptive skills into productive skills, or from declarative knowledge into procedural knowledge are but two: attention and frequency, with the former responsible for explicit learning, the latter, implicit learning.

This theory has important implications for language learning. For instance, between watching the same movie six times and watching six different movies, which has a greater effect on the learning result? To apply generally, this hypothesis addresses the different effect between receiving the same input multiple times and receiving different inputs just one time. To answer this question involves a number of other key issues regarding how memory encodes, retains and retrieves information, i. e. how memory works. In general, it concerns how to use the same amount of time to pro-

duce more effective learning results. It also addresses the question why intensive reading plays a much different role from extensive reading in vocabulary development.

Language and cognition development cannot be separated from each other. Therefore, it is hypothesized in the book that learning a foreign language in a mother-tongue environment will hinder the vertical cognitive development of the child. The optimal age to learn a second language in a mother tongue's environment is a very complex issue since it also involves social cultural political considerations in the making and implementing of language policies for a country.

Stance of the book

In recent years, the focus of SLA research has shifted from product (output) to process (input — intake — output) since it is generally believed that L2 learning is the result of the interaction between the learner's internal mechanism with the external environment. Therefore, SLA researchers and foreign language practitioners alike should, on the one hand, concentrate their efforts on understanding the nature of the learner's mental processes, the working of the mind; and on the other hand, the working of the target language — the object of the learning process. This book, thus, serves as a point of departure for the endeavor in that direction.

However, as is commented by Marysia Johnson (2004) that *"there is a false assumption in the ever-expanding field of SLA that unless one's research study includes some sort of experiment and inferential statistics, one's contribution to understanding second language acquisition processes is anecdotal, marginal, and even non-academic. Therefore, most teachers feel humbled, viewing their positions as powerless and insignificant, entirely controlled by theoreticians and researchers whose abstract models and ideas they feel are impractical and hard to follow."*

Hence, both in the east and the west, there appears the situation where researchers are burying themselves in theorizing and experimenting, and the practitioners are hardly informed of what is going on in this field of their inquiry. They are still doing teaching the way the best of their teachers did, with little meta-cognitive knowledge which will make their task much easier and the teaching much more efficient and sufficient. However, Johnson also comments that good experimenting must be based upon good theorizing to have value and to endure the test of time, on the other hand, experimenting is also supplementary to solid sound theorizing. If any new idea has to be empirical to be published in a first-rate journal, great concepts like “comprehensible input” could not have been introduced to the field due to its untestable nature. But no one can deny the invaluable advances the concept has brought about to our understanding of the role of input in SLA. What’s more, some experiments have the tendency of experimenting for the sake of experiment and publication. Some people set out to prove what they believe and create the experiment in a way to prove their belief, rather than come to a natural conclusion from fair and unbiased experiment.

The harm of judging every hypothesis with statistics is that many creative ideas may never be known or disseminated before they are killed. This is not to promote progress, rather, it hinders progress in research inquiries and endeavors. Again, as is remarked by Johnson that “*The purpose of a theory is not to provide all the answers but to provide a focus for investigation, a point of reference*” A model or theory should not be discredited and overlooked just because it is not testable or empirical in nature.

We do not deny the fact that though introspection is a good start to the understanding of cognition, psychological experimentation is not only necessary but also the major way to confirm and disconfirm the introspection and reflection from teaching and research so as to develop solid scientific theorization to facilitate good teaching and learning. We merely doubt the

absolute sole criterion of shaping and filtering each idea, testable or unstable, through experimenting.

Some theories proposed in this book, such as the frequency effect, spacing effect, etc have been tested a hundred years ago and are still undergoing repetitive experiments even now. However, some ideas, for instance, the idea that implicit memory or unconscious memory takes place through frequency effect has not been proven anywhere in the world, for which it will probably be labeled as pseudo-scientific. Hence, we are looking forward to having someone, at some point in the future, comes up with some empirical ways to test the theories proposed in this volume. It is not insurmountable, however, it is undeniable that it will be a very tough job.

Why a cognitive approach to SLA?

This book is intended as a cognitive approach to the field of Second Language Acquisition (SLA) and Foreign Language Teaching (FLT). It emerged from my research on SLA and a course entitled *Foreign Language Teaching Methodologies and Testing*. It is cognitive in nature because current SLA research and theorizing share a strong cognitive orientation. Indeed, the answer to the mystery of SLA can only be found through studying the human mind. What makes the mind work the way it does and what role language plays in thinking and memory? So far no answers to the above questions have been provided, yet, every quest in seeking the truth will bring us a little closer to a better understanding of the brain mechanism. If the reader of this book can be inspired in any way towards their attempt at finding the key to better learning, the goal of the book will have been fulfilled in a sense.

The intended audience of this book is primarily English major graduate students, but it is also suitable for teachers of English without a substantial prior knowledge of SLA but are intending to delve further into the

field.

What goals to achieve?

My goals in writing this book are fourfold: (1) to approach SLA from a cognitive perspective; (2) to introduce the necessary knowledge in Psycholinguistics, SLA and foreign language teaching methodologies and testing in one book for teacher training; (3) to synthesize well-established theories with up-to-date information in SLA research; (4) to fuse SLA theories with ELT situation in China. In general, the book intends to acquaint English teachers and learners with some meta-cognitive strategies so as to teach and learn English more effectively and efficiently and to inspire future interdisciplinary research between cognitive research and ELT in China.

Although not a detailed recount of every theory on cognition and SLA, the book provides English teachers a foundation and groundwork for SLA research, particularly for L2 instruction. Each cognitive theory or concept conveys a message for teachers who intend to achieve efficacy and efficiency in their teaching. This scenario mirrors the diversity of current convictions about what would bring about the most effective instruction, and it, in turn, points to the need of concerted effort to develop more metacognitive strategies for L2 learning.

In short, this book aims to answer three major questions: 1. What to learn? 2. How to learn? 3. When to learn? It is our hope that the readers can find not only basic theories to a better understanding of how to teach and learn a foreign language in a mother-tongue environment, but also good food for thought for their future research.

Why cognitive learning strategies?

As the famous Chinese saying goes that “if you give the student fish, they can have it for only one day, but if you teach them how to fish, they

can have fish for life. ” This saying carries much truth and weight in second language teaching practice because language learning is one of the cases where one plus one does not necessarily equal two ($1 + 1 \neq 2$). Even if learners put in the same amount of time and effort, not everyone will achieve the same level of attainment in the end. Hence, the methodologies of foreign language teaching and SLA was evolved and born, out of necessity.

As both a teacher and a learner, I am fully aware how much I have benefited from this expertise to be a better teacher and learner of English personally. Now I present the book to the many learners and teachers who might also be puzzled by the fact that their English seems to have stopped progressing at a certain point no matter how hard they try, and that a big discrepancy between what they can comprehend and what they can produce persistently exists no matter what they do, and that their interlanguage is far short of what is desired when they speak and write in English.

The book does not provide direct and conclusive answers to these questions, but it does introduce what the best has been known in terms of these issues in human learning so far. It is, however, our purpose that with these concepts and ideas summarized over decades and applied innovatively to China's situation, the readers of the book will be enlightened and triggered to provide their own understanding of the mystery of language learning and add something new to this field of inquiry.

There are many breakthroughs in SLA theory, such as skill learning theory by Anderson, which explains how explicit memory works and how we proceed from controlled processing to automatic processing through practice. Many important issues are still unsettled in language acquisition, such as the existence of UG, the working of the implicit memory system, etc. *The most innovative idea in this book is that in language acquisition, implicit memory functions mainly through frequency effect. Frequency of occurrence, in addition to playing the role of reinforcement and entrenchment,*

reduces the processing load and frees conscious attention so that repeated language forms create more chance to be noticed so as to get proceduralized or automatized in later encounters. In other words, repeated encounters lower the activation threshold and pave the way for production through familiarity effect. This theory is still a hypothetical idea that needs to be proved empirically.

Despite the many models in SLA put forward so far, it is unrealistic to expect that one single theory can explain the whole complexity of language learning. The theories proposed sometimes conflict but also interact with each other, which may serve as a basis for improvement and for the birth of a more enlightening theory to better our understanding.

Characteristics of the Book

We take an interdisciplinary approach, investigating SLA from both linguistic and psychological perspectives. However, theories which are applicable in SLA environment may not be of vital significance to foreign language learning environment. For instance, Vygotsky's Sociocultural Theory stresses the irreplaceable contribution of social interaction to the success of L2 acquisition. However, in China's situation where English is mostly learned as a foreign language rather than acquired simultaneously or subsequently as a second language along with the first, the social environment is not as critical as it is in SLA to learning results, therefore, it is not treated with much emphasis though we do take learner's interaction with peers in and out of classroom as an aid to group improvement, it is mainly dealt with in view of role of output. In other words, the role of learning from social interaction is very limited here. But with globalization and the internet, probably and hopefully, the situation can get some drastic change in the future.

前言

认知心理学对二语习得研究的影响,由来已久。从最初的行为主义到 60 年代的心灵主义,到 80 年代后的连接主义,理论不断更新。本书通过对经典和最新理论由来的介绍,使读者便于了解认知心理学理论在二语习得研究上的应用:如连接主义,是由计算机科学引用到心理学再应用到二语习得研究上;又如早在 80 年代初, Krashen 就将认知心理学上至今仍无定论的显性和隐性记忆机制的功能和区分,引用到了二语习得上来上来,区分了“习得的”和“学得的”知识的不同作用,成为了无界面理论代表者,与后期的 DeKeyser 等观点相对立,当然, Anderson 和 McLaughlin 的理论使后者——即,界面理论更易于解释技能学习的规律和特点;再如 ACT 理论和信息加工模型也是早在 80 年代初就应用到二语习得研究上,但在 1990 年 Schmidt 的注意理论发表之前,在二语学界并未引起广泛重视。直到 20 世纪后,认知理论才开始主宰国外二语习得领域的研究,并成为研究热点,否则二语习得研究已经无路可走。

当今的认知二语习得理论,对所有二语习得的问题,如学习者个体差异,年龄优势和石化现象等,都从认知上来解释了。如学习者最终水平被认为是取决于学习者运用认知策略程度的结果。儿童习得语言的优势是由于儿童主要依赖无意识隐性记忆力机制的结果,这就是引用了认知学上所谓的“less is more”(少反而多)的理论。并且,由于成年人更多使用认知学习策略,比儿童更具有优势,这一点可以解释成年学习者,特别是青少年学习者最成功的现象。石化现象被认为是错误习惯自动化的结果。这些理论都有很多的实验支持,并且具有更让人信服的解释。

随着现代实验方法对生物科学、神经学领域的促进,认知心理学将为我们解开二语习得之迷提供越来越多的答案,也必将成为二语习

得研究的主要研究入口。反之,由于人的思维和记忆主要依靠语言,因此,二语习得的研究比心理学上大多采用的实验室模拟非自然语言的“门诊式”实验,更有可能成为解开人脑奥秘的突破口。这就是很多认知心理学家转而开始研究母语习得和双语甚至多语习得研究的原因。

总之,随着科学的发展,学科之间的研究已经不可避免,更多的、更细致的跨学科研究不断涌现。因此,我们认为,心理语言学和二语习得已经不能满足充分展示语言和认知之间的联系,因而,认知二语习得的产生也就成为必然的趋势。由于国外这一跨学科研究也是刚刚起步,这一学科的范围和研究主题还在不断地扩展中。现在已有的主题,本书都基本包括在内,一些更先进的认知学家已经在建立神经二语习得这一更新的学科。因此,我国二语习得研究应该尽早识别这一发展动态,从而与国际研究接轨。本书的出版,将为认知二语习得研究在我国的发展,起到抛砖引玉、添砖加瓦的作用。

内容提要

本书内容包括认知心理学、心理语言学、二语习得理论、外语教学法和外语测试五个方面的知识。是外语研究者和外语工作者应该了解和具备的元语言、元认知知识的总和。掌握这些知识,将帮助广大外语教学解开一些迷惑,如石化现象发生的认知原因是什么?有意识记忆力和无意识记忆力的工作原理是怎样的?遗忘是怎样产生的?如何有意识缩短孵化期使理解和产生能力同时得到发展?技能习得遵循怎样的规律?外语教学史上都经历过那些教学法演变?学生吸收何种输入、产出何种输出才能将输入最大化、最优化地转化为输出?通过影视习得英语中,应采取哪些影视作品和方法?外语测试的基本概念和特点以及出外语多项选择题的注意事项?如何使学生达到课外学习自主?等一系列外语学习策略的问题。

本书共分七章:第一章是认知心理学和心理语言学理论介绍,共分三个部分。(1)介绍了记忆的分类、阶段、特点、遗忘的原因,目的是介绍人脑摄入、保存和提取信息的原理。特别是孵化期效应、频率效应、间隔效应、显著效应、扇形效应等等还没有引起国内外的二语习得研究重视的理论。(2)介绍了与二语习得相关的主要认知理论,如注意理论、信息加工理论、自动化理论、技能习得三阶段理论、双语人心理词汇的各种模型等;(3)由以上理论而产生的学习曲线、遗忘曲线和技能学习规律曲线等。本章就分歧最大的记忆的两个系统:有意识和无意识机制和各自功能特点的最新研究成果,做了介绍。这一区分对二语习得研究至关重要。因为它关系着陈述性知识是否能够转化为自动加工能力等一系列的问题。

第二章主要介绍二语习得理论。我们将二语习得理论分为两个阶段,前认知阶段和后认知阶段。前认知阶段介绍了二语习得学科和经典理论的发展历史和代表人物,及主要理论。如 Pit Corder 的错误

分析理论由来, Selinker 的中介语概念和石化理论, Krashen 的五大假说、Swain 的最佳输出理论、以及个体差异理论等。后认知理论阶段包括一些从认知心理学上舶来的如连接主义、Anderson 的 ACT 理论、MacWhinney 的竞争模式、Pienemann 的可加工性理论、Nick Ellis 的组块理论、Fodor 的大脑分工模块理论、VanPattern 的输入和输出理论等。

第三章比较了第一语言习得和外语学习的区别。首先我们介绍了 Lenneberg 的临界期假说、Chomsky 的语言习得机制和普遍语法假说、母亲语特点等理论。我们分别从生理、认知、心理三个方面, 共比较了三种情况: (1) 母语习得和外语学习 (2) 儿童二语习得和成人二语习得 (3) 二语习得和外语学习。理论应用: (1) 通过比较, 提出了针对不同年龄学生, 不同教学方法的观点。 (2) 通过国外有关起始年龄 (AOA) 研究的最新成果、语言和认知发展的关系、语言、思维和文化的关系, 提出了我国外语教育最佳起始年龄的假说。我们还指出, 应对英语全球化的冲击的语言规划的策略, 一方面是要平衡普通话、方言和英语教育的关系, 另一方面是缩短外语教育的时间, 开发学习策略, 使学生利用现代科技, 达到无师自通的学习者自主目的。

第四章为西方理论本土化应用的主体研究。学习者策略的培训和开发是本章重点。以语法和词汇教学为例, 说明了导致接受能力和产出能力之间巨大差异的原因, 从而介绍了一些外语学习的认知策略。语法教学上, 我们区分了语法知识和语法能力, 词汇教学上, 我们暂时提出了七大策略: (1) 故意注意策略 (2) 组块策略 (3) 关键词策略 (4) 概念排除策略 (5) 重复式、间隔式学习策略 (6) 变换学习环境策略 (7) 及时产出造句策略等。

第五章为西方理论本土化研究的客体研究。我们提出了最佳输入和最佳输出的理论假说。首先从语言和思维的关系入手, 说明了输入在二语习得中的作用并提出外语环境下产生习得的输入应具备以下特点: (1) 重复的、语言点突出的 (2) 简练的、非冗余的 (3) 可理解的 (4) 真实的 (5) 有趣的、引人入胜的 (6) 有内容、挑战知识面和智商的 (7) 互动的 (8) 最新的 (9) 蕴含文化的 (10) 大量的。在输出假说中, 我们指出为避免石化产生, 初学者不应过多过度自由产出。输出应以下

五大类:(1)朗读(2)句型操练(3)背诵(4)复述(5)自由产出。以上策略和输入特点,对目前的影视英语教学和外语环境下产生习得的效果,有着重要的指导作用。

第六章是西方外语教学法的总结并提出了适合中国国情的产生习得效果的教学法和策略。首先,我们总结了西方十种教学法的特点、理论基础和优缺点(1)语法翻译法(2)直接法(3)情景法(4)听说法(5)交际法(6)全身反应法(7)沉默法(8)社团学习法(9)自然习得法(10)暗示法。然后,我们提出了适用于我国的、集中体现这些优势于一身的整体式/综合式(Holistic Approach)教学法。

第七章是外语教师必备的外语测试知识。本章共分两个部分:首先从总体上,介绍了四种外语考试,分别是(1)成绩测试(2)水平测试(3)分班测试(4)外语学能测试。衡量测试的标准有两个:信度和效度。我们介绍了四种效度以及信度和效度的关系。我们指出了外语测试对外语教学的反拨作用。测试应首先确保良好的信度和效度。然后,测试后,通过趋中量数和分散量数分析测试的分数分布情况。通过单项分析,出题者可以了解每个题目的难度和区分度,看是否达到了测试的目的。最后,我们提供了一套由三十个题目组成的有毛病的多项选择题,从而总结出十六条出题应遵循的规则。

总之,该书为外语教师提供了一些应有的理论知识和实验经验,是外语教师科研和教学的参考,研究生撰写论文的理论指导,为认知二语习得这一研究方向在我国的发展,起到了一个促进作用;为我国将西方理论本土化应用做了一个尝试。

本书特点:

1. 本书将认知心理学、第二语言习得、外语教学法和外语测试的理论综合于一体。
2. 本书不但涵盖了二语习得的经典理论,也介绍了最新研究成果。
3. 本书不是对西方理论进行简单的梳理,而是将西方先进的认知二语习得成果应用于中国母语环境下的英语教学,提出了一些新的理论和学习策略。