

Six Decades of Research on Language Aptitude: An Introduction

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This forum is dedicated to the discussion on language aptitude and is motivated by a talk by Professor Shaofeng Li (2020) titled *Six decades of research on language aptitude: a systemic and critical review*, organized in the Fall of 2020 by Columbia University, Teachers College [Center for International Foreign Language Teacher Education](#) (CIFLTE). Dr. Li is an associate professor in Foreign and Second Language Education at Florida State University. He has written extensively on the role of language aptitude in SLA, including a meta-analytic review of research on language aptitude and second language grammar acquisition (Li, 2015), followed by another meta-analysis on the construct validity of language aptitude (Li, 2016). Motivated by these findings, the talk introduced the latest advances in language aptitude research, particularly the conceptualization and measurement of implicit language aptitude and evidence on the validity of the construct. As a way of extending the discussion, students in the Second Language Acquisition (SLA) doctoral seminar in the Applied Linguistics and TESOL Program at Teachers College, Columbia University were asked to reflect on the talk and provide their commentaries on the six decades of aptitude research and what it means for the field of SLA. In response, three papers were submitted to the present forum.

One key issue presented by the forum was on different definitions of aptitude. John Carroll, one of the earliest and most influential aptitude researchers, defined aptitude as “an individual's initial state of readiness and capacity for learning a foreign language, and probable facility in doing so [given the presence of motivation and opportunity]” (Carroll, 1981, p.86). According to Hale, aptitude is defined as one’s potential to perform a task given maximum training and opportunity” (Hale, 1987 p.41). And according to Skehen (1991), defining language aptitude implies four conditions that enable prediction of success:

1. There is a talent for learning languages that is independent of intelligence.
2. The talent is not simply the result of previous learning experience.
3. It is relatively stable.
4. It varies between people.

How SLA scholars define aptitude and its corollary constructs is foundational to providing a cohesive link between elements of aptitude theory and their operationalization in research. Unfortunately, confusion about what constitutes aptitude abounds when in addition to Carroll, Hale, and Skehen’s definitions, multiple terms exist to describe aptitude and its variations. This critical issue regarding definition and terminology is examined by Adrienne Lew, who states that aptitude remains as one of the most confounded constructs, ill-defined by their lack of specificity and ambiguity, while conflating multiple core concepts. Adrienne proposes that one remedy to such definitional issues is to implement the connectionist

approaches to SLA as the theoretical foundation to unify and clarify the notion of implicit language aptitude.

What Is Language Aptitude?



- Cognitive abilities predictive of learning rate and ultimate attainment in a second language
- Components of traditional aptitude
 - Phonetic coding
 - Language analytic ability
 - Rote memory
- Recent development/cutting edge: implicit aptitude

Image 1: Dr. Li delivering a talk on Six Decades of Research on Language Aptitude. Courtesy of CIFLTE

Ashley Beccia addresses the role of implicit and explicit aptitude in children's rate and route of L2 acquisition. Children's ability to master their native language has often been recognized as an invariant nature of the first language learning experience. However, the same cannot be said of adults learning a second language, which has shown a wide range of variance, mostly failing to reach native-likeness (Birdsong, 1992). Individual differences in

aptitude has often been theorized in such situations to account for the divergent variability found in learning outcomes of adult L2 learners. Ashley argues that while the convergent native-like competency in children under the age of critical period has been taken for granted, the process in which their ultimate end-state is achieved has been rather poorly understood. What is proposed is a critical examination of both the rate and the route of acquisition and through differential aptitudes implicated vis-à-vis implicit and explicit learning abilities in young learners.

Lastly, Sue discusses how although the concept of implicit aptitude is cutting-edge in current aptitude research, the concept of implicit learning has been central in many prominent SLA theories in the past. Consequently, the field's understanding of how implicit aptitude plays a role in L2 acquisition will help advance SLA theories that involve implicit learning. She argues that disambiguating the differential roles played by implicit and explicit aptitude will become a fruitful line of future research in second language aptitude.

Language aptitude is arguably the best predictor of success in second language acquisition measured by learners' rate of learning, L2 development, or ultimate attainment among adult learners past the age of critical period (DeKeyser, 2000). Like all cognitive constructs, pinpointing its exact characteristics and identifying their observable manifestations in learners have been illusive, at times difficult, and certainly not without controversy. Still, the study of aptitude in SLA has enjoyed a long history of research with periodic breakthroughs in theory and instrumentation. Language aptitude—whether implicit or explicit—has much to offer to the field of SLA, for it provides a wide range of psychometric constructs with reliable and valid instruments to explore inherently complex processes of second language acquisition. It is the author's hope that this forum will stimulate further discussion contained in this issue, as well as future studies that attempt to approach the study of SLA through a better understanding of how aptitude plays a role in the second language acquisition process.

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COMMENTARIES

1. From Language Aptitude to Implicit Language Aptitude: A Discussion of Definitional Issues by Wai Man Adrienne Lew
2. The Role of Language Aptitude in Children’s Rate and Route of L2 Acquisition: A Direction for Future Research in Child SLA by Ashley Beccia
3. Implicit Aptitude in SLA, in contrast to Explicit Aptitude by Sue Min Park