

The Role of Language Aptitude in Children’s Rate and Route of L2 Acquisition: A Direction for Future Research in Child SLA

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A fundamental distinction in the field of second language acquisition (SLA) is *route* versus *rate* of acquisition (or L2 development). While the former has traditionally referred to developmental sequences of learning, the latter denotes the speed with which learners progress through developmental trajectories (Muñoz, 2006). A second distinction at the center of SLA is the ultimate L2 attainment of children versus adults. Although researchers in the field hold different views regarding the role and effects of age in language learning ability and ultimate attainment—such as whether learners are subject to one or multiple critical or sensitive periods of development—researchers generally converge on the fact that early (child) L2 learners fully acquire the target language (TL) while most late (adult) learners do not (Hartshorne et al., 2019).

Due to the generally accepted fact that young learners under a certain age (or set of domain-specific age ranges) reach complete L2 ultimate attainment, the issue of differential L2 ultimate attainment does not have relevance in child SLA research as it does in the adult context. A more relevant question to children’s L2 acquisition is *how*, not if, young L2 learners arrive at full L2 ultimate attainment, given ample exposure to robust input. In this way, children’s acquisitional route and rate may be pertinent to future empirical studies, with the individual difference variable of language aptitude potentially being of particular use in addressing the inter-learner variability that is observed in children’s L2 acquisition.

Language aptitude generally denotes the amalgam of cognitive abilities implicated in language learning talent (Reiterer, 2018). The construct, however, has recently undergone conceptual refinement by researchers such as Li (2020), who distinguishes between explicit (language) aptitude, or the cognitive abilities that allow an L2 learner to explicitly learn the TL, and implicit (language) aptitude, the cognitive abilities that constitute a learner’s capacity for implicit language learning. He makes the theoretical claim, *inter alia*, that explicit aptitude is more vital to early stages of L2 learning, whereas implicit aptitude plays a more crucial role for advanced L2 learners. Still, the claims Li makes are in the domain of adult SLA and necessitate empirical verification.

To date, the vast majority of research pertaining to language aptitude has involved adult learners. Despite Carroll (1981), the pioneer of language aptitude research, initially conceptualizing the construct as a talent for language learning that affects the rate and facility with which learners acquire an L2, investigating how aptitude might influence L2 rate of learning remains unexplored by researchers (Li, 2020). Accordingly, concerning young learners, the role of aptitude in children’s rate of L2 acquisition remains fertile ground for empirical investigation. Such research would contribute to our understanding as to why children with the same age of onset and amount of exposure to robust TL input achieve complete L2 ultimate attainment at different points in time. By focusing on variability in the rate of L2 acquisition of

children with the same or similar ages of onset, researchers can transcend previous studies that have compared rates of L2 in learning in younger versus older children (e.g., Ekstrand, 1976) and adult versus child L2 learners (e.g., Morford & Mayberry, 2000).

In addition to young learners achieving complete L2 ultimate attainment at different rates due to language aptitude, young learners may also take different routes in L2 acquisition due to inter-learner variability in language aptitude. Not only might learners with high aptitude possibly skip stages of developmental sequences if provided timely instruction (cf. Pienemann's Teachability Hypothesis, 1989), differences in explicit and implicit language aptitudes may result in young learners taking more explicit or implicit approaches to language learning. Taking one route as opposed to another, that is, relying on explicit or implicit learning mechanisms, may impact the rate young learners progress in the TL, supported by the findings of Roehr-Brackin and Tellier (2019), who considered the role of aptitude in children's L2 learning and maintained that different components of aptitude are related to children's successful acquisition of various aspects of the TL.

In particular, Roehr-Brackin and Tellier (2019) studied eight- and nine-year-old L2 learners and found that the most predictive component of aptitude vis-à-vis "overall L2 gains is language-analytic ability" (p. 1127). Language-analytic ability, involved in explicit learning ability, refers to learners' ability to treat the TL as an object of analysis from which linguistic generalizations can be derived. Roehr-Brackin and Tellier's finding points toward explicit learning abilities facilitating L2 acquisition for children, suggesting that the widespread notion that child L2 learners rely almost entirely on implicit learning mechanisms may need to be revisited. Thus, in order to contribute to our understanding of language aptitude, as well as explicit and implicit learning abilities in child SLA, future research may address empirical questions such as, "Might young learners with explicit aptitudes take more explicit approaches to learning and those with implicit aptitudes more implicit approaches?"

Provided the ongoing development of the construct of language aptitude in SLA, as well as the dearth of research on language aptitude in child SLA, a multitude of questions remain, warranting more empirical studies on language aptitude in child SLA. Rather than relying on largely unchallenged assumptions in the field, such as aptitude and explicit learning playing a negligible role in child SLA and ruling out their relevance to empirical studies on child SLA *a priori*, fundamental questions may be reconsidered with greater sensitivity to individual differences in child learners to uncover the important roles they might play. In this way, SLA researchers can reveal not only the idiosyncratic paths that child learners take on their unique journeys of L2 acquisition, but also the rates with which young learners build their paths and the forces that influence how they are forged. By zooming in on individual difference variables like language aptitude, we can shed light on the variability of L2 development across young learners; by zooming out on the L2 ultimate attainment of children, the systematicity observed across young L2 learners transpires; and it is through research from both perspectives that a more complete picture of L2 acquisition during childhood will emerge.

REFERENCES

- Carroll, J. B. (1981). Twenty-five years of research on foreign language aptitude. In K. C. Diller (Ed.), *Individual differences and universals in language learning aptitude* (pp. 83–118). Newbury House.

- Ekstrand, L. (1976). Age and length of residence as variables related to the adjustment of migrant children, with special reference to second language learning. In G. Nickel (Ed.) *Proceedings of the Fourth International Congress of Applied Linguistics* (Vol. 3, pp. 179–98). Stuttgart: Hochschulverlag.
- Hartshorne, J. K., Tenenbaum, J. B., & Pinker, S. (2018). A critical period for second language acquisition: Evidence from 2/3 million English speakers. *Cognition*, 177, 263–277. <https://doi.org/10.1016/j.cognition.2018.04.007>
- Li, S. F. (2020, October 22). *Six decades of research on language aptitude: a systemic and critical review* [Invited talk]. Center for International Foreign Language Teacher Education (CIFLTE), Teachers College, Columbia University, New York.
- Morford, J. & Mayberry, R. (2000). A reexamination of “early exposure” and its implications for language acquisition by eye. In C. Chamberlain, J. Morford & R. Mayberry (Eds.), *Language acquisition by eye* (pp. 111–127). Lawrence Erlbaum.
- Muñoz, C. (2006) The Effects of age on foreign language learning: The BAF project. In C. Muñoz (Ed.), *Age and the Rate of Foreign Language Learning* (pp. 1–40). Clevedon: Multilingual Matters.
- Pienemann, M. (1989). Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 1, 52–79.
- Reiterer, S. M. (Ed.). (2018). *Exploring language aptitude: Views from psychology, the language sciences, and cognitive neuroscience*. Springer International Publishing.
- Roehr-Brackin, K., & Tellier, A. (2019). The role of language-analytic ability in children’s instructed second language learning. *Studies in Second Language Acquisition*, 41(5), 1111–1131. doi:10.1017/S0272263119000214

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