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# Article Title

L1 / L2 Learning in Children: Explicitly Reframed

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#### 1.0 Introduction

Some scholars have tried to frame second language acquisition (SLA) within children as a neat and clean proposition. The question for examination is whether children learn a second language implicitly (rather than explicitly) in the same way they acquire it in L1 (Fromkin et al., 1999, 347). However, the frames of children and their learning implicitly will receive particular attention, at first. The more central question, -traditionally simplified to L1=L2- will be subsequently examined. There will be also attempts, at times to demonstrate where theory may have affected practice so as to inject some pragmatic content into the exercise. A condensed historical overview will help reinforce the importance of the task at hand.

As a non-scholar in linguistic theory, it became particularly clear that the first problem in examining the proposition which Fromkin puts forth, is not so much as to whether implicit or explicit theorists are correct about child learning in the SLA context. But rather, it is whether the two terms have been sufficiently described so that the non-scholar and

specialist outside the field understand what is really being investigated. Having not heretofore done an exhaustive reading on the subject, it would seem that a greater effort at defining what the overall question is, would represent a good start.

In historical terms, the question has a relevancy in regards to its applicability to primary, and to a lesser degree, secondary education programs in the post 1950s. For in this period, the greater awareness of the importance of implicit learning and SLA research in itself began to reshape attitudes towards syllabus and curricular development. This contrasted starkly with the nineteenth century reform movement in education, where there was little concern for differentiating between the two types of learning or in fact, whether L2 learning deserved such a distinctive approach over L1, (Stern et al, 1992, p. 328).

Language teaching for decades-possibly up to the early to post World War II years and beyond- has relied on more traditional and explicit approaches to teaching, including certain grammar-translation methods. In the 1950s, behavioral theories outlined by B.F. Skinner, provided support for the audiolinguistic approach, which emphasizes implicit mimicry and rote learning (Stern et al, 1992, pp 328-329). They were fused with grammar-translation approaches; a fusion that is central core of SLA curriculum in many middle to high-schools within Northeast Asia. Subsequent research by Noam Chomsky (1959, 1965) and Stephen Krashen (1982) with their extensive support for the primacy of implicit learning and innate grammar generation (at the chid level) did not seem to resonate loudly within this region. Were practical educators there trying to make a statement?

More focused research efforts into whether L1 and L2 learning were similar and the dynamics of implicit learning have been accelerated since the 1960s, through a broad though incomplete list of scholars, (Brown, 1980, Chomsky 1959, 1969. Corder 1967, Dulay and Burt 1973-74, Ellis 1984, Krashen 1982). A good number of these works examined learning theory in the context of children. But the survivability of explicit teaching, even into early middle school, may tell us either that explicit learning has its use in late prepubescent children and/or the archaicness of grammar-translation methods in these school systems. This author tends to support the former with qualifications after applying communicative teaching to first year Korean middle school students for almost six years. A subsequent investigation into definitions and theoretical considerations and applications will hopefully provide more insights into these observations.

Scholars such as Krashen have used their views on the dominance of implicit learning not only among children but adults, as well so as to underscore the extensive weighting they place on implicit learning in either L1 or L2, (Krashen 2002 p.1). His emphasis on communicative (notational-functional) learning is an application of an implicit learning hypothesis which has had at least some affect on SLA curriculum development within the school system. For example, the Koreans, Japanese and Hong Kong authorities have over recent years expanded their native speaker programs within the elementary to high school levels so as to encourage communicative learning as supportive of implicit approaches. That is, curriculum in SLA, especially for children needs to emphasize daily and functional types of exposure and usage rather than excessive focus on grammar and lecture based types of explicit learning. However, these program form a small part of the SLA learning

picture especially in Chinese and Korean public schools..

#### 2.0 Definitions and Dimensions

First, it may be useful at this juncture to look at definitions and dimensions so that the question can be properly framed in terms of mainstream literature and research. "Implicit" has taken on a number of synonymous concepts, (rightly or wrongly) in SLA. In a recent conference, Stephen Krashen alludes to this when he equates unconscious learning with implicit learning (2002, p.1). He sees explicit learning as peripheral for children .Earlier, by almost twenty years, he stated, "language acquisition is subconscious process" (Krashen 1982, p. 10). For Krashen, language acquisition is more associated with the "spontaneous process of rule internalization" whereas language learning relates to the "development of conscious L2 knowledge through formal study", (Ellis R. 1992, p.292). Ellis refers to acquisition as absorbing a language by way of 'exposure' whereas learning is through conscious study. Ellis, on the other hand, seems less willing to differentiate between the two conceptually and by way of definition when contrasted with Krashen. (Ellis p.6).

Historically, Palmer in his 1922 work on language study seems to have been one of the first to enunciate in a methodological fashion the differences between explicit and implicit learning. (Stern et al, p.348). Respectively, he refers to the terms such as spontaneous and studial. However, he did divide the studial part into learning that required a more intellectual as opposed to less intellectual type. In the first type, he included repetition, memorization and automatization. Today, this might be included in the audiolingual type of implicit learning, again suggesting that the dimensional conceptualization of explicit vs

implicit may not always be so clear.

Stern et al, graphically portray learning consciously as an intellectual exercise compared with learning without thinking and absorbing language information intuitively, (p.327). Further on he compartmentalizes various dimensions in language teaching which additionally help one clearly understand the divide in implicit versus explicit, so it would seem. Here is an encapsulation.

### Explicit;

rational/formal/intellectual, conscious,monitoring, problem-solving, analysis, abstract, metacognitive, inferencing, and systemic study.

# Implicit;

intuitive, automatic, subconscious acquisition, unreflective, behaviorism, mimicry and memory,

exposure to language in use.

In terms of framing the question properly, it will be also important to briefly consider how one defines a child and some of the pitfalls involved in the way it has been done across subject areas and even within SLA studies.

According to the United Nations, an individual less than 15 years of age can be categorized as a child.( Unesco 1982) So wholesale worldwide data and research held by United Nations agencies such as UNESCO and UNICEF which gather information on education

and young people have generally gone with this definition. In the SLA field, however, because of cognitive studies and views by certain non-cognitive specialist scholars, there is a general acceptance that the child relates to the prepubescent stage, (Mangubhai, F,.2002, p.10).

Without getting too engrossed in semantics, the general reference to child in SLA can be confusing particularly for those not directly in the field such as statisticians, sociologists and other specialists working in an interdisciplinary manner. So as to facilitate cross-disciplinary sharing of information and to further add clarity, I would use a term of prepubescent child (ppc) and under ideal conditions would also try to more precisely talk about the cognitive/ development stage of the child combined with some reference to approximate age(s). For as Stern's dimensions placed under explicit might imply (e.g., rational, intellectual, metacognitive, problem solving) combined with Jean Piaget's descriptions of the formal operational stage, (Mangubhai, 2002, p. 14), the appearance of cognitive development -even if partial- might facilitate a late ppc's commencement of explicit learning. While this involves some conjecture, it would seem worthy of further examination. Contrastingly, earlier childhood would seem to involve a heavy reliance on the more implicit aspects such as mimicry, automatism, and absence of reflection as contained in Stern's implicit category.

To reflect the differences of development in explicit learning abilities along the childhood development continuum (more about that later) the author wishes to refer to late elementary school to early middle school level as (ppc3), nursery school to early

elementary school as (ppc2) and the infant /toddler stage would be (pcp1) Again, one needs to be transparent and specific as to is what is being described, otherwise the old adage of apples being compared to oranges comes into play-or were they lemons. Post pubescent, pre-adult (pppa) would be referred to as adolescent and would more or less include the approximately 12 to 18 year period but girls often mature earlier than boys, so age quantification may be sometimes perilous. As well, individual variation and affective factors need to be taken into account during this whole process of defining who and what a child is. But that will be saved for another time and is less germane to this paper.

## 3.0 Theoretical Considerations and Applications

While it has been difficult to avoid some theory till now, a more in depth presentation will follow. Again, it needs to be reiterated that any personal observations from practical experience as applied to theory do not represent a final say but act more as a point of departure for further study. But relating theory to personal practice and observations is what teachers need to do but they cannot always do it with absolute scientific rigor or through structured action research..

### I. Reframing the question

Using the above definition and dimensional framework as in section two, relevant theories and models will be examined and where useful, applied to practical experience in facilitating the investigation into the question. Firstly, in support of dividing out childhood into different developmental categories are the theories of Piaget (Mangubhai, 2002 p.15)

whose categorizations will be associated with the author's terminology as appear in brackets.

- a sensori-motor stage between the ages of o and 2 (ppc1)
- a preoperational stage between ages 2 and 7 (pp2)
- -a concrete operational stage around 7 to 11; and (pp3)
- a formal operational stage from around 11 years (pppa)

Clearly, Piaget associates pppa as where cognition begins to more fully develop and by possible implication, when explicit learning becomes more operative. But prior to that stage, is there not a certain degree of early, so called "pseudo-cognitive" development which can be put to use in basic vocabulary and simple grammar learning. Why would this author find that ppc3 Koreans -at least a significant quantity at an above average level elementary school -can learn the differences of when to use "an" and when to use "a" or even when in some cases to use a plural to describe something you like and when to use it to describe it as a food you like (I like kangaroos versus I like kangaroo)? Albeit the rules of when to use it may be incomplete but they showed a collective improvement. Though certain individuals seemed totally lost -bearing in mind the author was using L2 as the near exclusive teaching medium! Is this an indication that some form of abstract thinking is sufficiently developing that a kind of low level, explicit learning can be productive within some children?

So, this author cannot exclude for ppc3 what Stern refers to as systemic study and Palmer

refers to as studial, (Stern et al, p.328). Concrete operational as in Piaget's model implies some ability to deal with the concrete rather than the abstract. But are all grammar rules so abstract and non-concrete that pppa level of cognition is required to absorb a teacher's explicit explanations? It may be that most SLA grammar especially if it is highly different from the L1 of the second language learner may be too abstract for the ppc3. It is difficult to see how deep explicit learning approaches to SLA (complex abstractions, major problem solving, complicated tasks) as this author will refer to them as, can be the only type of explicit learning. It should be recalled that Palmer differentiated the light intellectual one from the heavier kind. Following from this, the author accepts that implicit is the mainstay but that some peripheral to moderate amount of light explicit learning does occur, particularly in the latter stages of pp3 as consistent with Piaget whose research which shows a continuum of cognitive development. And it seems from having observed high aptitude, elementary school children from upper socioeconomic ranges through three weeks of winter camp in Korea, that certain pp3 individuals may be more able to absorb explicit types of teaching. Explanations might include their being influenced by affective factors which "catapult" them into the type of explicit learning capability more in line with those in the pppa stage.

Individual factors which could contribute to ppa3 partial ability in explicit learning might include the quality of teacher and teaching methods, attitude, degree of and quality of outside school support, linguistic aptitude, general intelligence and to a lesser extent sociopolitical factors. Interestingly, H. Zobel may offer some support to the author's observations, at least in terms of the variation of success in learning past participle

grammar by pp3 Korean elementary students. For Zobel sees implicit learning as more effective than explicit forms of language instruction with the latter approach leading to more heterogeneous results, (Mangubhai, p. 4.6.) But again, more systematic and thorough research would have to be done to validate such an interpretation.

Finally, Chomsky would seem to be supportive of a focus on implicit learning during the childhood years. After all, the Chomskian concept of LAD (Language Acquisition Device) is referred to as working at a subconscious level. However there is little concern as to whether it might similarly apply to an L2 that an individual child might be learning, (Chomsky, 1965.) The LAD's dominance, or its extent of importance, re-enforces the argument of implicit approaches to learning by children as the LAD operates in subconscious and intuitive manners; adjectives subsumed under Sterns implicit dimensions to learning. It is through the LAD that the child internally and implicitly carries out hypothesis testing in a step by step continuum in deciding what grammar is to be adopted and what is to be excluded. According to E.H. Lenneberg, the LAD largely atrophies after pubescence has been reached, (Ellis, p.44.)

Axel Cleeremans and Luis Jimenez collectively wrote, "Learning is implicit as long as the cognitive system is not given enough time to develop high quality representations," (French 2002 p.2). Given the low or lower degrees of cognitive development in children the extent of this type of "interference" with implicit thinking would be significantly less one would think when compared to a mature adult-again reinforcing the importance of implicit learning in a child.

## II. SLA vs L1 Learning

Studies show that the order in which a language is learned by children in terms of syntax and morphemes, for example is highly similar in many cases between L1 and L2, (Dulay and Burt, 1974.) That in fact the so called errors that a child makes in learning English as a second language are similar to those of a child learning English as L1. So negative interference as expressed in the audiolingual concepts seems to be highly unimportant in affecting the leaning processes between the two types of learners of English if one were to give a high level of importance to this study.

Dulay and Burt (1974) specifically studied children in the ppc2 stage of 6 to 8 years of age. They concluded that "The learners' L1 does not affect the order of development in child SLA, (Ellis 1994, p.57). This again is consistent with the implicit concept of universal grammar as enunciated by Chomsky, (Chomsky 1965.) And as Ellis states in regards to the LAD, "the idea that there is an independent linguistic faculty which determines SLA is tenable," (Ellis 1994, p.14). The caveat is that L2 learners seem better able to learn core rules as compared with L1 learners who are better capable with acquiring specific rules. (Corder p.168) Possibly indicative that L1=L2 is not such a clean proposition (for children), Dulay's and Burts earlier results for Spanish children seem less conclusive in support of L1=L2.

Corder (1967) does not contest the relevancy of LAD in SLA but rather sees an L2 learner as having a a different set of hypotheses to test than a native learner exclusively studying

his or her mother tongue (p.168). But can we describe the leaning process as being essentially different between L1 and L2 learning because of Corder's insights? Or can one say that the L1 learning strategy may be somewhat different to an L2 learning strategy, instead. He infers that the SL learner's use of the LAD is largely facilitated by having existing input of his "mother" language. Suffice it to say, the differences between language acquisition and language learning strategy will not be further explored given the significant attention already given to defining and framing the question.

Largely contradictory to Corder's theories is audiolingualism. Though conceptually implicit, audiolingualism includes the concept of SLA as being interfered by the first language, (Baker p.118.) But as seen by the later evidence of Dulay and Burt, this earlier theory is not supported. Or by Corder's contention, SLA is reinforced by previous L1 learning (p.168). As well, Chomsky's research gave very little importance to audiolingualism further limiting support for the hypothesis that SLA is negatively affected by L1 acquisition, (Ellis p.43.)

The process of early bilingualism for example may also reduce the possibility of one language being dominant over the other and causing either interference (if one goes with the audiolingual approach) or facilitation as expressed by Corder. Saunders brings up this issue of early bilingualism in his study relating to the L1 child vs the L2 child in examining German and English speaking students (Mangubhai, p. 1.16.) He appears to conclude that the L2 learner at this pp2 stage enjoys many favorable conditions that an L1 learner would generally experience. Again, the stage of childhood would seem to be relevant in

reinforcing implicit learning which is seen as being more effective than explicit learning by the likes of Krashen and Lenneberg.

#### 4.0 Conclusion

Facile hypotheses that simply state that all children experience only implicit learning in the context of L1=L2 do a disservice to the inherent complexities of language learning theory and modeling. Definition and dimensional parameters are also important as launch points for further investigation of the question which a short paper as this one can not hope to "fully" answer.

Further, a paper as short as this one can not hope to comprehensively summarize all the main supporting (or contending) models, theories and conceptualizations about L1=L2. It is suffice to say that the more modern and up to date research as supported by the likes of Chomsky,(1959, 1965), Krashen (1982), Lenneberg (1967), Zobl (1995), and French and Axelman (2002) give credibility to the importance of implicit learning processes during the childhood years. Dulay and Burt (1974) underscore the similarities in L1 to L2 learning with Corder (1967) and Ellis (1992) suggesting some differences in learning strategies between SLA and L1 learning.

However, it would seem that there is a need to more finely define the period within childhood development as to when explicit learning is excluded or very near excluded, when L1 = L2 is particularly heightened and the impact of individual differences and affective factors. Anecdotally, non-linguistic specialists might benefit from having the

period of childhood better described up front and that explicit vs implicit might also be looked at in terms of points on a continuums -such as "deep explicit vs light explicit." No doubt psycho-linguists will be better able to come up with more technically sound terms and descriptions-if they already have not done so.

With the above references and limitations in mind, combined with observations as a former teacher in elementary to middle school EFL teaching, this author would conclude the following. The evidence to date indicates that for the most part, language learning in L1 and L2 are similar (though not identical) and implicit, especially in pp1 and pp2 development stages. That children in pp3, particularly in the latter years and with certain individual factors in their favor can experience some degree of explicit learning, even if in so called "lighter" forms.

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