

SIGNIFICANCE OF SYNTACTIC CONSTRUCTIONS IN CHILDREN L1 ACQUISITION

Assist lect .ibrahim Ali zghair

College of Medicine- Baghdad University

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Summary:

Many cross-linguistic studies have shown that children adopt the basic features of their target language at an early stage, although they may go through a long period in which they use grammatical morphology similar to the target. Researchers have abandoned old "all-or-nothing" theories of grammatical development in favor of more complex models including morphological, phonological, pragmatic, and processing-discourse components. Studies on bilingualism have revealed that learners separate the two language systems early on, yet can use both interactively, as evidenced by their code-switching and code-mixing behavior. Technological improvements have allowed us to study grammatical interpretation in learners of all ages and to create "high-density multimedia corpora" that allow us to study the distributional aspects of learners' input and its consequences in greater depth. This will lead to more complex and multidisciplinary models that incorporate interindividual variation and socioeconomic influences. Methodological advances in language learning enable academics to contribute to theoretical linguistics.

INTRODUCTION

The process through which children and young children learn their first language(s) is a major focus of linguistic theory and cognitive research more broadly. The evolution of language is both driven by natural skills and modified by the environment, as there is a widespread agreement that humans are uniquely suited to

this job (Nuessel, 2008:327). Although there are many diverse perspectives on the intrinsic processes and the extent to which they are influenced by the environment, any theory has to take into account the fact that a child's exposure to language is just a small part of what determines how well they learn language and grammar (Sandler, 2010:298).

Children hear the words of adults, not the abstract grammatical structures, yet they nonetheless learn a system of categories and norms that is structured in a hierarchy (Ntelitheos, 2022:151). They receive a limited number of words and phrases from their parents, but they are able to construct and comprehend sentences that are much more complex and varied, including many that are grammatically incorrect in the adult "input" language (Cornips, 2014:128).

Relationally, "positive" role models are introduced to the young (possible sentences in his language). However, they also acquire the ability to speak the unspoken language. The complex and highly abstract set of rules that make up a kid's native language's grammar are something that normally emerges in any child who follows a conventional course of development (Alharbi, 2022:18). Without the advantage of direct correction, teaching, or knowledge about grammatical errors, they achieve this in a very short amount of time due to fairly little evidence. Additionally, the language of the people around them does not always clearly illustrate the concepts that children are learning (Shim, 2016:8).

The purpose of this paper is to convey the fundamental concepts behind the techniques used to investigate syntax which helps children to acquire new languages, as well as to examine the many approaches to language learning. Since the paradigm of standard generative grammar proposed innateness, the corollary argument has been present in the study of language (Chomsky, 1965). To add to the continuing debate, we will try to summarise the syntactic data supplied by linguists whose research focused on the mechanics of language learning and explain the key issues encountered by both theoretical strands (Sharma, 1975:323).

Our objective is to dissect the information offered by phenomena like syntactic bootstrapping, stimulus impoverishment, alternative stimulus realisations, and non-standard syntactic constructs. Furthermore, we will suggest that a more credible and all-encompassing explanation for the mechanisms responsible underlying language acquisition may be found by incorporating these results into a usage-based framework.

AIM

This study covers the core theoretical concerns and empirical results from studies of syntax learning across language families. The study's goal is to determine the basic problems in the study of syntax learning, including the relative importance of learners' information and natural propensities for language acquisition. In addition, it attempts to provide an examination of syntactic evolution throughout time. The study will focus on the effects of age on learning a first language, a second language (L2), and a third language (L3) are also investigated.

Methods for studying syntactic growth will be presented, and the importance of both environmental and genetic factors in language learning will be discussed. This study will offer three distinct theoretical frameworks for understanding syntactic development the "generative, Optimality Theory", and usage-based frameworks along with empirical data on learner input to inform the ongoing discussion between these camps.

CHALLENGES OF LANGUAGE ACQUISITION RESEARCH

Syntactic research is defined by heated discussions as follows:

- 1- The role that both nature and nurture play essential role in language acquisition, namely the different contributions of the input of language learners and intrinsic predispositions for language learning.
- 2- The progression of syntactic development through time
- 3- The effects of age as well as the distinctions between learning a single and two languages (O'Neill, 2014:363).

As a starting point, these discussions centre on the "logical difficulty of language acquisition," which arises from the fact that children learn only a limited, non-systematic subset of their target language. However, they acquire the ability to make, comprehend, and evaluate an endless number of phrases and sentence patterns (Poeppel & Omaki, 2008:233). Consequently, it is reasonable to infer that children generalise beyond the scope of their information, even while that data does not itself include such generalisations, with the exception of isolated statements (Moranski & Ziegler, 2020:204).

There are two ways in which children's generalisations might stray from the target language: they can be too restricted, in which case the target may have structures that are not addressed by the child's generalisation, or they can be too broad (Fettes & Karamouzian, 2018:219). Some Italian youngsters may wrongly generalise that all Italian sentences contain an overt subject because they hear input phrases with overt subjects, noun phrases. All of the input sentences in this scenario have subjects that have been removed, indicating the existence of subject drop in Italian (Shively, 2018:226).

This may be useful in preventing youngsters from developing inaccurate generalisations. The alternative possibility is that the child's generalisation is too broad, and the set of sentences it expects is a superset of such set of phrases that are grammatical in the target language (Poeppel & Omaki, 2008:236). For instance, kids in Germany often hear sentences where the subject is missing from the topic sentence . This may cause German schoolchildren for instance to wrongly generalise subject deletions to all sentential contexts (Moranski & Ziegler, 2020:227).

MEYTHODS OF SYNTAX ACQUISITION

Researchers in the field of acquisition have devised a wide variety of techniques, for instance (i) "naturalistic sampling", (ii) "experiments", and (iii) "semi-structured elicitation", in order to deal with the problems stated above. Learners' natural speech

is captured on audio/video during casual conversations with loved ones, peers, or researchers to provide authentic data (Thothathiri & Snedeker, 2007:126).

Learners and their conversation partners are recorded in naturalistic sampling, often without the participants' knowledge. Thus, the recording environment is quite similar to the real-life condition being studied, and students are not likely to develop specific response techniques, even if samples are gathered frequently.

A. Ecological Validity

There is substantial ecological validity in naturalistic sampling. In addition, learners of any age, level of intelligence, or proficiency in the target language may contribute realistic samples, and recordings of their everyday conversations with native speakers can serve as input samples for machine learning models (Friedemann & Rizzi, 2014:17). Unlike other types of samples, naturalistic samples are not limited to studying one specific kind of building but may instead be (re)analyzed in terms of a wide variety of phenomena. There is no need for specialised stimulus materials or a profound familiarity with the target language to conduct a naturalistic sample (Frost & Monaghan, 2020:321).

Because of this, it is perfect for getting a quick, high-level perspective of the intake and output of students. However, reducing the amount of oversight from the researcher might result in unreliable samples since students may discuss other subjects or use unrelated vocabulary or grammar (Kuiper & Nokes, 2014:86).

B. Low-Frequency Structures

Low-frequency structures like embedded queries are seldom represented in realistic data. No solution can be found by combining the data of several students since doing so introduces sampling mistakes and fails to account for differences between students (Rizzi, 2003:98). Naturalistic data typically contain recurrent word-forms and phrases that may be components of formulaic patterns; therefore, it is important to remember that even the frequent recurrence of a particular structure cannot simply be considered as proof for its acquisition. For example:

(1) "Where's the key/car/cat"...? "Where's the X"?

As a result, it is possible to incorrectly judge students' abilities. Relationally, when students are involved in simple tasks that need simply imitations, item identification, and elliptical replies, it is possible to underestimate their level of understanding. Studies on the semantic features of quantifiers, co-reference, etc. are hampered since naturalistic samples do not give information regarding learners' interpretation of their utterances (Fettes & Karamouzian, 2018:227).

C. Elicited Production Experiments

Researchers are unable to systematically control and investigate factors that impact students' performance if they do not intervene in the recording circumstances (e.g. sentence length). They have conducted studies to determine whether or not a change in one or more factors has an effect on the behaviour of speakers (Hopp, 2013:236). Procedures that adhere to standards guarantee that results can be compared, and excluding models or feedback that could occur in natural speech eliminates certain possible sources of error. Furthermore, in certain investigations, the use of stimuli may facilitate the identification of learners' goals and interpretations (Crain, & Thornton, 2006:116).

Participants in prompted imitation studies are instructed to repeat verbatim utterances. Since participants cannot recall complicated sentences holistically, they must use their own grammar to reconstruct them, which might provide insights into learners' understanding. Many investigations only utilise elicited imitation as a first step since high task demands and incomplete memory of targets might make findings difficult to interpret (Demuth, 2010:312).

In prompted production trials, students are given cues to develop targeted structures, such as queries like (2a) or negated statements like (2b). Learners' ability to generate the goal or deviate in ways that reveal their syntactic understanding may be

inferred from their replies. A number of experiments on productive use of language ask students whether they can successfully use a structure using unfamiliar terms.

(2) a. *"The dog is eating something, but I cannot see what. Can you ask the puppet?"*

b. *"I'll say something and then you say the opposite".*

c. *"This is a wug. These are two...?"*

D. Repeat Syntactic Structure

The phenomenon of syntactic priming, wherein speakers use the same syntactic structure in seemingly unrelated statements, has also been studied experimentally. For instance, after being exposed to or creating passive prime statements, speakers are more likely to switch to using passives themselves (Crain & Thornton, 1991: 312). Such priming occurs among learners, when the primes and learners' own products include distinct words. This indicates that learners have abstract syntactic representations that may be triggered by priming. If, on the other hand, priming only happens when the prime and the learner's output both use the same verb, then the learner's syntactic representations are not abstract but lexically constrained (Birner & Ward, 2009:1167).

There are a variety of approaches to assess students' grasp of syntactic constructs and grammatical markers; for example, teachers may have kids act out sentences using playthings, or they could have them choose images that correspond to what they've heard in a passage, as in (3a) or (b) (3b) above.

Preferential gazing tasks may be used to determine which of two visual stimuli receives more of a student's attention while an aural stimulus is also being given to students of a younger age. Alternatively, one might ask students to evaluate the veracity of a statement after presenting them with a picture or a tale, as in (4).

(3) a. *"The girl is hitting the boy"*

b. *"The girl is being hit by the boy".*

(4) *All the cows are in the corral, Is this true?*

E. Grammatical Experiments

Students as young as three may be subjected to grammaticality judgement trials in which they are asked to inform the experimenter if a phrase is grammatical or to choose between a grammatical utterances versus an ungrammatical variations of this speech. To investigate how learners' syntactic processing influences their output and comprehension, researchers have turned to "online-methods that are sensitive to the time-course of processing" in recent years (Kupisch & Rothman, 2016:525). These types of studies often use audio or visual stimuli and assess students' response times, or they record students' eye movements to identify where their concentration is at various stages of the understanding or production process (Crain & Thornton, 2000: 213).

Some scientists augment naturalistic and experimental data using semi-structured elicitation because of the possibility that experimental performance is impacted by memory issues, task-induced strategies, or difficulties in concentrating on key components of the stimuli. Semi-structured elicitation strategies employ films or games to stimulate the generation of rich and similar speech samples while maintaining a conversationally realistic setting (Chomsky, 1965:85).

It is conceivable to employ form-focused strategies to go further into certain constructs, such playing games with contrasting colour and size to tease out noun phrases that include colour and size adjectives. Meaning-focused tasks, on the other hand, allow us to investigate how students store specific meanings; for instance, elicitation games for ownership transfer constructions, in which students must specify which food they give to which animal; see, for instance, (5a) vs (5b).

(5) a. *"I give the bear the honey pot".*

b. *"I give the honey pot to the bear".*

NATURE AND NURTURE IN SYNTAX ACQUISITION

In order to explain how children generalise beyond specific input utterances while simultaneously avoiding or recovering from wrong generalisations without

systematic verbal corrections, any model of syntactic development must handle the "logical dilemma." We will break down the current discussion around this issue by examining three fundamental approaches: "the generative method, the usage-based approach, and Optimality Theory". These strategies have prompted experimental investigations on the significance of genetic predispositions and the perspectives of children's input.

A. Theoretical approaches

Researchers that study generative acquisition often postulate the existence of Universal Grammar, an intrinsic process for learning a new language "UG" (see de Villiers and Roeper, 2011 for an overview". Children's hypothesis space is limited by a set of intrinsic universals as stated. Therefore, kids can only draw valid conclusions or draw conclusions that may be rejected without being corrected directly (Guijarro-Fuentes & Schmitz, 2015:198).

Chomsky (1981) argues that all human languages have UG properties such as substantive universals (i.e., innate tendencies for grammatical categorization) and formal universals (i.e., well-formedness restrictions for syntactic representations). The "Structure-Dependency Principle" is one of the universal formal principles (Lillo-Martin, 2021:364).

It is realized that syntactic structure, and not temporal sequence or other non-structural features of language, is what determines how syntactic operations are carried out. With this rule in mind, it is important for kids to know that sentence pairings, like (6), do not always result in inquiries being created by fronting the "first auxiliary or the third word of the utterance" (Kupisch & Rothman, 2016:368).

1. Syntactic Operations

The syntactic operations must have an effect on parts that fall under a certain syntactic category or are located in a specific syntactic place, as the main clause auxiliary in English question construction.

(6) a. "The rooster is eating."

b. "Is the rooster eating?"

The Principles-and-Parameters model of generative grammar and the Variational Typological Approach both have distinct perspectives on the existence and significance of such intrinsic restrictions in learning (Chomsky 1981). When discussing formal universals, one must distinguish between (i) overarching rules that account for the common features of all languages, (ii) criteria that provide students a limited number of possibilities.

In this sense, generative linguists recognise that languages may vary in where subjects appear in sentences and how they are explicitly realised. Subjects in English must be clearly realised (e.g., (7a) vs. (7b)), but in Italian they may be removed when their referents can be deduced from context. Clusters of syntactic qualities may likewise be captured by means of parameters (Jaeggli and Safir, 1989).

Contrast the obligatory-subject nature of English, which necessitates subject expletives for verbs that fail to pick a subject, with the optional nature of Italian (see e.g. (8a) vs. (8b)). In addition, in English, the subject of an embedded sentence may only be retrieved if there is no complementizer (9a), although in Italian, the same expression is valid either way (9b).

Parameters in the Principles-and-Parameters model represent this grouping when they are connected to sets of syntactic features. For instance, [-pro-drop] in English has different behaviour for all three characteristics than [+pro-drop] in Italian. The acquisition of a set of grammatical qualities is assumed to follow naturally from i learning the vocabulary and (ii) adjusting the model's parameters to the desired values (Chomsky 1989:489).

- (7) a. (Giovanni) parla
 John speak-3sg-prs
 "John speaks"

b. John speaks

- (8) a. It rains

b. Piove.

Rains 'It rains'

(9) A. *Who do you think (*that) will leave?*

B. *Chi credi che partirà?*

Who think-2sg-prs that leave-3sg-fut

'Who do you think will leave?'

II. Derive Linguistic Universals

For the first iterations of the generative grammar theory, intrinsic formal universals were thought of as language-specific. In more recent, stripped-down iterations, generative scholars have looked to more broad cognitive principles—such as efficiency rules for applying syntactic operations—to derive language universals (Chomsky 1995, 2001). There have been rethinkings of other fundamentals as well. As an application of the basic concept that operations on a given level of cognitive representation must relate to features of units at that level, the Structure-Dependency Principle may be seen as a domain-specific effect (Eisenbeiss 2003, 2009).

Thus, it is clear that syntactic operations, such as the reordering of words in question formulation, may only refer to syntactic units (such as heads and phrases in certain syntactic locations) and not to qualities unrelated to syntactic structure, such as the linear positioning of a word. The use of this idea goes well beyond the study of languages (Clahsen & Sonnenstuhl, 1995:79).

The chess rules, for instance, do not specify the weight or size of the pieces; instead, they refer to the pieces themselves as functional units (*king, pawn*, etc., the smallest one, etc.). Parameters were also rethought, since they had previously been understood to relate to a wide variety of linguistic features such as missing subjects, awkward word orders, and illogical morphological markings (Slobin, 1966: 22).

All parameter values in modern generative models, however, are tied to characteristics of so-called functional categories that convey grammatical qualities and are actualized by function words or grammatical morphemes (Chomsky 1989). Examples of

realisations of the functional category INFL(lection) that project to an Inflectional Phrase include subject-verb agreement indicators that are linked to subject realisation parameters (IP). Extractions from embedded clauses rely heavily on the features of complementizers, therefore they are seen as realisations of the functional category COMP (lementizer) which predicts a CP and a set of determiners.

They are seen as manifestations of the functional category DET(erminer), the DP's head, and which demonstrate variation in definiteness and specificity marking across languages. A lexicalist model would suggest that by learning the features of the lexical items that encode the corresponding functional categories, children may more accurately set parameters and construct projections of functional categories.

- (10) *Gestern*_{non-subject phrase} *aß*_{verb} *ich* *Hühnchen*.
 Yesterday ate I chicken
 'Yesterday ate I chicken'

B. Input and Intrinsic Tendencies

Numerous research has looked at whether or not children truly adhere to the limits proposed by theoretical linguists. For example, it has been proven that children adhere to the Structure-Dependency as early as is practicable to test them. When forming inquiries with two auxiliaries, they do not just front the first auxiliary as in (11a). In other words, they do not restrict themselves to doing math with respect to a straight line's location. Instead, they make phrases like (11b) (Koráb & Murinova, 2018:219).

It is apparent that they seem to be aware that the subject and auxiliary of the main phrase in an English question are switched around, a syntactic action that modifies an element's position in the sentence. It has been argued by Pullum and Scholz (2002) that children may be taught to avoid making errors like (11a) when presented with wh-questions containing two auxiliaries (11c).

- (11) a. * *Is the farmer who __ running is bald?*
 b. *Is the farmer who is running __ bald?*
 c. *Where's the other car that was in here?*

Although sentences like (11b) and (11c) could show up sometimes in written corpora, they make up less than 1% of "child-directed speech corpora". Thus, it seems that children's information is insufficient to generate the proper generalisations in the absence of intrinsic restrictions (Biersack, Kempe, & Knapton, 2005:322).

Simulated computer experiments have shown that limitations are useful, for example, a non-overlap requirement for components, limiting conditions on head-argument dependence connections, and a restriction to binary branching may help an unsupervised machine learning mechanism learn complicated syntactic structures of a high degree of correctness (Birner & Ward, 2009:1179).

It is important to remember that certain grammatical restraints have only lately been developed from broader ideas. Thus, it is reasonable to assume that children's grammatical generalisations are limited by robust general cognitive rules, as shown by both empirical and computational research (Fettes & Karamouzian, 2018:126).

LINGUISTIC DEVELOPMENT: SYNTACTIC DEVELOPMENT

Acquisition models must not only address the logical problem only; they must also explain how syntax emerges on the basis of the proposed constraints. In addition, they explain input properties and tackle the bootstrapping problem. Children must identify the grammatical distinctions and the corresponding morphological forms of their target language (Hewson & Bubenik, 2006:158). Moreover, such models must explain why this process is characterized by initial omissions of grammatical morphemes and subjects or other arguments (Friedemann & Rizzi, 2014:32).

A. Bootstrap Problem and Syntactic Classification

Some studies believe that children employ phonological clues to identify components when confronted with the bootstrapping issue. This is conceivable because words cluster into prosodically cohesive units, which are rhythmically as well

as intonationally ordered and approximately correlated to grammatical sentences and phrases (Pino-Mejías et al., 2004: 253).

Dispersion patterns are also hinted at by other indicators: In every language, it is simpler to forecast the next sound inside a word than across word borders, since certain sounds are often mixed. Youngsters may utilise such information to segment data, but semantic bootstrapping proponents say that this is insufficient for syntactic classification (Dale, 1980:95). Children employ intrinsic form/meaning linkages to distinguish grammatical categories in input. Specifically, Pinker (1984) hypothesised that children have natural linkages between language and mental categories, such as nouns and things, verbs and actions, or agents and subjects (Kim & Cha, 2006:151).

B. Construct Preliminary Representations

Bootstrap Problem and Syntactic Classification permit children to construct preliminary representations of phrases' structures with knowledge of their referents and their intrinsic understanding of how phrases are put together. But for languages spoken by adults, the connections that Pinker posits do not hold. Thus, kids would have to get over their preconceived notions or restrict themselves to reading only dynamic phrases, and how they might do either of these tasks is not known (Somorjai & Raudys, 2002:433).

This has led some scholars to make broader assumptions, such as the existence of a universal predicate/argument distinction. It is argued that through phonological and distributional bootstrapping, children may construct incomplete sentential representations that include component boundaries (Shively, 2018:200).

(12) *The chicken is chased by the dog*

(13) [[... dog] [chases chicken...]]

ACQUISITION OF QUESTIONS AND EMBEDDED CLAUSES

Complementizers, like *that* and *wh-elements* like *who*, are located in the CP-layer of sentences, which contains *wh-phrases*. Also, in English inquiries, an auxiliary must occupy the COMP position, necessitating the inversion of subjects and

auxiliaries or the inclusion of the "dummy auxiliary do if the utterance" already lacks a modal or auxiliary verb, for example (14) (Poeppel & Omaki, 2008:117). Because of this, much research examining language learning has concentrated on the subcategories of COMP, such as "(wh-)questions, subject-auxiliary inversion, do-support", as well as embedded clauses (Moranski & Ziegler, 2020:215).

Listeners must also connect the *wh-element* ("filler") in inquiries and relative sentences to the point where it is understood ("gap"). For example, in (14b), native speakers must consider the *wh-element who* as if it were the subject of the embedded clause. But in (14a), they must interpret whoever as the object of the sentence (14c). To that aim, researching wh-questions may shed light on how kids pick up on and use filler-gap dependencies in their own speech.

- (14) a. *(Where) can he go?*
 b. *Who do you think ___ saw Mary?*
 c. *Who do you think Mary saw ___?*

Complementizers and *wh-elements* tend to emerge in the third year, while *wh-elements* may infrequently exist as early as the two-word stage. However, first queries that arise on their own often include elements that make them seem formulaic, such as (16). While children may properly identify agreement in other situations (e.g., (17a) vs. (17b)), in these questions they fail to adjust the "auxiliary portion" of the formula to achieve target-like agreement (e.g., (17)). This indicates that at least some toddler inquiries are formulaic rather than based on realistic adult representations.

- (15) *Where's the car/dog/cat? -> Where's the X?*
 (16) **Where's the cars?*
 (17) a. *They are running.*
 b. *He is running.*

ACQUISITION OF CO-REFERENTIALITY

Research on the development of co-referential relations between referential terms like "*John*", "*he*", and "*himself*" and pronouns like "*he*" and "*himself*" also focuses

on problems of maturity and methodology. Co-reference is limited in generative models by "Binding" Principles (Chomsky 1981). In (18a), for instance, *the man* and the reflexive *himself* cannot both be co-referential (Ma, Bell, & Mattiello, 2022).

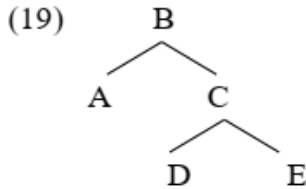
Only *John* may serve as an antecedent for it. Binding Principle A captures this idea by mandating that any reflexives inside a sentence must be "bound," or co-referential, with a c-commanding word. The c-command connection is a structural one, meaning that if two phrases X and Y do not predominate each other in the syntactic tree, then X will c-command Y, and vice versa (Lillo-Martin, 2021:325). For any branching node in the tree that dominates X. In (19), for instance, node A c-commands C, D, and E, node B c-commands none, node C c-commands A, node D c-commands E, and node E c-commands D. Only the noun phrase "John" in (18a) c-commands the reflexive *himself* inside its sentence (Kupisch & Rothman, 2016:12).

In order to adhere to Principle A, it follows that *John* and *himself* must be co-referential. According to rule B, pronouns should not be forced to remain inside the context of the phrase in which they are used. Within the same phrase, in (18b), *John* c-commands *him*. *Him* would be bound, i.e. co-referential with a c-commanding noun phrase, if *John* and *him* were co-referential (Kim & Cha, 2006:151).

This is against rule B. However, since *the guy* is not included in the same sentence as *him* in (18b) and *he* in (18c), all three may be co-referential. According to C's principle, free referential expressions include names like *John's*. Consequently, *John* cannot be co-referential with *he* or the *guy* in (18c) (Hewson & Bubenik, 2006:76).

Any other combination would bind it to these components. In contrast to blocking, a referential expression from becoming co-referential with a preceding pronoun, principle C is a structural constraint that prevents binding under the c-command (Guijarro-Fuentes & Schmitz, 2015:15).

- (18) a. *The man said that John was washing himself.*
 b. *The man said that John was washing him.*
 c. *The man said that he was washing John.*



ACQUISITION OF QUANTIFICATION

Most recent studies on learning to quantify have focused on universal quantifiers such as *every*, which designate two-place interactions between two sets of persons. These quantifiers take their domain from the noun they are used with. When reading (19), adult native speakers focus on the set of *boys* involved in the circumstance (rather than the set of all *boys*) and ask themselves whether any of those guys are elephant-riders (Frost & Monaghan, 2020: 231).

That herd of *elephants* is not what they mean. The subject of how children learn to use universal quantifiers arises since sentences including these words are uncommon in children's input. Any solution to this topic must take into consideration the prevalence of inaccuracies in comprehension research (Friedemann & Rizzi, 2014: 315).

The first form of inaccuracy is frequently called "overexhaustive search" or "exhaustive spreading"; for example, if a youngster sees an image of *three boys* and *three elephants*, and *each boy* is seated on *an elephant* and *each elephant* has *a boy* on it, the *child* would properly accept the description (19).

Though adults can see the logic of a phrase like (19 a), children typically reject it because of the "additional" elephant, despite the fact that it does not change the factual basis of the sentence. When pressed for an explanation of their decision to reject the phrase, many kids will reference to the elephant without a rider (Fettes & Karamouzian, 2018:62). It seems that they do not properly limit the use of universal

quantifiers to the noun phrases they modify. The second sort of inaccuracy complements the first (underexhaustive search/pairing): "*kids tend to overlook people who aren't in their pairing but should be taken into account anyhow*" (Dale, 1980:147).

Children will occasionally believe the answer (20) when the image depicting the problem displays multiple automobiles, all of which are in garages, and yet another car that is not in a garage. Bunny spreading is the name given to the third kind of errors: Children's truth-value assessments may occasionally go so far as to include non-mentioned visual elements of a sentence's illustration. An image of three rabbits, each munching on a carrot, and a dog, munching on a bone, is rejected (21) as a description (Biersack, Kempe & Knapton, 2005:249).

(19) a. *Every boy is riding an elephant.*

b. *Every elephant has a boy on it.*

(20) *Every car is in a garage.*

(21) *Every bunny is eating a carrot.*

CONCLUSION

The above discussion has shown that the present study concerning syntactic development is concerned with the following issues:

1. The relative importance of the learner's environment and their own language acquisition,
2. How syntax evolved through time.
3. How age plays a role and what it may mean for monolingual, bilingual, and L2 learning.

Experimental analyses of learner input and cross-linguistic corpora have shown universal prosodic preferences, which provide light on the relative importance of these two factors. A kid's ability to identify component boundaries and classify lexical items is aided by the distributional and discourse features of speech aimed at the child. The words from a certain lexical category can assist in identifying patterns of



recurrence and variation in sets of variants, or the co-occurrence of high-frequency functional. Additionally, input frequency's significance has been investigated extensively as of late.

The need to assume limits on children's hypothesis field for morpho-syntactic generalisations remains, notwithstanding the findings of these investigations. While kids sometimes go off course, their blunders are seldom completely at random. When it comes to correcting inaccurate generalisations, however, direct negative evidence in the form of systematic verbal corrections is too sporadic, inconsistent, and unclear to be effective.

So, to solve the logical challenge of language acquisition, the majority of contemporary methods to syntactic development presume are restricted by the children's generalisations. And there seems to be developing agreement on the nature of these limitations. The most up-to-date generative models attempt to reconcile the two types of models by deriving universal constraints for language representations from general cognitive constraints.

REFERENCES

- [1] Alharbi, B. (2022). On the Syntax of Existential Sentences in Najdi Arabic. *Languages*, 7(1), 18. <https://doi.org/10.3390/languages7010018>.
- [2] Birner, B. J. & Ward, G. (2009). Information structure and syntactic structure. *Language and Linguistics Compass*, 3(4), 1167-1187. doi:10.1111/j.1749-818x.2009.00146.
- [3] Chomsky, N. (1981). Knowledge of language: Its elements and origins. Philosophical Transactions of the Royal Society of London. *Biological Sciences*, 295(1077), 223-234.
- [4] Clashesen, H., Hong, U. & Sonnenstuhl-Henning I. (1995). Grammatical constraints in syntactic processing: Sentence-matching experiments on German. *The Linguistic Review*, 12(1). doi:10.1515/tlir.1995.12.1.5.
- [5] Cornips, L. (2014). Socio-syntax and variation in acquisition. *Linguistic Variation*, 14(1), 1-25. <https://doi.org/10.1075/lv.14.1.01cor>.
- [6] Crain, S., & Thornton, R. (2006). *Acquisition of syntax and semantics. Handbook of Psycholinguistics*. <https://www.sciencedirect.com/science/article/pii/B9780123693747500298>.

- [7] Crain, S., & Thornton, R. (2000). *Investigations in universal grammar: A guide to experiments on the acquisition of syntax and semantics*. London: MIT Press.
- [8] Dale, M. B. (1980). *A syntactic basis of classification. Classification and Ordination*, 93-98. doi:10.1007/978-94-009-9197-2-12.
- [9] Fettes, M., & Karamouzian, F. M. (2018). Inclusion in education: Challenges for linguistic policy and research. *Language Policy*, 219-235. doi:10.1007/978-3-319-75963-0-13.
- [10] Friedemann, M. & Rizzi, L. (2014). *The acquisition of syntax: Introduction. The Acquisition of Syntax*, 1-25. doi:10.4324/9781315839899-1.
- [11] Frost, R. L., & Monaghan, P. (2020). *Insights from studying statistical learning: Current Perspectives on Child Language Acquisition*, 65-89. doi:10.1075/tilar.27.03fro.
- [12] Guijarro-Fuentes, P., & Schmitz, K. (2015). The nature and nurture of Heritage Language Acquisition. *Lingua*, 164, 239-250. doi:10.1016/j. Lingua.2015.05.008.
- [13] Hewson, J., & Bubenik, V. (2006). From case to adposition. *Current Issues in Linguistic Theory*. doi:10.1075/cilt.280.
- [14] Hopp, H. (2013). Grammatical gender in adult L2 acquisition: Relations between lexical and syntactic variability. *Second Language Research*, 29(1), 33–56.
<https://doi.org/10.1177/0267658312461803>.
- [15] Kupisch, T., & Rothman, J. (2016). 18. interfaces with syntax in language acquisition. *Manual of Grammatical Interfaces in Romance*, 551-586. doi:10.1515/9783110311860-021.
- [16] Lillo-Martin, D. (2021). *Chomsky and signed languages. A Companion to Chomsky*, 364-376. doi:10.1002/9781119598732.ch22.
- [17] Ma, Q., Bell, R. W., & Mattiello, E. M. (2022). *Nutrient acquisition with particular reference to subsoil constraints. Subsoil Constraints for Crop Production*, 289-321. doi:10.1007/978-3-031-00317-2_12.
- [18] Moranski, K., & Ziegler, N. (2020). A case for Multisite Second Language Acquisition Research: Challenges, risks, and rewards. *Language Learning*, 71(1), 204-242. doi:10.1111/lang.12434.
- [19] Ntelitheos, D. (2022). Compounding in Greek as Phrasal Syntax. *Languages*, 7(2), 151.
<https://doi.org/10.3390/languages7020151>.
- [20] Nuessel, F. (2008). The Acquisition of Syntax in Romance Languages. In Torrens V. & Escobar, L. *The Modern Language Journal*, 92(2), 327-328. <https://doi.org/10.1111/j.1540-4781.2008.00729.6.x>.



- [21] O'Neill, D. K. (2014). Assessing pragmatic language functioning in young children: Its importance and challenges. *Pragmatic Development in First Language Acquisition*, 363-386. doi:10.1075/tilar.10.20nei.
- [21] Poeppel, D. & Omaki, A. (2008). Language acquisition and ERP approaches: Prospects and challenges. *Early Language Development*, 233-255. doi:10.1075/tilar.5.12poe.
- [22] Roeper, T., & Villiers, J. D. (2011). The acquisition path for wh-questions. In *Handbook of generative approaches to language acquisition* (pp. 189-246). Springer, Dordrecht.
- [23] Pullum, G. K., and Barbara C. Scholz. "Empirical assessment of stimulus poverty arguments." *The linguistic review* 19.1-2 (2002): 9-50.
- [24] Sandler, W. (2010). Prosody and syntax in sign languages. *Transactions Of The Philological Society*, 108(3), 298-328. <https://doi.org/10.1111/j.1467-968x.2010.01242.x>.
- [25] Sharma, O. (1975). Syntax optimization for and parsing of patterns. *Computer Languages*, 1(3), 233-253. [https://doi.org/10.1016/0096-0551\(75\)90033-8](https://doi.org/10.1016/0096-0551(75)90033-8).
- [26] Shim, J. (2016). Mixed Verbs in Code-Switching: The Syntax of Light Verbs. *Languages*, 1(1), 8. <https://doi.org/10.3390/languages1010008>.
- [27] Shively, R. L. (2018). Naturalistic data in L2 pragmatics research. *Language Learning. Language Teaching*, 197-218. doi:10.1075/llt.51.09shi
- [28] Slobin, D. I. (1966). Grammatical transformations and sentence comprehension in childhood and adulthood. *Journal of Verbal Learning and Verbal Behavior*, 5(3), 219-227. [https://doi.org/10.1016/S0022-5371\(66\)80023-3](https://doi.org/10.1016/S0022-5371(66)80023-3).

أهمية التراكيب النحوية عند الأطفال في اكتساب اللغة الأولى

م.م. إبراهيم علي نزيير

كلية الطب - جامعة بغداد

ibrahim.a@comed.uobaghdad.edu.iq

الكلمات المفتاحية: بناء الجملة. اكتساب اللغة. التعلم

الملخص:

أظهرت الكثير من الدراسات اللغوية المتقاطعة أن الأطفال يتبنون الصفات الأساسية للغة المستهدفة في مرحلة مبكرة، على الرغم من أنهم قد يمرون بفترة طويلة يستخدمون فيها الصرف النحوي المشابه للهدف. لقد تخلى الباحثون عن نظريات "كل شيء أولاً شيء" القديمة للتطوير النحوي لصالح نماذج أكثر تعقيداً بما في ذلك المكونات الصرفية والصوتية والخطابية العملية والمعالجة. كشفت الدراسات حول ثنائية اللغة أن المتعلمين يفضلون بين نظامي اللغة في وقت مبكر، ومع ذلك يمكنهم استخدام كليهما بشكل تفاعلي، كما يتضح من سلوكهم في تبديل التعليمات البرمجية وخلط الرموز. لقد أتاحت لنا التحسينات التكنولوجية دراسة التفسير النحوي لدى المتعلمين من جميع الأعمار وإنشاء "مجموعات وسائط متعددة عالية الكثافة" تسمح لنا بدراسة الجوانب التوزيعية لمدخلات المتعلمين وعواقمها بمزيد من التعمق. سيؤدي هذا إلى نماذج أكثر تعقيداً ومتعددة التخصصات تتضمن التباين بين الأفراد والتأثيرات الاجتماعية والاقتصادية. تمكن الإنجازات المنهجية في تعلم اللغة الأكاديميين من المساهمة في اللغويات النظرية.