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Universal Grammar as a System for First Language Acquisition and Development: A Critical Review

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ABSTRACT

Contention of Universal Grammar (henceforth, UG) hypothesis is not a phantom so long as every cut-and-dried assumption and proposition is amenable to sustaining discredit and falsification. Cognitive scholars and linguists mesmerized by the trendy adherence to new presumptions; thanks to typological studies on numerous diverse languages, concur that children recruit different models of thinking which is nowise specific to a sire language. In an attempt to broach the assumption that language is too convoluted and complicated for human to learn, Chomskyan linguists have incubated on the idea of universal grammar for decays, by trying to inculcate their inferences and illations into language studies. To that end, this overview endeavors to zero in on and challenge universal grammar represented as a reproductive mechanism defying any developmental learning. Thus, universal grammar as a springboard for acquisition of language is set out for discussion regarding its lacuna, deficits, and drawbacks apropos of first language acquisition to enable a plausible conception of this premise, as being in vogue for decades. A broader footwork, discussing of suggestions, arguments, and empirical and theoretical evidences, will ensue.

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INTRODUCTION

The interest in the capability of children as for the gaining of verbal capacity, which stands out as the most conspicuous façade of uniqueness of human species, spurs mothers, plebeian, and scholars to contemplate more and mull over the process of language acquisition and development. However, the myth over the acquiring of language by a child, who is enjoying an underdeveloped thought, in such a short span of time and with so much celerity and velocity through a circumscribed exposure is unresolved.

The development and acquisition of language is an appealing subject to many scholars and researchers. However, mystery of the fact of the way is language is acquired cherishes the minds of many researchers and educators for ages. According to Bates and MacWhinney (1982), language is a complex, multi-vectorial problem space. However, the transition from an unstable non-verbal to a steady lingual communication in the guise of mastery of language by children is a convoluted phenomenon seeking to be viewed from different angles. It has been the disputable border which needs to be sketched and showcased in a unitary and single and stand-alone well-organized fashion.

Theories of language acquisition have been evolving through the ages, informed by the critiques directed to Chomsky. According to Chomsky (1981), the actual language production is hard-wired in a language system encapsulated in a black box in the brain.

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Chomsky attends to an internalized hardwired system assigned to the brain, which is a mathematically pre-specified grid likening instinct endued with an automatic formula having productive power for grammar production and decryption. However, the pros and cons of this theory are still in place where its rebuttal yet to be endorsed.

It is argued that the language acquisition is installed on the three platforms: behaviorism, nativism, and functionalism. The behaviorists propone that, learning is a conditioning procedure coming into effect either through association or a reward and punishment system, while nativism suggests that child is born with an innate knowledge (the LAD or UG) and predisposition for language that is universal in all human beings (Brown, 1994). Bates and MacWhinney (1982) maintain that functionalism insists on the fact that natural language forms created, constrained, governed, learnt, and utilized to serve communicative functions. For them, functionalism pinpoints anti-nativism. They further argue that linguistic theory of performance would be finally substituted altogether by functionalist theories; though, they are not in conflict with each other.

UG as a mentalist theory of innate language structured in a faculty in the human's brain impels fixed constraints incumbent on grammar ahead of any experience mobilized in a stimulus-free motif for acquiring of any particular language's grammar (Chomsky, 1981). This box, independent of other cognitive faculties, incorporates definite principles of languages that encapsulate the ken of abstract properties and that of the parameters, by which realized in different languages (Chomsky 1981, Cook 1988).

Universal grammar as a mentalist theory speculates that all humans are corporeally endowed with an innate language sector helping them acquire language grammar. UG rigs learners of every language with an abstract point d'appui upon which a natural language grammar is founded. This autonomous faculty contains a specialized abstract ken of principles realized by language parameters instigated by input. The conception of UG is sculptured within any specific language by the palpable language-particular properties (Chomsky, 1981).

To Chomsky (2007), all natural languages are structurally hierarchical and human is equipped with a special-purpose mental organ only responsible for first language acquisition. This specific and separate module enjoys a genetic program of an innate grammar inherently inborn blossoming through induction and analogy steering grammar growth which determines order of sentence. It is a toolkit of language acquisition allowing effortless, rapid, convergent building of any language (Jackendoff, 2002). Universal Grammar is a toolbox from which actual language select its categorical items (Dąbrowska, 2015). Universal Grammar hypothesis (UG) propounds that all speakers' brains represent a common set of syntactical constraints (Berent, 2008). An innate Universal Grammar (UG) denotes that languages have putatively in common "universal" patterns which appear arbitrary (Christiansen & Chater, 2009).

The Projection Problem and Subset Condition, explaining that the child language production is a subset of the adult language, leaves no pretext to remise the existence of an extraordinary system caring of first language acquisition. Language learners require a system to map and build their language on it to be able to understand and produce linguistic signals (White, 2003). In this sense, initial system is universal grammar which allows learner to reach at a grammar based on the input exposed to. UG dispenses grammars that are to be and not to be like set beyond the world outside beforehand through which learners find the capacity to deduce their language exposed to in a structured and predetermined order and specified timeline (White, 2003).

For Jean Piaget, a pro-Saussurian psychologist, language is a system of abstract sign relations of propositional and context-free linguistic representations that turn it into

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a mighty means for the developing of abstract reasoning. Vygotsky considers language as a social constructivism in which the role of social environment is sine qua non for molding personal construct, thought, and behavior of learners. Chomsky asserted that language universals can be inferred from a single language (Chomsky, 1980).

Moreover, interactionists take side at the environmental attributes (Lightbown & Spada 1999). Language, in a sense, develops from a convoluted interaction of innate aptitude and the linguistic environment. Child directed speech is deemed as a significant contributor to the child's language development. Interactionists don't schematize language acquisition from the child's experience and cognitive development but additionally underscore the influences of other skills and knowledge (Lightbown & Spada 1999).

Emergentism an approach in psycholinguistics which posits an interplay between biological (nativist) and environmental (empiricist) processes in language acquisition; that is, the importance of the input (or usage) for understanding how language acquisition works and the role of the processor-working memory interface in language acquisition, addressing problems of learnability and development. Emergentist perspective gives rise to emergent forms and behavior by interacting at all levels, from genes to environment (Elman et al., 1996; MacWhinney, 1998). The emergentist literature on SLA offers analyses for a representative range of phenomena, including grammatical morphology (Ellis 2006b), competition-based processing (MacWhinney, 2008) and the references, quantifier scope (O'Grady, 2007), and want to contraction (O'Grady et al., 2008).

CRITICAL OVERVIEW

The phenomenon of language acquisition is such a convoluted process that cannot be easily sketched and showcased in a unitary and well-organized fashion. The child language acquisition develops on a continuum of inconsistency and imperfectness to stability and equilibrium. In-between, the inter-language grammar geared to the constraints set by UG principles for first language acquisition.

To Chomsky, language-specific ken with which people are born is named Universal Grammar, or what O'Grady calls as "special nativism." The maturationists associated with Chomsky propound that access of the principles to the child is genetically timetabled at some determined time. The constructionist platform; however, does not believe in linguistic behavior change due to maturation, but rather takes changes as the result of assembly of structure. Early and later occurrence of a phenomenon paves the route to building up of and the transferring of an entity. For Chomsky (1995), there exists no place out of the mind/brain for the notion of language. Linguistic knowledge is in human language faculty or person-specific, internal or 'I-languages, where the principles and parameters are set to acquire and produce and understand utterances.

Universal Grammar (UG) connotes that the ability for language competence and performance is ingrained out of instinct as encapsulated in an inwardly modularized system of a formal universal grammar. Cognitive linguistics opposed this idea by proposing that language is built on representational and domain-general processing capacity model too where universal grammar spares any processing or parsing (Dabrowska, 2015). Chomsky's logical reasoning against behaviorism was built on the premises that language cannot be learnt in a sequential order of association and reprinting of abstract syntax through the observation of the use of language instances.

Language to Chomsky is sketched in a cognitive undertaking blossoming as an individual developmentally maturates, traversing a preplanned path asunder from the linguistically encountered quality or in-being of exposures– albeit needy of some

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minimum intake to instigate and rekindle this process. Converse to instantaneous model, maturational hypothesis stands out assuming that the UG principles are not at once available to the child; rather, the disparate principles abide with a general maturational timeline. Non-maturational view or what is known as the continuity hypothesis opposes instantaneous process of grammatical development of functional categories and assigns to it a continuous one which are the same for both adult and children and does not terminate in any stages of growth (Clahsen 1990/1991).

According to Ingram (1989), maturationists associate themselves with nativism. The maturationist, associated with Chomsky, propound that that access of the principles to the child is time-tabled genetically at some determined time. The constructionist platform, however, does not believe in linguistic behavior change due to maturation, but rather takes changes as the result of assembly of structure. Early and later occurrence of a phenomenon paves the route to building up of and the transferring of an entity.

According to Lightbown and Spada (1999), it is difficult to solely ascribe and impute children's uses of language forms to imitation and practice. It is a repository to claim, for certain, that language is programmed from birth in a faculty in a pre-specified timeline to blossom only by some triggering. Innateness is against the human's mental power to learn and create language. According to Brown (2000), this theory maims at the explanation of abstract nature of language regarding child's creativity and interactive nature of language acquisition.

Chomsky rationalizes against behaviorism, built on the premise that language is not acquired in a sequential order of association and reprinting of abstract syntax through the observation of the use of language instances only. Chomsky argued that the behaviorists provide no good account of why children out of the blue use language. He insisted why a child should utter a new sound or word when the child is not reinforced until after he or she has already said it whereas the children across the world utter the basic phonetic elements of language spontaneously. Behaviorism or what is known as the learning perspective (in which any physical action is a behavior), is a psychological philosophy built on the presumption that all things that organism does; namely, acting, thinking, and feeling, can and should be deemed as behaviors.

Language acquisition is not circumscribed to conditioning or habit-formation rather seeks processing in the form of rational and cognitive perception. Chomsky potently argue against the behaviorist school of language acquisition in that it goes astray being short of expatiating the creative aspects of human's linguistic capabilities. Instead, he believes that innate is must-have for human to enjoy language acquisition. Chomsky canvasses that children exposed to an impoverished language input are needy of the assistance of an innate system in order to acquire language. He goes on to proclaim that infants enjoy special mental function; namely, language acquisition device (LAD), of which work is to initially analyze the exemplified exposures of language a learner get across and then to assign grammatical descriptions to those encounters samples. Additionally, it must appraise the set of possible grammars that culminates from this process to find the one that best suits all the primary linguistic data. Chomsky has proposed that humans are born with language-specific knowledge called Universal Grammar.

As Olson (1986) purports, mothers are the most suppliers of input to children. Likewise, Snow (1977) underscores the significance of mothers' speech to their children's language. According to Lenneberg (1967), LAD functions successfully if only activated at a specific time- the critical period, what Brown (2000) identifies as a biologically pre-specified time in the life beyond which time language acquisition become difficult. The impoverished data available to the learner does not parallel the convolution of language

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knowledge actually mastered by normal children. The Projection Problem and Subset Condition explaining that the child language production is a subset of the adult language leaves no pretext to remise the existence of a an extraordinary system that cares for first language acquisition. First, language learners require a system to map and build his/her language on it to be able to understand and produce linguistic signals. In this sense, initial system is universal grammar that allows learner to reach at a grammar based on the input exposed to (White, 2003). UG dispenses grammars that are to be and not to be like in the world outside set beforehand through which learners find the capacity to deduce their language exposed to in a structured and predetermined order and specified timeline (White, 2003).

However, it is been evidenced that in some cases that children deprived of normal language exposure were later incapable of compensating the failure somehow endorsing the concept of CPH. Brown (2000) regards the child's language systematic at any stage in that the child is continually formulating hypotheses hinged upon the received input and then examining it in speech and comprehension. As the child's language develops, those hypotheses are constantly refined, restructured, or even sometimes discarded. The integrated system of nativist approach is advocated by Berko (1958), than a series of independent discreet items, insisting that children use to learn language. UG contains some principles common to all languages but with different parameters in them that need to be set instigated through linguist input provided in the given language.

To Chomsky (2007), all natural languages are hierarchical structurally and human is rigged and braced with a special-purpose mental organ only responsible for first language acquisition. This specific and separate module enjoys a genetic program of an innate grammar inherently inborn blossoming through induction and analogy steering grammar growth which determines order of sentence. It's a tool kit of language acquisition that allows effortless, rapid, convergent building of any language (Jackendoff, 2002). Universal Grammar is a toolbox from which actual language select its categorical items (Dąbrowska, 2015). An innate Universal Grammar (UG) denotes that languages have putatively in common "universal" patterns which appear arbitrary (Christiansen & Chater, 2009).

However, the issue of the innateness is the bone of contention and dissonance in the psycholinguistics field (Bates & MacWhinney, 1982). Chomsky and all the other generative grammarians are inhumed by Bates and MacWhinney (1982). However, Quartz and Sejnowski (1997), neural constructivists refute learnability and the poverty of the stimulus arguments. Chomsky has recourse to the nativism vista to delineate people possess a specific language learning faculty separate from other learning faculties. This provides the infant with a ready-made blueprint for the structure of language. Learning of the mother tongue means fitting patterns into the framework with which a child comes up, as generative grammar highlights the abstract organizational properties of sentences, giving rise to such differences (dissonance between meaning elicited from structural discrepancies in the skeletons of the sentences that are not instantaneously palpable from their surface forms. Tarone (2007) challenges Universal Acquisition Hypothesis (UAH), positing that learners manifest discrepant acquisition successions for English questions in the school versus home environment, as mediation works comes into effect variously in sundry socio-cultural spheres, allowing of a psychologically diverse development in these domains.

Development of language is not quintessentially asunder from that of biological aspects, taking some years for a child to walk on his/her feet as s/he biologically grows old. The child recruits signals available in the surrounding environment to harness his

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development. Language development is indebted to Jean Piaget for his insightful theories regarding children's active navigation during the course of cognitive development. However, in the matter of language development there is controversy over individualistic or collectivist nature of language development. Vygotsky's approach to language, a functional or pragmatical overture, revolves around speech than language (Fletcher & Garman, 1986). Vygotsky takes a process-based stance to psychological development in reverse to Piaget. Cognitive development based on Vygotskian perspective leave the structures of thought to attend to thought as a goal-directed exercise happening in a context (Fletcher & Garman, 1986). However, cognitive approaches fail to thoroughly draw an integrated sketch of the phenomenon of competence and performance in language blossoming continually and interchangeably in a real time.

According to Fletcher and Garman (1986), child development theories deal with the query into the way of interconnection of the child's thinking, language, and interaction. The complexity of language is comprehensible in the light of the interplay of more plain and pivotal non-linguistic determinants videlicet biology of human like vocal tract, nature of mechanisms of perception, influence of pragmatics, communicative social interaction, characteristics of learning mechanism, and circumscriptions of processing capacity and working memory- while not inbuilt grammatical principles. From the vista of dynamic model, language development takes into account the intricate and interrelated interplay of nature, environment, and timetable language growth and development emerging spontaneously.

Cognitive theory propounds that the same principles apply for the learning of language like that of other convoluted cognitive skills. However, it lags behind of elaborating of the sequence of acquisition of grammatical structures where universal grammar comes into play. Theory of cognitive learning takes language learning as a complicated skill which exploits disparate information-processing techniques via mental processing to surpass convolutions that hamper performance of mental capacity (Ellis, 1985). According to Bialystok (1978), the processing of language is like that of other kinds of information. However, Chomsky (1986), sketches a distinguished module responsible for language acquisition.

The rationalism put by Chomsky against behaviorism is fronted on the rationale that language cannot be acquired in a successive manner of association and copycatting of abstract rules by dint of encounters with the use of language instances. Chomsky presumes that the behaviorists fail to extend a good account of why children produce language from nowhere. He persist on the reason why a child should articulate a new sound or word when s/he has already not heard of and even not reinforced by an outsider. This implies that there is an innate mechanism for using language which is not at the helm of environmental control as the behaviorists believe. Behaviorism from the learning perspective(where any physical action is a behavior), is a psychological philosophy built on the presumption that all things done by organism, like working, contemplating and feeling, can and should be titled behaviors.

However, Pinker (1994) corroborates the concept of language as an instinct while Tomasello (1995) berates Pinker's labeling of instinct by reminding that an instinct categorically appertains to a highly stereotyped behavior where major hallmark of language is time and space diversity wideness. To elaborate and expatiate more thoroughly the concept of instinct, it conveys independency with no eternal need of learning irrigation to react whereas in Pinker's definition of instinct it is still calls for catering and triggering by environmental experiences to fertilize and blossom. The

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preexisting of syntactic features as part of UG is not something that can be built on the basis of the input (Chomsky, 1965; Pinker, 1984; Valian, 1986).

To Lieberman (2005), instinct cannot afford language encoded in an organ of cortical network, but rather a skill does learnt by linguistic functional system covered across innumerable cortical and sub-cortical wards. It should not be neglected that each person has potential for creation and learning language where Chomsky does exclude the idea of learning by UG as a blueprint transferability of coded language to other generation. What ancestors did saw and their progenies will reap. Dawkins (1982) argues in favor of characterizing genetic materials as recipes for development rather than blueprints.

Tomasello (1995) challenges even the theorists who intend to alleviate indeterminate concept of the language instinct by associating it to universal grammar, which is not learnable in essence. Tomasello's (1995) blow to generative grammar as instinct is that this hypothesis is built on the formal aspect for natural languages and camouflaging this flaw with circumscription of hypothesis only to syntactical aspect of language setting and only in a serial sequences described and hypothesized at first only in English language which was later edified by commencing to study and ascribe it to other languages and trying to covering up and edifying this flow by raising and extending of the theory of principle and parameter setting during 1980s.

According to Dąbrowksa and Lieven (2005) and Tomasello (2003), nativist-linguistic approach to language acquisition considers an already highly abstract Universal Grammar for child to read and learn particular features of the input, whereas the view of usage-based approaches to child learning is mapping of sound and meaning for communication construction. These convey that no single idea, theory and phenomenon can adequately explain the intricacy of language development and acquisition without any recourse to other theories and influential entities. Usage-based theory proposes an intimate nexus between language use and structure, with structure as by-product and producer of language use (Kemmer & Barlow, 2000).

According to Lightbown and Spada (1999), interactionists take side at the environmental attributes. Language, in this sense, develops from a convoluted interaction of innate aptitude and the linguistic environment. Interactionists do not schematize child language acquisition from cognitive development and experiences but the skill and knowledge influences. To Jean Piaget children's uses of language are a means to express conceptualization of their physical interaction with their environment, culminating in a symbol system which represents the child's thoughts and comprehension of his/her environment. From brain to outer world, interactions at all levels, immerse language representations. Logistic growth model inaugurated by the avant-garde Van Geert (1991, 1994) propones that various subsystems in an ecosystem are altered, required and summoned by the environment via bootstrapping and competition contrivances. These convey that no single idea, theory and phenomenon can adequately explain the intricacy of language development and acquisition without any recourse to other theories and influential entities.

Universal grammar disarms human capacity of learning, justifying it through computational correlation mapped against the lingual exposure being get-at-able in contextual milieu and privileged only to the aspect of syntax than that of meaning or whatsoever. According to Tomasello (1995) universality is quintessentially theory-dependent phenomenon. Like other linguists, Van Valin (1993) purports that point d'appui of generative grammar is upon English model as a unique language as it heavily leaning on word order and less on morphology to dispense principal syntactic relations. Word order, while rigidly preserved in English, functionally pragmatically, varies extensively in Italian

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language in almost all structures (Bates & MacWhinney, 1982). A word-order option in Italian can nowise be existent in English. This discourse qualitatively renders discrepancies among languages.

UG purports that structural principles are so implicit and convoluted that are un-learnable from mere encounters. Un-learnable constraints cannot be extrapolated from a single language in the same way in Italian or Russian languages as falsified through cross-linguistic evidences (Newmeyer, 2004; Van Valin & La Polla, 1997).

Structure dependence principle, the hallmark of innate knowledge applicable across the entire grammar, is not contravened by any language in the world. It delineates language knowledge as cognizance of structural relationships in a sentence not sequence of words. It is the exploitation of distributional processing to replace syntactically other elements which are similar semantically o like pronouns. The structure dependence or what Crain (1991) names as "parade case'' accounts for the complex question viz., yes/no constructions from the intake being literally absent (p. 602). Structure dependency is related to the hierarchical structure, usually seen in syntactic analysis by dint of tree diagrams. Syntactic operation banks on structural connections between elements in the sentence rather than on the linear order of items (Chomsky, 1980).

In point of Government and Binding theory, principle and parameter framework, inaugurated for grammar, is able to convincingly explain a great sum of language-acquisition conundrum as the void left by the paucity of the input and corrective feedback posed problematic logic of language acquisition or what is called as Plato's problem. The model likewise delineates timeline of language appearance and extinguishment.

Parameterized principles initially are underdetermined in first language development and need to be set to one of their values. Learners are to identify the inducing evidence, i.e. structural properties of the input data. The clustering effect conveys that learners need to detect only one of the surface properties representing the target value of the parameter. In second language acquisition if L2 learners enjoy full access to UG, parameters are reset to the L2 value transferred from the L1 (Meisel, 2011).

Discovering which parameters is needy of being set is on the head of a person for whatever language he or she is trying to acquire. Input acts out as a trigger in parameter setting in this model in that exposure makes UG activated as to select from several possible parameters. In point of UG, minimal exposure to input provided with instigators being appropriate instantaneously enables parameter setting (Cook 1989). Parameter setting only favors positive rather negative linguistic evidence viz. error correction, for instance children should persistently learn the double-object dative prior to the other dual constructions.

Continuity hypothesis propones the accessibility of principles and parameters from the get-go for children, but the utilization of this ken is obstructed unless lateral problems (like memory limitation and parts of speech identification) obviated (Clahsen, 1992). Maturation hypothesis, as an alternative hypothesis, propounds that children have no initial access to all their inherited linguistic knowledge, but as children grow older this becomes available (Felix, 1992). Penner and Weissenborn (1996), under the rubric of Strong Continuity Hypothesis, evidenced that parameter-setting from scratch can be wholly target-persistent in some cases; meaning that, certain parameter values are set very early at one-to-two or pre-linguistic word stage. However, in some instances a stepwise or gradual setting can be carried out, leading to preliminary grammar corroborating just slightly with the target.

The Projection principle, another ward in the system of universal grammar, posits that syntactic structure is assigned by lexicon entries; that is, the choice of the verb GIVE

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entails the use of a particular syntactic pattern. Adjunction principle operates movement in which the constituents move to the already filled adjoined positions. Head parameter determines the position of heads within each phrase where in English, the head for example preposition comes first in a phrase whereas in Japanese the head viz., postposition postpones to last part of phrase (Cook, 1991). Input provided to language learners allow them to deduce rules for themselves, in that, they will deduce the position of lexical items in a sentence Evidence available to learners either negative or positive avail them of deducing rules. For example never heard of subject-less as part of negative evidence available make them realize that English has subject at first (ibid).

Binding Principles conveys that converse to most pronouns; an anaphor (the term here refers to reflexives such as HIMSELF and reciprocals like EACH OTHER) can only refer to an antecedent within the same. Binding principle determines certain pronouns to be appertaining to particular nominal phrases. Principles A and B governs the reflexive use (e.g., herself) vis-a-vis pronouns not being reflexive (e.g., her) (Chomsky, 1981). Principle A implies that reflexive pronouns (for instance herself) must be bound in its real local territory. Conversely, principle B propones that a non-reflexive pronoun must be free (i.e., NOT bound) in its local domain. Principle C emancipates any entity which is free in meaning from any parts of a word in a sentence should not be bound and be free everywhere (Kaiser et al., 2009).

Lexical syntactic categories and word order parameters are utilized as a model. Parameter setting is responsible for basic word order attainment in UG-based approach to language acquisition (Chomsky, 1981). Syntactic distributions of a newly heard word as part of universal grammar are exploited to induce its linguistic properties (Pinker, 1984). Learners harness distributional acquiring to make cluster though harshly congruent with grammatical categories. Using semantic bootstrapping as Pinker (1984) points out word order roles are induced (e.g., SUBJECT, VERB, & OBJECT) through inferring AGENT, ACTION, PATIENT order from single encounter. According to Wexler (1998), the initiation of multiple-word utterances commences at about 18 months for children, by impeccable formation of the basic parameters like clause structure and inflection in their language.

Lexicon is the kernel of human language (Cook, 1991). Positive data enacts as instigator and permits parameter setting specific to a language. However, Lightfoot (1991) doesn't endorse that every experience acts out as a trigger. A rich input in respect of frequency and saliency must be provided for the trigger to exercise its effect. Hierarchical construction of languages, to Chomsky, is a manifestation of the fact of phrases embedded within phrases. Subjacency as a conventional linguistic constraint imposes limit on syntactic movement (Chomsky, 1973) by circumscribing the Wh-word movement not more than one "bounding node at a time. Wh-questions, from the underlying declaratives (or similar ones), are made recruiting ancillary movement. Wh-words are solicited from both object complements and simple main clauses.

According to Evans and Levinson (2009), the assertive potency of language goes far beyond grammar, being attributable to conceptually grammatical properties; videlicet, pragmatics and meaning. Multitudes of languages do not possess grammatical constituents and do not enjoy any, or have greatly delimited syntactical recursion. In other words, there is not indefinite complexity embedding allowable, and even no embedding of syntactic at all in some languages. The cross-linguistic evidence verifies that albeit syntax of languages has no recursion process but the conceptual structure has, that is, it is permanently possible to dispense convoluted propositions in any language, running per contra to the Chomsky's syntactic-centrism paradigm (Evans & Levinson, 2009).

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McMurray and Wasserman (2009) account that to Evans and Levinson language stands as a conduct molded by manifold processes in that it is a malleable and protean general learning process involving a great lot of resurfacing convolution. In another word, in acquisition of phonology, one may bank on an ample and iterative array of clues, seemingly utilizing interlocutor's unrelated datum (Rost & McMurray, 2009). According to Bavin (2009), many researchers in the field with this belief that domain-specific knowledge emerges as the byproduct of development, assume that social and cognitive development of language cannot be schematized from that of brain, rebutting the formal UG approach for its domain -specific constraints in facilitation of language acquisition.

As Eubank propones (1991), the child is the sharper than the linguist insomuch as s/he harnesses more of information which is less available to him/her than a linguist. However, it founds the basis on which theories of universal grammar built, to explain convoluted system of language viz., the acquisition of morpho-syntax, structure dependency, subjacency, binding principles. Identifying syntactic categories as expatiated during the session to the listeners albeit briefly, impossible to obtained just through an environment sparsely enriched of input s needed and at the same time where the individual is not armed with an instinct as a must for survival in the intricate world of interaction which is always not saturated of enough words. It is not much pertinent to compare languages across world to reach a commonwealth to explain universal grammar. Nothing more than neurological studies limns a simulated portrait of universal grammar which is not found in the presentation. The impoverished data available to learner does not parallel the convolution of language knowledge actually mastered by normal children under the rubric of the Projection Problem and Subset Condition.

Chomsky shields his theory against the topologists on the ground that no theory is able to provide many instances of exposure to be verified and going, then, to some extent by putting forward that there is not sufficient evidence to rebut his hypothesis, remising the idea that some theories are not provable by mere science and evidence like the proving the existence of God. He exploits his oeuvre of knowledge of science and logic to order his featuring component of his hypothesis that no gap can be could found in between. He parallels cunningly, finding a void in linguistics to explain scientifically the phenomenon of language acquisition to mathematics exploiting the idea that langue learning is like learning rules and delineate his theory as a rule-based kind. He explains of competence refraining his hypothesis to be standing and maneuvering on performance plane less he be berated in case of deficiency witness in the nature of observational concreteness in research of his hypothesis. He disarms man of creativity to generate from a zero point a language while at the same time attributing the human as linguist creature with spark reservoir of recourses to handle complex production of language. Chomsky is keen on not mentioning of the fact that if language is to be pre-specified in mind as universal grammar, it happens to be converse to locality condition principle. The language creation of sign and symbols has happened in a gradual not saltatory course, spread across nations to be shared and used, undergoing modulation and manipulation in the variability of form converse to what is named as language faculty.

Cognitive sciences partially take language diversity as superficial and linguistic variation parametric (Chomsky, 1981). Chomsky asserted universality of language is inferred from one language (Chomsky, 1980). However, Evans and Levinson (2009) challenge UG leant on language diversity by dint of taking cultural evolution pivotal in discerning of it, linguistic universals, and the way they emerge through growingly potent models of general learning. Evans and Levinson (2009) purport that increasing number of studies document that specialized brain domains for the processing of language are just

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few. Diversity claim falls on the biological and cultural-historical dual planes (Evans & Levinson, 2009). Evans and Levinson (2009) expounds the reasons for the diversity of language based on biological point of view, phylogenetic (cultural-historical) and geographical patterns, statistical distribution of typological variation. However, it is noteworthy as Berent (2008) asserts grammatical universals are mental representations (I-language), whereas typological universals are statistical generalizations including external linguistic products (E-language). Likewise, Hinzen (2012) adumbrates the critiques of Universal Grammar in that it is rather otiose suffering from a coherent formulation evidenced by abundant variation and is not in harmony with biology to evolutionary principles.

Chomsky resorts to commonalities of the rules found in some languages to expose a system for the language acquisition that is innate. As Bates and MacWhinney (1982) imply, languages differ qualitatively in the existence or inexistence of specific lingual apparatuses; to name some, word-ordering constraints or case-marking. They, likewise, vary quantitatively to which the linguistic device used and rendered functionally is alike in the extent and in the range, respectively (Bates & MacWhinney, 1982).

The formula explained by Chomsky for the way language is arrayed in such an ordered and neat arrangement across languages attest to the fact that this blessing is not a haphazard phenomenon gradually and accidentally accrued through experience. UG contains some principles common to all languages but with different parameters in them that need to be set instigated through linguist input provided in the given language. Spolsky (1989) challenged the Chomskyan algorithmic connections in generative rules and the brain's single neural connection between a pair of neurons. He propounded the Parallel Distributing Processing Model (PDP) in which one neuron can interact with a myriad of other neurons. He exemplifies the child's performance as an orchestra in a symphony, with several synchronic interconnections of neural levels than a serial order of rules.

It should be noted that each human being is endowed with the potential for creation and learning language against the idea of Chomsky where language acquisition independent of UG as a blueprint is refutable. Chomsky, expounding on the idea of comprehension before production, ascribes it to the silent period, overshadowing the issue of biological organ development and discarding the matter of creativity of mind, to recall of man as a creative creature and exempt him/her of any obligation to form, sign, and symbols for all languages. Dawkins (1982) argues in favor of characterizing genetic materials as recipes for development rather than blueprints. In total, no single idea, theory and phenomenon can adequately explain the intricacy of language development and acquisition without any recourse to other theories and influential entities.

As exemplified by Bates (1984), it is impossible to infer that there exists a gene for eating with hands since all humans use hand to manducate. The chess game involves many unique contrivances but no one asserts that this uniqueness is due to an innate chess-playing module (Bates et al., 1991). However, Newmeyer (2004; 2005) reacts to this hypothesis taking it as a spurious statement and deficient at its prognostication about the learning and alternation of language, and the implicational linkages between linguistic determiners. Constituency of syntax is not universal feature of languages rather like dependency relations it is plainly a way to signal relationships between the parts of a sentence. Just like the grammatical relation of subject many languages evolving, but it is wholly inexistent (Evans & Levinson, 2009). Many languages do not abide the word order like that in English. According to Enfield (2004), Lao language has no adjective class in which property concepts are encoded as a sub-sub-type of verbs. Mohawk is a language in

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which constituency is not evidenced in its word order (Baker, 2009). Word-order or syllabification cases conn children's specified language learning down the wrong road (McMurray & Wasserman, 2009).

By and large, to Christiansen and Chater (2008), UG sounds like myth. Dabrowska (2015) proclaims that there is feeble empirical evidence to rely on the concept of Universal Grammar. According to Evans and Levinson (2009), few universals characteristics of language have been evidenced in a world of 6,000 to 8,000 diverse languages with radical varieties in sound, semantic, and syntactic organization. They add that the English-like language conception before cognitive boffins, sprouted from the generative school in linguistics has been violated and is no longer accredited.

Languages are proving to vary, basically from one another at every level of description (sound, grammar, lexicon, and meaning) that it is naïve, baseless and unfounded to claim any longer that they share a common pattern and a single structural property. The claim of grammar as universal appears more as a trend than an empirically verified construct with strict universals (Evans & Levinson (2009). Moreover, grammar is the invention of culture, where biological principles come impertinent to their description and explanation (Bates & MacWhinney, 1982). Christiansen et al. (2011) purport that the best view of language grasped is the evolution of culture not that of biology.

CONCLUSION

This overview sought to expound and shed light on the concept of universal grammar as springboard for acquiring of any language. UG delineates that structural principles are so convoluted and implicit that are un-learnable from mere encounters. Insufficiency of input reservoirs available to language learner can nowhere near be compensated with a model than the enactment of universal grammar mechanism. This deficiency for learning basic morpho-syntax, structure dependency, subjacency, binding principles, and identifying syntactic categories cannot be in any way resolved unless universal grammar comes into effect. This learnability problem can be obviated by dint of UG assembly, which is underwritten by an innate program. Biological heritages such as big and versatile brain, special social structure, and prolonged infancy comprise capacities non-unique to language itself, which contribute indirectly but significantly to the mapping problem of universal meanings (Bates & MacWhinney, 1982). UG attributes are innately indirect, based upon exchanges among built-in traits and processes that are not peculiar to language (Bates & MacWhinney, 1982).

Universal grammar explicates the phenomenon of language acquisition by circumscribing it only to first language and to learning of grammar of formal English-like language. However, pigeonholing language as innate and equating it with other born-to-use instinct-related organs like the inadvertent notion of impetus of eyelid shake that human being cannot help but blinking, is a controversially slippery issue. Volitional Morse-like device, individually- or serially-coded symbols. The traces of such linguistic order can be noticed not far away even in Anglo Saxonrunic alphabet incorporated of such conventional *and* discernable codes and symbols to be juxtaposed along one another as to communicate systemically different events, concepts, and references. Moreover, from cognitive and environmentalist point of views, it is possible for adult learning to ape intentionally the conventions and the standards of linguistic communication practiced by the socio-cultural players like crow's burial behavior. Such systemic order can be learnt and extracted by a cognitively developing child to the extent that it can be extraordinarily simulated in statunascendi.

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Chomsky attends to an internalized hardwired program assigned to the brain as mathematically pre-specified grid with unlearned formula called instinct than to the structure of the brain which has the productive power and learning ability. The language idealization, in Chomskyian vista, corresponds to instantaneous model of language acquisition; albeit, Hyams (1986) claims the opposite. Albeit behaviorism expounds the more preliminary features for language acquisition, it cannot afford to explain the acquisition of more elaborate structures. Children construct sentences out of pattern identification, extrapolating them to novel contexts. It cannot be taken for granted that, since human enjoys ability to speak; thence, there has to be an innate syntax module with an adult-like structural system and a gene for grammar programmed biologically for all languages.

Through the lens of constructionism; however, projection problem of language could explain the inadequacy and underrepresentation of social environment for enabling instigation and rekindling of language comprehension and production. Inadequacy of input available to language learner is nowhere near compensated with a model than the enactment of universal grammar mechanism. This deficiency for learning basic morpho-syntax, structure dependency, subjacency, binding principles, and identifying syntactic categories cannot be in any way resolved unless universal grammar comes into play. This learnability problem can be obviated and the task of language learning is able to be facilitated by dint of a UG assembly underwritten by an innate program. UG in Chomskian sense implicates one deep structure underpinning languages, as genetically programmed in the head. Universal grammar denotes that structural principles are so convoluted and implicit that spares human the capacity of the learning from the mere encounters. As per this theory, grammar, then, is taken as an abstract concept, a gadget for the manufacturing and comprehending of any structure in any language.

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REFERENCES

Baker, M. C. (2009). Language universals: Abstract but not mythological. *Behavioral and Brain Sciences*, *32*(5). 448–449. https://doi.org/10.1017/s0140525x09990604

Bates, E. (1984). Bioprograms and the innateness hypothesis. *Behavioral and Brain Sciences*, *7(*2), 188-190. https://doi.org/10.1017/s0140525x00073799

Bates, E. & MacWhinney, B. (1982). A functionalist approach to grammar. In E. Wanner& L. Gleitman (Eds.), Language acquisition: the state of the art. New York: Cambridge University Press.

Bates, E., & MacWhinney, B. (1988). *What Is Functionalism*?

Bavin, E. L. (2009).*Widening the field: The process of language acquisition. Behavioral and Brain Sciences, 32*(*5*), 449-450. https://doi.org/10.1017/s0140525x09990616

Berko, J. (1958). The child's learning of English morphology. Word14, 150-177. https://doi.org/10.1080/00437956.1958.11659661

Faculty of Cultural Science, Universitas Sebelas Maret
PJL *Prasasti:* Journal of Linguistics
URL: https://jurnal.uns.ac.id/pjl
ISSN (Print): 2503-2658
E-ISSN (Online): 2527-2969

Berent, I. (2009). Unveiling phonological universals: A linguist who asks "why" is (inter alia) an experimental psychologist. *Behavioral and Brain Sciences* 32, 450-51. https://doi.org/10.1017/s0140525x09990628

Boxell, O. (2016). The place of Universal Grammar in the study of language and mind: A response to Dabrowska (2015). *Open Linguistics*, 2, 352–372. https://doi.org/10.1515/opli-2016-0017

Brown, H. D. (1994). *Principles of language learning and teaching* (Vol. 1). Prentice Hall. https://doi.org/10.3138/cmlr.37.1.121b

Chomsky, N. (1981). *Lectures on government and binding*. https://doi.org/10.1515/9783110884166

Chomsky, N. (2007). Of minds and language. *Biolinguistics*, 1:1009–27. https://doi.org/10.5964/bioling.8585

Christiansen, M. H. & Chater, N. (2008). Language as shaped by the brain. *Behavioral and Brain Sciences*, *31*(pp. 489-558). https://doi.org/10.1017/s0140525x08004998

Christiansen, M. H. & Chater, N. (2009). The myth of language universals and the myth of universal grammar. *Behavioral and Brain Sciences*, 32(pp.452-453). https://doi.org/10.1017/s0140525x09990641

Christiansen, M. H., Reali, F., & Chater, N. (2011). Biological adaptations for functional features of language in the face of cultural evolution. *Human biology*, *83*(2), 247-259. https://doi.org/10.1353/hub.2011.a438022

Clahsen, H. (1990/1991). Constraints on parameter setting: A grammatical analysis of some acquisition stages in German child language. *Language Acquisition, 1,* 361-391.

Dabrowska, E. (2015). What exactly is Universal Grammar, and has anyone seen it? *Frontiers in Psychology* 6, 852. https://doi.org/10.3389/fpsyg.2015.00852

Evans, N., & Levinson, S. C. (2009). The myth of language universals: Language diversity and its importance for cognitive science. *Behavioral and Brain Sciences, 32*, 429-448. https://doi.org/10.1017/s0140525x0999094x

Hinzen, W. (2012). The philosophical significance of Universal Grammar. *Language Sciences, 34 (5), 635–649.* https://doi.org/10.1016/j.langsci.2012.03.005

Hyams, N. M. (1986). Language Acquisition and the Theory of Parameters. In Studies in Theoretical Psycholinguistics. Springer Netherlands. https://doi.org/10.1007/978-94-009-4638-5

Jackendoff, R. (1997). *The architecture of the language faculty*. MIT Press. [SP] (2002) Foundations of language: Brain, meaning, grammar, evolution. Oxford University Press.

Kaiser, E., Runner, J. T., Sussman, R. S., & Tanenhaus, M. K. (2009). Structural and semantic constraints on the resolution of pronouns and reflexives. *Cognition*, *112*(1), 55-80. https://doi.org/10.1016/j.cognition.2009.03.010

Kemmer, S., & Barlow, M. (2000). Kemmer, S., & Barlow, M. (2000). Introduction: A usage-based conception of language. *Usage-based models of language*, 7-28.

Faculty of Cultural Science, Universitas Sebelas Maret
PJL *Prasasti:* Journal of Linguistics
URL: https://jurnal.uns.ac.id/pjl
ISSN (Print): 2503-2658
E-ISSN (Online): 2527-2969

Lenneberg, Eric H. (1964). A Biological Perspective on Language," in *New Directions in the Study of Language*, pp. 65-88, Eric H. Lenneberg (ed.), Cambridge, Mass: The M.I.T.

Lieberman, P. (2005). The pied piper of Cambridge. *The Linguistic Review* 22.2-4: 289-301. https://doi.org/10.1515/tlir.2005.22.2-4.289

McMurray, B., & Wasserman, E. (2009). Variability in languages, variability in learning? *Behavioral and Brain Sciences, 32*(5), 459–460. https://doi.org/10.1017/s0140525x09990926

Newmeyer, F. J. (2004). Typological evidence and universal grammar. *Studies in Language* 28(3), 527– 48. https://doi.org/10.1075/sl.28.3.04new

Newmeyer, F. J. (2005). *Possible and probable languages: A generative perspective on linguistic typology*. Oxford University Press.

Quartz, S. R., & Sejnowski, T. J. (1997). The neural basis of cognitive development: A constructivist manifesto. Behavioral and Brain Sciences, 20(4), 537–556. https://doi.org/10.1017/s0140525x97001581

Rost, G. C., & McMurray, B. (2009). Speaker variability augments phonological processing in early word learning. *Developmental Science*, *12*(2), 339- 349. https://doi.org/10.1111/j.1467-7687.2008.00786.x

Tomasello, M. (1995). Language is not an instinct. *Cognitive Development*, *10*, 131-56. https://doi.org/10.1016/0885-2014(95)90021-7

Van Valin, R. (1993). A synopsis of role and reference grammar. In R. Van Valin (Ed.), *Advances in Role and Reference Grammar.*Amsterdam: John Benjamins. https://doi.org/10.1075/cilt.82.03van

Van Valin, R. D. & LaPolla, R. (1997). *Syntax, structure, meaning and function*. Cambridge University Press.

Vygotsky, L. S. (1978). *Mind in society: he development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1987). Thinking and speech. In R. Rieber & A. Carton (Eds.), *The Collected works of L. S. Vygotsky (*N. Minick, Trans.) (Vol.1, pp. 39-285). New York: Plenum Press.