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## Minimalism, Economy, Simplicity, and Children Language Acquisition

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### Abstract

In syntax, a model of a grammar is economical if it is doing the least work possible in order to generate grammatical forms, and rule out ungrammatical forms. In the minimalist program, economy has been applied to every level of representation, every principle, every structure, leading to a type of plainness never seen before in generativist. The study of child language acquisition highlights the continuity from the Principles & Parameters framework (Chomsky 1981) to the Minimalist Program (Chomsky 1995). In this study, minimalism particularly the trends of economy and simplicity have been investigated. In addition, minimalism and its relation to and effect on first language acquisition have been shown through children during first years of language acquisition as investigated in the literature.

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### 1. Introduction

The reductions and minimizations of the minimal Program result in a system that is immensely different in many respects to the earlier generative GB system of language. Economy considerations are clearly observable in numerous other simplifications. Simpler operations apply in preference to more complex ones. Less economic derivations are then advanced to be congested by more economical ones, whether that means Agree rather than Move, or moving a shorter rather than a longer distance, or some other opposition. A further simplification of this

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type comes in the form of the Inclusiveness Condition. This states that nothing can be added in the course of a derivation; that is, only those features and properties which obtain in the lexical array determined at the beginning of the derivation may be used all over the phases of the derivation.

Overall, eliminations and reductions have been applied to every aspect of the architecture; levels of representation, operations, syntactic constraints, search space, phrasal categories and categorial features, derivational paths. Although not every simplification considered fully or simply mentioned in the works of the past decade or more has been detailed here, the central concept should be more than clear - the architecture should reduce to the bare minimum required to fit between the semantic and phonological systems, and the derivation should follow a course which is computationally limited in both its use of operations, and the domains in which it can apply them.

## 2. Economy

In The Minimalist Program (1995), Chomsky hypothesizes that language must be under restrictions of “virtual conceptual necessity” (1995, p. 171), meaning that a speaker should only need to appeal to the basic need of operations in the syntax to form structures. This assumption leads to a principled account of economy in syntactic structures. Radford explains economy as follows “*a principle which requires that (all other things being equal) syntactic representations should contain as few constituents and syntactic derivations involve as few grammatical operations as possible*” (2009, p. 335).

An important theme in recent generative grammar is that linguistic operations, derivations, and representations are subject to economy conditions which guarantee that they are ideal in some sense (see Chomsky 1998b). Consider an operation OP applying in a derivation D leading to the representations (PF, LF) (phonetic form and logical form). Economy considerations suggest that OP be as small as possible, and be applied in a way that minimizes search. Given a series of operations that form a derivation D, economy conditions suggest that the length or cost of the derivation must be minimized in some way. Finally, economy considerations suggest that the representations formed in the course of a derivation should be as simple as possible, consisting of a minimal number of syntactic objects, each of which is interpretable (at either LF or PF). As a minimalist principle, Chomsky (1993) assumes that the interface representations should be pure and simple, stripped of all features that are not relevant to the cognitive systems they provide input for. This he calls economy of representation, summarized in (1):

**(1) Economy of representation:** *Use as few symbols as possible in the output of a derivation* The principle Procrastinate reduces to *Inertness*, if the latter is considered to apply at each point in the derivation. In addition to (1), Chomsky proposes a second minimalist principle, stating that interface representations should be arrived at in the most economical way. This paper discusses the proper formulation of this second principle, called economy of derivation. I will argue for the following formulation:

**(2) Economy of derivation:** *Use as few steps as possible in deriving an output representation*

is a standard feature of the minimalist program of Chomsky (1993). Chomsky argues that derivations are governed by principles summarized here under the label *inertness*:

**(3) Procrastinate:** *Move as late as possible*

**(4) Greed:** *Move "only if movement contributes to licensing of".* (3) and (4) can be grouped together as in (5):2

**(5) Inertness** *Move as little as possible* (5) and (2) are equivalent.

The formulation of economy of derivation in (2) is more interesting for what it leaves out than for what it contains. In particular, (2) makes no reference to the length of the steps involved in a derivation. According to conventional wisdom, short steps are more economical than long steps. Thus, it has been proposed that economy of derivation contains (6) in addition to (2):

**(6) Economy of derivation part 2:**

*In deriving a representation, make the shortest possible movements*

(6) Underlies the concept of minimality (Chomsky 1986b; Rizzi 1990), paraphrased in (7):

**(7) Minimality:** *Don't move "across a place where" could have landed*

(6) also plays a major part in Chomsky (1993).

### 2.1. Different Types of Economy

Several major types of economy have been identified: global derivational economy, local derivational economy, and global representational economy.

Global derivational economy considers an entire derivation as a whole and considers whether the resources involved in its computation are greater or less than the resources involved in another derivation that begins with the same numeration and converges. Kitihara (1995): the Shortest Derivation Requirement.

(1) *The Shortest Derivation Requirement*: Minimize the number of operations necessary for convergence.

Representational economy starts with different assumptions about narrow syntax than derivational economy does, endorsing the idea that it is some kind of economy of representations, rather than derivations that is active in the grammar

Finally, local derivational economy deals with a derivational system, but unlike global economy, it does not (typically) involve comparing alternative derivational paths, nor does it generally entail that the grammar has a look ahead property.

### 3.Simplicity

Natural and common syntactic changes should have a simple representation; typologically less common changes should have a more complex representation. A simple change of valence of a single verb should have a simpler representation than, e. g., the overall shift from head to dependent marking patterns on the clause level. In general terms, the simpler representation of a change is always preferable, other things being equal.

*Simpler Syntax Hypothesis*: The most explanatory theory is one that imputes the minimum syntactic structure necessary to mediate between phonology and meaning

A simple example concerns bare argument ellipsis (BAE). illustrated in B's reply to A in example (1).

(1) A: Ozzie says that Harriet's been drinking. B: Yeah, scotch.

• B's reply conveys the same meaning as sentence (2), thus going beyond the meanings of *Yeah* and *scotch*.

(2) B: Yeah, Harriet's been drinking scotch

In SS, such full syntactic structure and deletions are unnecessary. The syntactic structure of B's reply is just the string of two words, and its interpretation is determined by grafting the meanings of the two words onto an appropriate location in the *meaning* of A's statement, without no syntactic support. The relation between the elliptical utterance and its antecedent depends not on syntactic identity, but rather on delicate factors in the semantics of the antecedent. For instance, there is no syntactic difference among A's utterances in (1) and (3), but the interpretation of the antecedent is clearly different.

(1) A: Ozzie says that Harriet's been drinking. B: Yeah, scotch.

(3)a. A: Ozzie fantasizes that Harriet's been drinking.

B: Yeah, scotch. ['Ozzie fantasizes that Harriet's been drinking scotch', **not** 'Harriet's been drinking scotch']

b. A: Ozzie doubts that Harriet's been drinking.

B: Yeah, scotch. [no plausible interpretation]

• An approach to ellipsis that depends only on syntactic structure cannot capture these differences.

As Freidin and Vergnaud (2001: 641) have observed, Chomsky's earliest writings on generative grammar (Chomsky, 1951, 1955) already contain allusions to simplicity. (Freidin and Vergnaud, 2001: 641 n. 2) point out that (Chomsky, 1951) notion of simplicity bears some general similarity to the more current discussions of economy.

For the formulation of any relative accurate notion of simplicity, it is essential that the general structure of the grammar be more or less fixed, as well as the notations by means of which it is constructed. We want the notion of simplicity to be broad enough to comprehend all those aspects of simplicity of grammar which enter into consideration when linguistic elements are set up. Thus we want the reduction of the number of elements and statements, any generalizations, and, to generalize the notion of generalization itself, any similarity in the form of non-identical statements, to increase the total simplicity of the grammar. As a first approximation to the notion of simplicity, we will here consider shortness of grammar as a measure of simplicity, and will use such notations as will permit similar statements to be coalesced. (Chomsky 1951: 5)

#### 4. Minimalism and Learning

The study of child language acquisition highlights the link from the Principles & Parameters framework (Chomsky, 1981) to the Minimalist Program (Chomsky, 1995). As is the case for all meaningful theoretical developments, under Minimalism new challenges emerge, puzzles are cast under different lights, while important insights from previous work can still be retained. How the child acquires a language so rapidly and accurately under limited linguistic experience? The principles, which are considered universal, are not learned, and can be expected to be operative in (early) child language; this opens up a wealth of topics for empirical research which continues in the Minimalist era. The Minimalist approach to the language faculty in a broad context of cognition and evolution has led to new conceptions of learning, which may provide a more complete explanation of child language acquisition.

One of the most revolutionary aspects of Minimalism is the consideration of the language faculty in a broad cognitive and perceptual system, which marks a significant shift from the earlier inclination to attribute the totality of linguistic properties to Universal Grammar. Minimalism provides direct evidence for several abstract principles: Asymmetric Merge, Feature-checking, the Labeling Algorithm, the Strong Minimalist Thesis (Phase-based interpretation), recursion, and the role of Interfaces.

At first it might seem very unlikely that minimalism simplifies rather than complicates the acquisition problem. If a child seeks to analyze input substantively in terms of noun or verb then noun phrase or verb phrase, it would seem to be a step ahead of a child who begins only with the notion of Merge, which might seem to fit anything. A closer look reveals otherwise. In fact, minimalism allows grammatical principles, like asymmetric merge, to participate more directly in the analysis of Primary Linguistic Data than, for instance, phrase-structure rules.

Merge deviates in an important way from what might be called a general cognitive capacity for the act of combination or concatenation (Hornstein, 2009) which applies to almost anything in life experience. Merge requires asymmetry: a Label is chosen, usually seen as a projection of one lexical item, which allows one part of a binary Merge to dominate the other, following a Labelling Algorithm (Chomsky, 2006).

The important point here is that Asymmetric Merge allows an immediate representation of a child's first utterances and, more importantly, an abstract analytic instrument that enables a child to attack in a simple way what is a very complex set of inputs, before projecting the full array of functional categories (which is not to say that the capacity is absent). The significance of this point should be underlined: a virtue of the abstraction of minimalism is that it reduces the Primary Linguistic Data problem by giving the child representational tools. That allow first stage efforts to represent linguistic forms whose full feature system has not yet been identified. In that sense, Minimalism predicts that Stages can exist.

Feature-checking and economy of representation receive another kind of specific support from spontaneous aspects of acquisition. If Feature-checking motivates movement, e.g., if a *wh*-word carries a Feature which matches a CP feature and moves to check it off, then it is only the critical feature that needs to move, not everything moved under Pied-Piping.

The sharpest spontaneous evidence comes from (Guasavera and Thornton, 2001) who provide an extensive experimental evidence from at least 10 children that they will break-up "whose" and move only "who" in production:

(14) Q: John saw someone's book. Ask him which book?

A: Who did you see t 's book

This is precisely what ought to occur, but children never hear direct evidence for it in English since the choice of lexical items from the Numeration offers only the contracted "whose" which drags the object along: "whose book did you see?"

Do-insertion, originally claimed to be a Last Resort phenomenon, fulfills economy of representation under Feature-checking in early acquisition in precisely the same way. (Hollebrandse and Roeper, 1997) find that children prefer to insert "do" rather than pied-pipe a V+Tense (as in "painted") from the lower V-node to a higher Tense node. This occurs for brief periods in various children who spontaneously produce non-target grammar do-insertion:

15) "do it be colored"

"I did paint this and I did paint this"

Do-insertion achieves immediate Feature satisfaction without requiring percolation of the lexical feature to a higher node. See (Fitzpatrick 2005; Heck 2009), for discussion of economy and Pied-piping). From this perspective, the child resorts to do-insertion as a First Resort, preferred over pied-piping a verb and it converts do-insertion into an operation that preserves economy of representation for

Feature-checking rather than being a response to an imperfection in grammar. This can be seen as evidence that Merge is more economical than Move (Internal Merge).

### ***The Strong Minimalist***

*Thesis entails that computation of expressions must be restricted to a single cyclic/compositional process with phases.*” (Chomsky, 2005).

How does the child eliminate an overt medial wh-word or the phasal interpretation of a trace? The answer is not yet clear but it should follow from the formal representation of opacity at LF. (Roeper, 2009) argues that the child must learn to alter a trace—modify the unmarked interpretation required by the SMT-- to prevent it from being interpreted in its original Phase. It changes from a Full trace to a Converted trace when evidence arises that full reconstruction delivers the wrong interpretation.

(Chomsky, Hauser, and Fitch, 2002) have argued that a core feature of Minimalist representations is recursion. The operation of Merge creates recursive hierarchies in every language. However there are language specific forms of recursion which children do not acquire instantly and whose complexity is intuitively evident. Possessives, adjectives, and clauses require recursive generation and are systematically delayed in the grammars of children, and not uniformly present in the languages of the world. For instance children and L2 speakers find it very difficult to handle forms like:

*Cookie Monster’s sister’s picture*

3yr old children regularly prefer a conjoined reading Cookie Monster and sister’s picture when faced with alternatives (Roeper, 2007).

The child must not simply grasp the fact that a category is embedded inside an identical category, but also generate an interpretation at each Phase Edge. Thus the child interprets a possessive as possessive and the next point of interpretation calls for embedding that possessive meaning inside another.

Acquisition theory has always tacitly assumed a rich interface whose mechanics were subtle and mysterious. There is no doubt that inferences about context must feed into both lexical and syntactic growth. The child may need to hear quite a number of sentences before he has sufficient evidence that these interfaces all match, supporting the view that frequency of exposure will correlate with point of acquisition.

## **5. Economy and simplicity in children syntax**

Through knowledge of syntax, children can relate the sounds of language to thought, and can produce and comprehend unlimited new sentences within limited recursion, e.g., Dr. Seuss’s “*When tweetle beetles fight . . .*”

For syntax as for phonology, children must discover the relevant units, then categorize and combine them. They must link distinct levels of representation and do so in a systematic, productive, but constrained manner. Children must know the special design features of natural language, i.e., units may move (*displacement*) or combine through operations on them, and many may be null or “empty.” First utterances of children may be limited to single words, leading to the term historically used for them, “holophrastic utterances.”

“no dirty”

“Me like coffee”

“pull hat”

“mommy go store” (Bloom 1970)

“Mommy fix” (Eve I, Brown 1973, 205).

For months, the child’s speech is often short and may omit subjects and other arguments as well as nominal and verbal inflection. 10 Functional Categories are frequently absent or diminished. Even the single word period appears to involve several developmental steps between twelve and about twenty-eight months of age (Bloom 1973).

Some researchers have hypothesized that children’s knowledge surpasses overt in their early productions.

### **Functional Projection Hypothesis**

*Accurate representations of children's early sentences include Functional Categories and/or their projections; these may be phonetically null.*

In support of Functional Projection Hypothesis, researchers have noted that although children may omit functors in production they know these exist and are aided in production and comprehension by FC, even when they omit them. In early studies of children's natural speech using "rich interpretation" of their intended meanings, Bloom (1970) had found evidence for elements in the underlying representation (UR) of children's sentences, even when not overt in early utterances. The same utterance, e.g., "Mommy sock," may map onto different interpretations, and therefore different underlying representations (e.g., a subject-predicate relation such as "Mommy has a sock" or an attributive relation like "Mommy's sock"). Bloom argued for a "reduction operation" in child grammars which mapped from the UR to production under a length constraint. She noticed that children frequently produced various parts of a sentence, showing that they had the competence for each of the parts, while they rarely produced these together in a single utterance, e.g., "make a block" (VO), as opposed to "Kathryn make a house" (SVO). When one item (an extra argument) was included, another (a verb) might be deleted, as in "Ø raisin Ø grocery store." Operators in the internal syntax of a sentence, e.g., predicate negation, appeared to trigger reductions (e.g., "Daddy like coffee," but "Lois . . . no coffee"), as opposed to operators that were clause external, e.g., anaphoric negation (as in "No Lois do it") (It is not the case that Lois did/will do that).

Results showed that functors were frequently omitted in children's productions, e.g., "Pete push dog," but English functors were omitted significantly more than nonsense ones, evidencing that children were in fact sensitive to the properties of functors; they are encoded. Researchers have investigated each of the fundamental FC which provide essential sentence skeletal structure, i.e., DP, IP and CP, in child language and grammar.

In case of DP (Determiner Phrase), many of the results suggest children's early knowledge of the functional category, D-zero, including determiners, even when these are not overt. Supporting evidence comes from early child productions such as 1 and 2 where the possessive ('s) has a determiner function.

1. That Daddy's (Kendall; MLU 1.48; Bowerman 1973, 242; W hitman et al. 1991)

2. Mami sis (J, 1.07) (Penner and Weissenborn, Bernese Swiss German, cited in Powers and Lebeaux 1998, 39).

Penner and Weissenborn hypothesized that DP structure is universally available in early language acquisition (1995, 1996). The IP (Inflectional phrase) is the secret skeleton of a sentence, headed by the FC I-zero, provide the backbone for the predicate of the sentence as well as knowledge concerning the predicate. To acquire verbal inflection in a language, children must know a set of FF (formal features) and how to map these to the lexicon and verbal morphology in their language. In addition children must know how to distribute the FF in the phrase structure. While the I-zero head of IP and basic IP structure may be determined by UG, knowledge of the specific way that inflection is instantiated in a language is not. The development of inflection appears to be slow and gradual. Not only do children often use only a certain subset of verbs as they begin to learn the lexicon of the language, and express these verbs in only certain inflections, but various forms of inflection error occur (both omission and commission errors). At the same time, in certain ways, this aspect of language acquisition shows remarkable abstractness, accuracy and constraint, and does so in a way which links to the FC head of IP.

### **The "Null AUX Hypothesis"**

*Boser (1997a, b; Boser et al. 1991, 1992), as well as others, has found evidence that even when the auxiliary is null in a child's language, there is evidence that the child knows about it.*

By this hypothesis, ostensibly simple utterances such as (3a)–(4a) actually have representations such as in (3b)–(4b), where AUX is present although phonetically null.

3. a. Mommy go store

b. Mommy (can/will/did) go store

4. a. Where Daddy go?

b. Where (did) Daddy go?

Another evidence is CP (Complementizer Phrase), this FC (COMP) is also present and accessible initially and continuously, even when children omit it in production.

5. Adult: Was will er tun? Ein Apfel essen?

(What does he want to do? Eat an apple?)

Child: nein . . . will nich . . . traurigist (Sebastian, 1.5, Boser)

No want not sad is

(No, he doesn't want to, **because** he is sad)

In (5), the child's word order, with the verb "be" appearing at the end of its clause, indicates that the COMP has a role in its representation even though it is null. The child distinguishes main and subordinate clauses in word order, presumably by consulting the CP structure these involve.

By the time children are about to produce first words and simple sentences, they have already begun to crack the code of the language to which they are exposed, with regard to syntax. They have realized the basis of the secret skeleton of the sentence – order and constituent structure, including Functional Categories – even though the phonetic realizations of this knowledge may often be null and even though they still do not, for the most part, understand the meaning of language. So these evidences from children speech demonstrates the notions of simplicity and economy in children syntax.

## 6. Conclusion

Minimalism aims to show that the language faculty is a simple, economic system. However, it aims to characterize this system in a simple, economic way. If the theory of Minimalism is correct, then its mechanisms should be apparent in the acquisition process. The Minimalist Program (MP) in linguistic research Chomsky (1995) maintains that the human faculty follows *principles of economy* in that there are "no extra steps in derivations and no extra symbols in representations beyond those that are necessary for the system to function at all in connecting sound and meaning" (Boskovic & Lasnik, 2007, p.1).

In the present paper, Chomsky's Minimal Program is investigated with the focus on economy and simplicity. Moreover, the effect of minimalism in the acquisition of syntax in children has been identified. According to Platzack (1996), economy principles strongly influence first language acquisition. He stated that the economy considerations of the Minimalist Program imply that children should initially opt for the least marked possible grammar. On the definition of marked-ness, he claims that overt syntactic operations are more costly than covert ones, and he further states that "the mechanisms forcing overt operations in a language will be the marked ones" (p. 369). If children prefer the least marked grammar, they will initially assume all features to be weak and thereby avoid movement.

## References

- Boeckx, Cedric. (2006). *Linguistic Minimalism. Origins, Concepts, Methods and Aims*. Oxford: Oxford University Press.
- Boskovic, Z. & Lasnik, H., (2007). *Minimalist Syntax: The Essential Readings*. Malden, MA: Blackwell Publishing.
- Boser, K., B. Lust, L. Santelmann and J. Whitman (1991). The Theoretical Significance of Auxiliaries in Early Child German. *Proceedings of the 16th Annual Boston University Conference on Language Development*. Boston, MA: Cascadilla Press (1992). The syntax of CP and V-2 in Early German Child Grammar: The Strong Continuity Hypothesis. *Proceedings of the North Eastern Linguistics Association*. Vol. 22. Amherst: University of Massachusetts. 51–66.
- Boser, K. (1997a). *The Acquisition of Word Order Knowledge in Early Child German: Interactions Between Syntax and Pragmatics*. Ph.D. dissertation. Ithaca, NY: Cornell University.
- Chomsky, N. (1981). *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. (1993). 'A Minimalist Program for Linguistic Theory'. In K. Hale and S.J. Keyser, eds., *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge: MIT Press. Cambridge: MIT.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, N. (2006). Approaching UG from below. In H.-M. Gartner & U. Sauerland, eds. *Interfaces + Recursion = Language?* Gruyter, Berlin, pp. 1-30.
- Collins, Ch., C & Baltin M. (2001). Economy Conditions in Syntax. *The Handbook of Contemporary Syntactic Theory*. Published Online: 21 JAN 2008 DOI: 10.1002/9780470756416.ch2
- Fitzpatrick, J. (2005). On Minimalist Approaches to the Locality of Movement. *Linguistic Inquiry*, 33, 443–463.
- Hauser, M., Chomsky, N. & Fitch, T. (2002). The Faculty of Language: What Is It, Who Has It, and How Did It Evolve? *Science*, 298 (5598), 1569–1579.
- Heck, F. (2004). *A Theory of Pied Piping*. Ph.D. dissertation. Universität Tübingen.
- Hollebrandse, B. and T. Roeper (1997) The concept of DO-insertion and the Theory of INFL in Acquisition. Amsterdam Child Language Series, eds. C. Koster and F. Wymen
- Hornstein, N. 2009. *A Theory of Syntax: Minimal Operations and Universal Grammar*. Cambridge University Press
- Lust, Barbara C. (2006). *Child Language Acquisition and Growth*. Cornell University. Cambridge University Press.

- Penner, A. and J. Weissenborn (1996). Strong Continuity, Parameter Setting and the Trigger Hierarchy: On the Acquisition of the DP in Bernese Swiss German and High German. In H. Clahsen (ed.), *Generative Perspectives on Language Acquisition. Empirical Findings, Theoretical Considerations, Crosslinguistic Comparison*.
- Platzack, Christer.( 1996). 'The Initial Hypothesis of Syntax,' in Harald Clahsen (ed.) *Generative Perspectives on Language Acquisition*, John Benjamins, Amsterdam,369-414.
- Radford, A. (2009). *English Syntax An Introduction*. Cambridge, Cambridge University Press.
- Roeper, T. (2009a) "Microscopic Minimalism" BU Plenary lecture Proceedings BU 33, Cascadilla Press
- Roeper, T. 2007. *The Prism of Grammar*. Cambridge, MA: MIT Press.
- Yang, C . & Roepar, T. (2012). *Minimalism and Language Acquisition* . In Cedric Boeckx The Oxford Handbook of Linguistic Minimalism. Amsterdam: John Benjamins.
- Zwart, Jan-wouter(1996b). 'Shortest Move' versus 'Fewest Steps' . In WernerAbraham, Samuel David Epstein, HoskuldurThrainsson& C. Jan-wouterZwart(Eds.), *Minimalist Ideas*, 305- 327. Amsterdam: John Benjamins. Hollebrandse and Roeper (to appear) Recursion and Acquisition.Proceedings of Recursion Conference UMass. Amherst, Mass.