

**Towards a Weakening of Continuity:
Kayne, Wexler and Cinque—
Three Cases for a Pre-Functional Stage in Language Acquisition¹**

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1998

Abstract

This first paper (of a series of twin papers) presents an overall account of the Development of Early Child English Phrase Structure that is based on a Structure-Building model of language acquisition. I argue that a Pre-Functional Stage exists manifesting symmetric *Non-specifications* 'across-the-board' (contra a Under-specification/Optional Infinitive model): citing deficits in the areas of e.g., (i) Target Word Order (VP), (ii) Inflection (IP), and (iii) Wh-Question Operator Movement (CP). I argue that any strong continuity stance on acquisition needs to be further examined and possibly 'weakened' in order to accommodate the full range of empirical data that follows.

0. Introduction

It has recently been proposed in the First Language Acquisition literature that early child clause structures should be thought of as having all the adult-like structure in place from the very onset of the early multi-word stage. Under this view, known as Strong Continuity, the child is considered to deviate from the target grammar only to the extent that certain features of (already present) relevant functional categories are, at times, sporadically underspecified. Such treatments of early grammars have been characterized and labeled accordingly: The *O(ptional) I(nfinitive)* stage (Wexler 1994), The *Underspecification* stage (Hyams 1994, Hyams et al. 1996), etc. In this paper I argue against underspecification, as defined as an initial stage, and alternatively present (following Radford 1990, 1994, 1995 and contra Wexler and Hyams op.cit.) a *Structure-Building* model of language development. In keeping with the spirit of Structure-Building accounts, I argue that Stage-1 of syntactic development follows a protracted-maturational schedule, and thus begins completely without any *formal feature* specification² (see Wakefield et al. for a Maturational account). This initial stage is characterized by a *complete* lack of INFL/COMP-related phenomena (*inter alia*).

¹ Citing Kayne, R. (1994), Wexler, K. (1994), and Cinque, G. (1990).

² Such an initial stage which manifests no formal syntactic features however may be exceedingly short lived (and thus unobservable or silent, cf. Roeper 1992: 340) for some children of very morphologically rich languages (e.g., Italian). The OI-stage for such languages might manifest itself from the very earliest

In (§1) I argue that Kayne's strong position for a universal Spec>Head>Comp (SVO) Word Ordering as based on his LCA needs to undergo some modification in order to account for SV/OV vs. VS word order variations found among the initial (Single Argument String (SAS)) Stage: a stage arguably restricted to thematic/base-generated projections which would exclude any movement operation (*per se*).

In (§2) I argue that the strong stance taken by Wexler (et al.) (i.e., defining the child's initial Optional Infinitive Stage as Stage-1) needs to be 'weakened' and relegated to being a second stage. The Stage-1 I am proposing here lacks all signs of such Optionality (regarding Tense and/or Agreement). Furthermore, (following Radford ms. 1998) I will argue that a (previously unreported) symmetry holds concerning the protracted emergence of two INFL-related constructs: namely, the development of IP(Agr) as it pertains to (i) Subject+Verb and (ii) Possessive agreement (cf. Kayne 1994: 105).

In (§3) I argue that Cinque's strong stance regarding a universal Spec-CP landing site for (all) Operator/Wh-elements needs to be slightly 'weakened' (favoring the Structure-Building model) by allowing the very early Wh-element of Non-CSV constructs to be potentially base-generated in Spec-VP where they can either take-on the Θ -role of a miscategorized subject pronoun and/or a quantifier. Our modified version suggests that it is only with the emergence of CSVs--when the Spec-VP is filled by an overt subject--that Cinque's universal Spec-CP account applies (truncations notwithstanding).

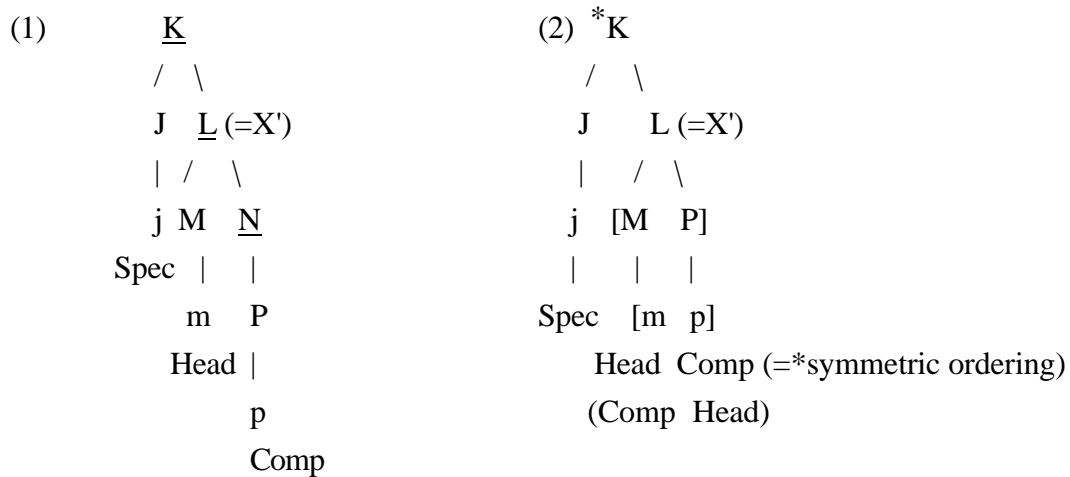
The aim of this paper is not to reject outright innate *Continuity Principles* of the three theorists, but rather to demonstrate that though their overall intentions are sound, I believe there is room to maneuver a 'weakening' of their approach without jeopardizing the spirit of their proposals. The empirical findings that force this weakening favor a 'bottom-up' model of acquisition where, as defined, children first pass through an initial Pre-Functional Stage (utilizing thematic-VPs to the fullest extent), and only later come to form an Optional Stage (where more complex functional IP/CPs sporadically appear).

MLUw. Such early manifestations however don't in any way jeopardize the Structure-Building model (which doesn't argue, in principle, against a possible OI-stage), but rather, it merely addresses the notion that Italian children may simply work out their Inflectional Paradigm in a minimal amount of time--and so any potential Pre-Functional/Pre Optional Infinitive stage may seemingly pass undetected in a silent stage. However, a caveat is in order here: it remains uncertain whether such languages, in fact, do not exhibit an initial Pre-Optional stage. For instance, a number of richly inflectional languages--namely Polish (Smoczyńska 1985), French (Pierce 1989), and Dutch/German (Wijnen & Bol 1993)--have indeed been reported on as having an identifiable Non-Inflectional stage-1. (See Atkinson (ms 1995: 51-ff) for a commentary on the viability of a Pre OI stage for such languages.)

1. Word Order & VP Considered: Kayne

(Overview) Following Kayne's LCA, I reach the conclusion that Word Order is indeed a universal hierarchical property of a Spec(ifier)>Head>Comp(lement) relation. However, this in itself is not enough to account for the wide array of word order errors found among my early data. While adopting Kayne's *Head Medial Principle*, I consequently devise a two-prong model for dealing with the variable word order patterns found at the early two-word/small clause stage of development (referred to here as the SAS (=Single Argument String) stage (cf. Bowerman 1990).

In Kayne's hierarchical model, the Complement position is seen as playing the pivotal role in determining Word Order. This strict linearization is achieved by virtue of LCA--as triggered by the Complement's maximal projection within the Head-Comp configuration.



(the underlined constituents mark nonterminal hierarchical levels)

More precisely, it is the insertion in (1) of a maximal-projecting N-node of the Complement--breaking the unwanted symmetry of L [M,P; m,p] as seen in (2)--which renders the correct antisymmetrical hierarchy. The principles of the hierarchy are based upon the Linear Correspondence Axiom (LCA). In short, the axiom states that an asymmetric c-command relation (ACC) imposes a *linear and hierarchical* ordering of terminal elements (from left-to-right): viz., nonterminals K, L, N as seen in (1). The central workings of the ACC lie within the Head-Comp relation, and for that reason alone, an additional (VP-internal) maximal projecting node N of the Comp is required, bringing about an asymmetric left-to-right hierarchical structure.

In addition to the LCA and ACC, Kayne makes one additional stipulation, and it is eventually this final stipulation that allows us to envisage a 'weakening' of the model:

(3) Head Medial Principle = $\langle x, y / y, x \rangle$ ($x = \text{Head}$) (Kayne 1994: 35)

The *Head Medial Principle* states that a Head $\langle x \rangle$, in theory, can project universally either in an initial or final position prior to the combined onset of the Specifier-Complement string $\langle y, z \rangle$ (which would form a Double Argument String (see below)). Such a principle could be reduced to saying that when a solitary argument projects (i.e., an external Specifier), it opts to project either to the left or to the right of the Head $\langle x \rangle$, dependent upon where (in the target grammar) the Complement would naturally place itself, thus yielding potential SVO or OVS base-generated word orders (viz., SVO iff Comp sets rightward, OVS iff Comp sets leftward (see Tonoike 1995 for OVS)).

In sum, by stipulating that all Heads must be base-generated in medial position, we deduce that there exists a *Complement Parameter* (in relation to Spec) which endeavors 'to set' the Comp either leftward or rightward of the *Head*--the Spec is then seen as eventually positioning itself accordingly within the given DAS (=Double Argument String) structure. This essential means, and here is the precise 'weakening', that there are (as mentioned above) two universal orderings, not one: SVO, along with the mirrored OVS (with principles of the hierarchy remaining intact). We conclude that it is the onset of the DAS stage with the co-emergences of Spec along with Comp that tiggers Kayne's weakened version of his LCA. Before the onset of DASs (i.e., the initial stage where $MLU_w \leq 1.75$ and where SASs are in the vast majority) the XP is considered to be of a partially fledged Proto-Type, enabling Subjects and Objects alike to enter into the sole proto-argument position.³ From this, we can deduce that a further hierarchy of theta-role visibility exists. (i) The first argument of a verb is given (by default) a proto-external argument status. (ii) Once a second argument of the verb is syntactically projected, (catapulting the full-fledge XP along with its 2nd and 3rd level projections), both External/Internal Mechanisms (for theta-marking) become operational forcing the Subject/Spec now to solely occupy the external position--leaving the Object to properly insert under Comp.

3. Besides Bowerman's initial study (loc.cit.), other prima facie evidence found in the acquisition literature can back-up the claims being made here. E.g., Irish data reported on by Hickey (1992: 11) suggest that otherwise variable word ordering found among SASs becomes rather fixed once DASs appear: (Eoin: n.= 86% VS, vs. 14% *SV, vs. 0% *SVO). Tsimpli (1992) likewise demonstrates, cross-linguistically, that Consider the (SAS) reduced trees in (4) below (cf. 1) where the Spec/Comp is now

'reorganized' and fused as the sole potential (external) argument--noting that the ordinal Comp projection which is said to be responsible for the asymmetry is not salient.^{4, 5}

(4)	(i)	<u>K</u> (=XP) / \ <u>J</u> <u>L</u> j M a.> Spec/ b.> Comp m Head (a=> SV) (b=> OV)	//	<u>Proto-XP</u>	//	<u>K</u> (=XP) / \ <u>L</u> <u>J</u> M j m Spec/ < a. Comp < b. Head (a=>VS) (b=>VO)
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The Data (taken from my (English) *N-Corpus*) bear out this 'weakened' model showing a partially fledged (*Proto*) *Argument+Predicate* XP for such SASs:

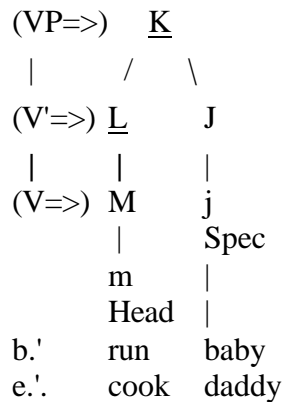
(5) Table 1.1

<u>SASs</u>	//	<u>DASs</u>	
Token counts: <u>SV</u>	//	<u>SVO</u>	<u>Other (xyz)</u>
(Files 8-16) n=87	//	290	15
<u>VS</u>	//		
78	//		

indeed a correlation seems to hold between variable orderings found at the VP stage (contra fixed ordering at the IP stage). Furthermore, reports taken from Clahsen (1986) suggest German children produce incorrect OV orders over 50% of the time (subject optionally projecting). The onset of obligatory subjects coincides with 90% correct ordering.

⁴ We consider at this very early stage that *all missing arguments* (such as PRO) are lexically and/or syntactically saturated (cf. Rizzi 1986) (contra null analyses) and thus, being *implicit*, need not require syntactic projection--hence, empty categories needn't be hosted. (See Radford 1990 for comments.)

⁵ In allowing the Spec and Comp to fuse here, we assume (following Radford 1990: 245) that an additional Externalization Mechanism is required and must await parameterization in order to determine which theta-marked argument of a predicate will be projected in the syntax as an external subject (in Spec position). In this sense, we deduce that the mechanism can only operate once DASs emerge--where the Spec and Comp no longer have to compete for the sole (proto) argument slot.

(6) SAS-Structure (Kayne (4ii))SAS-Token Examples

- | | |
|--------------|---------------|
| a. kick baby | d. eat me |
| b. run baby | e. cook daddy |
| c. open me | f. help me |

(Nb. I acknowledge Kayne's model is inconsistent with Chomsky's Minimalist Program--where merger theory excludes the possibility of non-branching single-bar categories and where higher-order categories can only be formed by merger.

In light of Chomsky's discussion (1995: 338), such a reduced two segment structure might be looked on as having an internal Adjunct structure:

- (i) K^2 (K^1 projecting [L, M, m] =Head)
- $$\begin{array}{c}
 / \quad \backslash \\
 K^1 \quad \alpha \text{ (order irrelevant: } \alpha = \text{Spec may either} \\
 \text{precede or follow its target)}
 \end{array}$$

2. Optional Feature Specification & IP Considered: Wexler

(*Overview*) Following Wexler, we agree that there exists an Optional Stage: Where we differ with Wexler (et al.) is that this stage is not the initial stage but a more advanced second stage. We propose the initial stage to be totally without Inflection. (Table 2.1 below shows such a Stage-1 (2;3-3;0) for 3Sg Per "S" with Tables 2.2, 2.3 illustrating the incremental acquisition of Possessor Agreement/INFL.)

Generally speaking, two-and-three year old children pass through a stage during which they sporadically omit inflections. Wexler (1994) has termed the stage as the *Optional Infinitive* stage. I know of no controversy to this well known fact of Optionality. The matter at issue here lies in exactly defining where such a stage begins. That is to say, although 'Structure-Builders' do acknowledge an OI-stage, they do so not of the demise of their Structure-Building account. In contrast, proponents of Full Competence Hypotheses have claimed their stake on this OI-stage as providing the last piece of evidence against any Structure-Building model, claiming the stage proves all structure to be in place from the very earliest MLUw. With regards to the occasional grammatical blunder, the child is merely said to 'underspecify' that feature responsible for Heading/Projecting the Category/Phrase in question--with the overall structure remaining intact and unhindered. My own Data provide some *prima facie* evidence (contra an initial OI-stage) that an

'across-the-board' *Non-Inflectional Stage* manifests prior to any sort of Optional Stage. In this sense, we throw into question the very foundation on which the Full Competence model is based: viz., the data presented in my Stage-1 don't provide any *prima facie* evidence for functional categories whatsoever, and any attempt to argue for a full competence model based upon my stage-1 data would amount to little more than theory internal whistling. (NB. We take the lack of any *prima facie* evidence for functionalism at stage-1 to be the Null Hypothesis for typical child English stage-1 corpora).

Consider the Tables below along with the relevant Token Examples showing the acquisition of Inflective "S" (Main Verbal and Possessive Nominal).⁶

(7) Table 2.1

<u>INFL-"S" Occurrence in Obligatory contexts:</u>			
	<u>Age</u>	<u>3Sg Pres "S"</u>	<u>Poss "S"</u>
a.	2;3-3;0 (Stage-1)	n. 0/69	0/118
b.	3;1-3;6 (Stage-2)	72/168	14/60

(7') Token Examples

- a.' (Poss) *That mommy car* (2;6). *No daddy plane* (2;8) *It dad bike* (3;0)
 (Verbal) *Baby have bottle* (2;8). *The car go* (2;11). *The one work* (3;0)
 b.' (Poss) *Daddy's turn* (3;2). *It's the man's paper* (3;4) *It's Tony's* (3;6)
 (Verbal) *This works. It hurts. It rains. The car goes* (3;2).

The data above point to a symmetric acquisitional process of both types of INFL-related "S" (Possessive and Verbal) and clearly indicate a stage where such INFL-related phenomena are altogether absent. Radford (et al. ms. 1998: 2) picks up on this parallel by recounting Kayne's (1994: 105) attempt to link one overall INFL-related mechanism for dealing with both (i) Subject+Verb and (ii) Possessor+Noun Agreement constructs. In short, the account basically runs as follows. Kayne considers that the Possessive "S" along with the Verbal "S" share the same reflex of an Agreement relation between an inflectional Head and its Spec, utilizing the following paradigm as follows:

6. I have excluded from this count potential *routine formulaic* 3PSg Copulas found at stage-1: (e.g., "*What's +N*", "*It's +N*", etc) where the frame consists of a fixed item plus a variable. Criteria for identifying such formulaic frames are taken from Hickey (1993). See also Peters (1983, 1995).

(8) INFL-Related Nominal Paradigm (Radford: class lectures '97)

An overt (Pro)Nominal is Case Marked:

- (i) Nominative if in an Agreement relation with a Verbal INFL⁷
- (ii) Genitive/Poss if in an Agreement relation with a Nominal INFL
- (iii) and Objective otherwise (via default)

(9) An Overall Inflectional "S" Reflex

Verbal: a. [IP This/He [I t_i [+Agr]] [VP [V work- s_i]]] (=Nom. cf. (i))

b. [IP -Agr]...[VP The car/Him [V go]] =(Obj. cf. (iii), =VP-stage)

Poss: a. [D/P⁰[IP Daddy [I 's [+Agr]] turn]] (=Gen. cf. (ii), cf. Kayne)

b. [DP Daddy [D \emptyset [-Agr, +Def]] turn] (=Obj. cf. (iii) (-Agr, +Def))

One could interpret Kayne as follows: since both Verbal and Possessor "S" encode an Agr(eement) relation (under IP), the overall omission of the inflection "S" suggests there to be an Agr failure of some kind (coded as (-Agr)). The symmetry that we discover between the onsets of both Verbal and Nominal/Poss. INFL "S" indicates (*prima facie*) that a correlation holds between the two structures--since the same Spec-Head Agreement relation is ultimately involved.

Tables 2.2, 2.3 illustrate the incremental acquisition of Possessor Agr(eement)/INFL:

(10) Table 2.2

<u>1Pers Poss INFL: Required contexts</u>					
	<u>Age</u>		<u>Me (-Agr)</u>	vs.	<u>My/Mine (+Agr)</u>
i.	2;6-2;8	n.=	53/55 (96%)		2/55 (4%)
ii.	2;6-3;0		73/118 (62%)		45/118 (38%)
iii.	3;1-3;6		6/231 (3%)		275/285 (96%)

(10') Token Examples

- i. That *me* car. Have *me* shoe. Where *me* car? I want *me* woof (2;6-2;8)
- ii. It is *my* bike. Where is *my* book? I want *my* key (3;0)

⁷ Following Schütze (1997), I assume that the 3perSg "S" marks both (fused) Tense and Agr. (I however argue against this position in my Ph.D. Dissertation (1999) where I suggest that "S" solely marks Tense.) Nothing hinges on this distinction however--one could argue that the Pollockian split IP (T and Agr) amounts to the same INFL reflex. The idea here is that stage-1 is without IP (in both T and Agr form).

(11) Table 2.3

<u>2/3Per Poss INFL: Required contexts</u>							
<u>Age</u>	<u>You (-Agr)</u>	vs.	<u>Your (+Agr)</u>	//	<u>Him (-Agr)</u>	vs.	<u>His (+Agr)</u>
i. 3;2-3;4	n.	14/16 (88%)	2/16 (12%)		-----		
ii. 3;6		2/29 (7%)	27/29 (93%)		10/13 (77%)		3/13 (23%)

(11')

- i. No *you* train (=It's not your train). No *you* baby. This is *you* pen (3;2)
- ii. Where's your house? It's *him* house. What's *his* name (3;6)

What we can deduce from the above findings is the following. First, the general picture suggests (contra Wexler's notion of an initial OI-Stage) that, in fact, the initial Stage is without Inflection (irrespective of potential INFL optionality).⁸ The data presented here give some evidence that a Pre-Functional and Pre-OI-stage does exist--characterized by the fact that (i) presumably Agr settings of early constructs consistently get Objective Case via Default (-Agr), (ii) there is no use of inflective "S" for either Subject+Verb or Possessor Agreeing constructs. Functional categories seem only to manifest at a slightly later Stage-2 (albeit with Optional-Underspecification). Following Radford (et al. ms 1998), we moreover can conclude from these findings that a previous unreported symmetry seems to hold regarding the acquisition of all INFL-related constructs 'across-the-board': viz., between Pronominal Possessors and Subject+Verb constructs. Overall, the findings clearly point to a *two-stage developmental* process of Language Acquisition: (i) a Pre-Functional/Pre-Optional Infinitive Stage-1, and (ii) a Functional/Optional Stage-2 (which Radford (op.cit.) appropriately terms the *Optional Inflection stage*). (Stage-3 marks the eventual mastery of the target grammar).

⁸ Of course, the outstanding dilemma faced with this view, as seen through the eyes of Wexler, is that such data which bear out no INFL-related material could simply be dismissed as pertaining to a 'one in the same' OI-stage--where the lack of apparent optionality gets disclaimed as an innocent by-product of insufficient data collecting, recording, etc. The problem with this stance is that it simply becomes ridiculously impossible to dispute an OI-stage with empirical data--i.e., whatever data one presents contra the OI-stage wouldn't stand a chance from the empty rhetoric of such indisputable "neither here nor there" ideology. Worse still, is the scenario where a stage-1 would be characterized as an 'obligatory *non-specification* stage' and where functional categories would be *obligatory present* albeit always *null*). Quite clearly, I see no logical reasoning behind projecting an IP if all of its feature specifications are thereafter obliged to remain null and void? The prevailing reasoning surely must consider the empirical date alone at this point.

3. Wh-Movement & CP Considered: Cinque

Following Cinque (1990) I adopt a strong continuity stance wherein Wh (operator) movement universally involves movement into a Spec-CP position (never to an adjunct position); however, with an added stipulation ('weakening') that in order for this *Spec-CP analysis* to hold, the subject must first surface forcing the Wh-element to raise and preposition in Spec-CP. Otherwise, very early Wh-elements (e.g., *What, Who*) may get initially miscategorized as (i) *thematic-base-generated* 3Prs-Pronoun/Quantifiers in superficial Subject Spec-VP position (by default), or (ii) may alternatively illustrate a productive (albeit non-target) OVS ordering where the Wh-element surfaces in Spec-final position (see fn.4 for PROs). The datum lends itself to such classification and presents a rather clean distinction between a dual-stage development (viz., a VP-stage which exclusively projects Non-CSV *Copula* structures, followed by a more advanced CP-stage where CSVs (=Complement+Subj+Verb) appear triggering target SVO word ordering).

(12) Table 3.1

		<u>Wh-element surface positions</u>	
		<u>a. Non-CSV</u>	<u>b. Wh-Spec-CP</u>
		(e.g., What is that? //	What him doing?)
i. Files 1-21	n.=	78	0
ii. Files 22-25		120	80

(12')

		<u>WH-Structures</u>	
		<u>Base-Generated VP</u> (Files 1-8)	<u>Movement into CP</u> (Files 22+)
a.	VP (=Non-CSV)	b.	CP (=CSV) (Roeper, Rohrbacher)
	/ \ (A semi-formulaic non-	/ \ (or CP>IP>VP where	
	Spec V' movement analysis)	Spec C' IP is [-Agr/-T], given	
	/ \ this is the OI-stage)	/ \	
	Prn Copula D(P)	C VP	
		/ \	
i.	What is that ⁹	i.	Who _j \emptyset you see t_j
ii.	Where 's the car	ii.	What \emptyset him doing t
iii.	Who \emptyset me	iii.	Where \emptyset you going t

⁹ The Copula "Is" is the only verb form that appears among such Non-CSV constructs: In concluding that such early constructs fail to generate an IP, we resort to considering them as semi-formulaic in nature.

The above defining characteristics of a potential VP (Non-CSV) Wh-structure bears its origins in the early literature: (e.g., Klima & Bellugi 1966, Brown 1968, Bowerman 1973). More recently, research into such early child structures have commonly shown that under-two year olds may rely on a *thematic* grammar and may not be capable of performing movement operation (*per se*). Thus, young children may initially be forced into projecting (all) strictly from out of the thematic-VP (be it an SVO or OVS ordering). This amounts to saying that under two-year olds may not form IPs nor CPs, since both phrases would require some sort of movement operation. Regarding CPs here, we follow Chomsky (1986b: 42)--the spirit of which could be extended to his later writings on Minimalism (1995)--and take true Wh-movement as that which includes either *Wh-frontings/Traces*, *Aux. inversions*, or *CSVs* (noting that all such *criteria* for movement are completely lacking for Stage-1). The main thrust behind this section is that initial Wh-Non CSV constructs show no signs of movements as such, and hence, could, in theory, be considered as simple VPs. The argument is two pronged in nature: (i) The Wh-element may project (base-generated) from an available Spec-VP site (in a bottom-up manner) since there is no overt Subject filling the slot; (ii) as a consequence, Agreement and/or Case may typically get mis-spelled in a way which suggests the (thematic) Wh-word to be taking-on the role of the superficial subject of the clause (e.g., *What's these?/Who is him?*). Hence, the *Wh-Spec-CP analysis* (cf. Cinque) results by way of an overt-lapping subject competing for the proper Spec-VP slot, forcing the Wh-word to then preposition itself into Spec-CP. Regarding the mis-spelling of Case and/or Agreement, the underlying Subject of Non CSVs e.g., *Who is me?* (=Who am I>I am who?) consistently shows the Wh-element as not functioning as the complement of the verb, but rather as the superficial 3SgPres Subject of the Copula. (NB. These errors last well until the emergence of CSVs.) Moreover, Radford (1996: 59ff) reports that there is further semantic evidence (coupled with the syntactic evidence) suggesting that children treat Wh-words of such NonCSVs as (unbound) Subject *Determiner-Quantifiers* (as opposed to prepositioned complement (bound-variable) *Operators*). Radford (1990: 130) had once cited such data regarding early *Wh+Copula* constructs and noted that children often misanalyzed the Wh-item of adult interlocutor questions into the following thematic scheme e.g., [*What=>What's X?*]:

- (13) What's she [=Nana] doing? (adult)---Nana (child).

From this analysis, it follows that their highest potential projection consists of a base-generated VP. There are no reported instances of Verbal 3SgPres "S" or Bare Verbs showing up among Non-CSVs. 1st/2nd Pers Copulas (am, are) don't show until file 24. No other material that could possibly suggest an IP/CP stage appears at this stage-1: i.e. no Aux Invert, surface wh-raising above Subject, Do-insert. (See §5 for caveat).

4. Final Remarks and Conclusion

(Word Order) One interesting aspect of Word Order is that it becomes fixed once DASs project. However, in light of this, it seems that SASs and DASs do occur alongside one another (with only the SAS counterpart allowing variable orderings). Thus, it becomes rather difficult to refer to the two modes here as individual stages. In this sense, the eventual correct setting of word order, as partially brought about by the *Comp Parameter*, is also dependent upon the non-parameterized workings of LCA coupled with DAS (Kayne op.cit.). This is made apparent by the fact that if word order were based purely on *Parameterization* (for example, via some functional category), then word order should be correctly set for the entire range of XP-structures found at the presumed parameterized stage--given the emergence of DASs (be it for SASs or DASs alike). As we see from the data here, accounts of word order based purely on parameterization don't suffice--this seems to support Kayne's claim for a "*Non-Parameterized*" LCA.

One additional piece of support in favor of a dual SVO vs. OVS base-generated pattern comes from Sam Epstein (Chomsky 1995: 391 fn108) who notes that Kayne's LCA allows free temporal ordering (either left-to-right, et vice versa). E.g., a satisfied LCA could have any arrangement of (sister) Head-Comp, Comp-Head relations (*read-books*, *books-read* freely). It is in this sense that I couple LCA with a *Comp-Parameter*.

(Underspecification) There has been some talk that the two prevailing schools-of-thought (as cited within) may eventually be forced together--on principled grounds--by Chomsky's *Merger Theory*. What I am on about here is the idea that certain features may *Merge* while others get postponed--irrespective of the category which binds them. In other words, a new brand of classification may be in the making--i.e., categorizing *+Interpretable* vs. *-Interpretable* features constructs. For reasons of time and space, I won't go on about in here. But, in what I believe is a sample of things to come, reflect on the idea of traditional Functional Categories (DP, CP) as being able to project at the earliest MLU stage (say, at our stage-1 here) via *+Interp(retable)* features only (i.e., merge can operate on partial feature sets.) What would one claim about this stage? Since category labels no longer enter into the equation—and we now forfeit the very criteria that once spun old debates on Structural Continuity--the notion of a VP-stage becomes irrelevant. In other words, the issue here is that functional categories (DP, IP, CP) encode both *[+Interp]* and *[-Interp]* features (*Agr = [-Interp]* for IP). In the event that all *[-Interp]* formal features are lacking at stage-1, would a proto functional category actually be functional or lexical? (See also §5 below).

(*Wh-Movement*) (For further arguments against an overall *Adjunction* account, see Galasso: 1999). Suffice it to say here that any adjunction account for such early, seemingly thematic structures would entail some sort of movement analysis. With such analyses, it becomes exceedingly difficult to account for the wide-spread failure of movement operations and functionalism which usually accompany movement: viz., the cited deficits in Inflectional markings of Tense, Agreement (IP), and Aux Inversion (CP) etc. (See section 2 above for a Non-Inflectional Stage-1). In sum, although children may use *Wh+Copula+N* constructs as early as MLUw 2.3, such constructs are relegated to being either (i) semi-formulaic in nature or (ii) base-generated strings not involving movement operations where a simple *VP* projects in order to accommodate the copula verb. An interesting side-note here is that Roeper et al. similarly claim (albeit in reverse effect) that once children come to move *Wh*-expressions into Spec-CP, they cease to produce subjectless *Wh*-questions (cited from Radford 1996: 61). What I am suggesting is in fact an opposite 'cause & effect' relation--namely, it is due to the subject surfacing which eventually forces the *Wh*-element to position into Spec-CP (adhering to Cinque).

(*Formulaic Wh*) The three types of early *Wh*-constructs which all come out as semi-formulaic are the following: (i) *What that*, (ii) *What's/is that*, (iii) *Where's +N*--and are all taken from files 1-8). Somewhat similar *Wh+Copula+N* constructs which appear starting from file 9 (onward) conversely get considered as maintaining a CP structure via structural continuity (IP truncations notwithstanding). (See Hickey 1993 for criteria).

(*A Recap*) The data (above) suggest there to be an initial *No-Inflection Stage-1* during which Subject-Verb and Possessor Agr are not marked--a stage characterized by the use of default Objective Possessors/Subjects and the omission of Poss. 'S and third person S. Compare and contrast Stage-1 vs. Stage-2 respectively: (*Me car vs. My car; Daddy car vs. Daddy's car; You car vs. Your car; Him car vs. His car; Me/Him go vs. I/He go(es); "What's that" vs. What \emptyset daddy doing/What is daddy doing?*) This Optional *Stage-2* last until the end of the recordings (file: 25, 3;6), though by file 25, INFL is generally established. The incremental emergence of possessors like *His* (emerging late in file 24, Table 2.3) demonstrates that different lexical items are acquired at different rates and ages, and likewise, their independent incremental onsets of INFL-related development seem to suggest that the feature specifications involved are lexical-specific (*pace* Schütze et Wexler), and not dependent upon 'higher-order' phrase structures: IP can be well established for some lexical items e.g., Poss. *My* = [+Agr] while being totally nonexistent for other items, e.g., *Him* = [-Agr] for that same period.

(*Conclusion*) In conclusion, what we have suggested here is a (manageable) merging of two extreme positions. Firstly, by acknowledging the strongest case scenario as the Null Hypothesis, (Minimise Degrees of Freedom Principle (cf., Hyams 1994)), we appease Continuity Theory. Secondly, and to the delight of the Structure-Builders among us, we slightly 'weaken' the null hypothesis by one degree only: stipulating that in order for any full competence theory to be set in practice, *VP-Eligibility* must first be exhausted. In other words, if a (prosaic) VP can theoretically handle the relevant material found among the very early stage of language development, then, by virtue of principles of economy of projection (Roeper et al. 1994), it must. However, principles of economy only work in conjunction with this deduced principle of VP-Eligibility--as a natural consequence of Economy--viz., once projected material can no longer be secured within a Θ -VP, it must manifest within its destined full-continuity structure. Justification for this approach is self-evident. Following M. Atkinson (op.cit: 32), we can suppose that: [*if two periods of the data are sufficiently far apart, these sets of data will exhibit rather clear qualitative differences* allowing us to construct grammars G_1 (=VP stage) and G_2 (=IP/CP-Optional stage) (respectively) (*emphases* belong to MA). In this sense, we have shown in general that functional categories do seem to follow at prior stage where (primitive) VPs, along with other lexical categories, function in isolation (i.e., the lexical VP-stage). This was the case with INFL (cf. 2), where a Non-Inflectional Stage-1 preceded a Wexlerian OI-Stage. Likewise, a Wh-VP stage (cf. 3), theoretically, was posited to be in advance of a potential CP-stage. I believe in maintaining these above stances, we come full circle in highlighting traditional differences between the *Full Competence* vs. *Structure-Building* schools. This view could be summed-up as follows: from the beginning, there was never much real distance between the two schools (both schools acknowledge that Principles of UG must constrain all possible grammars.)¹⁰ Recent notions of Underspecification have certainly exemplified this--seemingly putting the Structure-Builders on the defensive. However, in full view of the data presented here, the successful 'weakening' of such strong stances has shown once again the (*proper*) gap between the two schools. By taking the strongest hypothesis (concerning Continuity) as the Null Hypothesis, and then by essentially working backwards and weakening it on a 'need-to-need' basis in order to accommodate the empirical data, we have essentially returned (once again) to the ghosts of bygone orthodoxies: so let's ask the same old familiar question once more (overleaf)--

¹⁰ Here, I speak against notions of 'wild grammars' (Felix 1984). Moreover, tactics for defining absolute feature-nonspecificity (for the proposed stage-1) could equally be cast within Structure-Building models--with more traditional questions like '*How do category/phrase types emerge and develop?*' being replaced by the now relevant question--'*How do particular feature types develop?*'

<<< Do children start-off their grammatical lives with a *complete system of syntactic representation...*or not? And if so, how can we tell >>>
(*emphases* belong to Atkinson 1995: 29).

5. Residual Problems, Alternative Solutions and Future Research

The following is a highly condensed version of a discussion on Merger Theory found in Galasso (1999). It is presented here merely as a *caveat* to the aforementioned outstanding issue regarding child *formulaic* constructs.

In spite of an embarrassing wealth of literature about well know facts on *formulaicity* in early child speech, (see Brown 1968, Hickey 1993), the notion behind formulaic analyses seems nonetheless to grate on the minds of some researchers today whom esteem to grant the benefit of doubt to the child in any event (and at whatever cost). I myself, among many, personally believe such a granting to be overly optimistic and ill-managed, typically in light of the sort of data the child produces/comprehends at the given stage. However, in acknowledging that there is a potential issue here, and in the event that formulaic accounts do become increasingly unattainable (e.g., there is ongoing research to suggest that children might comprehend Wh-Questions even before they can talk, cf. Radford: pc), I propose below a broad alternative account to default/formulaic grammars which could continue to uphold Structure-Building models of acquisition.

I. (Reconsidering DP) The traditional idea of functional categories have recently been complicated by the introduction of notions of feature specifications and projections (as cited in Chomsky: 1995, §4 Merger Theory). In Chapter 4 of my Ph.D. Diss., I tease out issues in how we can come to grip with a seemingly functional DP projection in an otherwise (manifesting) Lexical VP stage. In a nutshell, what I discover is that all such DPs used at this hypothetical VP-stage-1 go consistently under/non-specified for formal features [-Interp(etable)] such as *Case*. By extended hypothesis, I went on to claim (following Radford pc) that such DPs could specify for [+Interp] features only--namely, [+Def(initess)] which would not require any formal checking. This is tantamount to saying that e.g., *The* within such DPs take-on *Case* via default and show no other signs of functionalism. I labelled the DPs as either (i) DP>VP or (ii) DP>IP--seeking to express the contrast between DPs which pertain more to the lexical-substantive category VP, contra the traditional classification of a formal functional DP:

- (i) a. John's car goes = [D/P⁰ [IP John ['s [car]]]]* ..goes [+Agr] (DP > IP)
 b. John car go = [D/P⁰ John car]...go [-Agr] (DP > VP)

(*Bracket structures are simplified to show only the relevant agreement.)

This attempt to redefine traditional notions of categories and phrases in terms of the features that project--viz., [+Interp vs. -Interp]--drastically changes the landscape in how we can assess functional vs. lexical categorial distinction.

II. (*Reconsidering CP*) Following in the wake of such underspecified DPs (above), it is not too inconceivable to then propose a similar analysis to underspecified CPs (likewise found at the otherwise patterned VP stage). The parallel [+Interp] feature for CP (as it has to do with Wh-elements) would be Chomsky's notion of a Q-feature (=Interrogativeness). E.g., Chomsky (1995: 289) suggests--*that Q is plainly [+Interp]; therefore, like the phi-features of a nominal, it need not be checked (unless strong)*. Such a treatment of Wh-elements puts them on *a par* as a variant of D (e.g., *What book*=DP). Thus, the distinctions drawn-on above concerning D(P)s now have relevance here to C(P)s as well.

Suppose, for Child English, we take Q to be initially set (or unparameterized) to a default 'weak setting' (until further sufficient input on Wh-raising sets it otherwise). Then, Q doesn't raise for checking.

Suppose, for Child English, Q only initially projects this [+Interp] feature. The parallels of the two arguments become ever so apparent--i.e., there is nothing in principle which would prevent us from saying that, like DPs (before them), CPs may also receive a form of default setting.

- (ii) a. What car go = [C/P⁰ (VP)...[DP What car]]* ...go... [-Agr] (CP > VP)
 b. What car goes = [C/P⁰ (IP)...[DP What car]]....goes [+Agr] (CP > IP)
 c. Whose car = [C/P⁰ (DP)...[IP Who 's car]] [+Agr] (CP > IP)

(*Bracket Structures are simplified to show only the relevant agreement)

This amounts to saying that in spite of a seemingly (straightforward and traditional) CP analysis, such Wh-sentences may be reduced to projecting in one of three base-generated manners via a VP. More specifically, the DP in e.g., *What car go* may select the following

available landing sites: (i) a Spec-VP, (ii) an Adjunct VP, or finally (iii) a Spec CP>VP (with a [+Interp] feature only)--the essential point being here that all three constructs would possibly show no movement. In the latter sense (iii) (exemplifying +Interpretable features here), Roeper & Rohrbacher's CP>VP truncated account could be reinterpreted as ultimately being base-generated.

In full spirit of the proposal sketched above, we then are left with only Agr/T (=IP) to consider. Following Chomsky's (1995, Ch.4) remark that only Agr is left to constitute pure non-Interp features--and having shown how the remaining functional categories DP & CP might be reducible to their substantive feature-projections--we take IP to be the functional category *par excellence*. As a consequence of no INFL-related material, the feasibility of a CP>DP/VP structure projecting from the earliest MLUw stage may not entirely jeopardize an otherwise seemingly straightforward Structure-Building account of language acquisition. (See Galasso 1999, Chapter 4 for DP & Chapter 5 for CP.)

III. (Future Research: Issues in Specific Language Impairment)

The protracted nature of language acquisition as drawn up here certainly may aid developmental linguists and language pathologists interested in accounting for specific areas of delayed grammatical development in some cases regarding Specific Language Impaired individuals (SLI). Whether it be stroke victims suffering from Left/Right Hemispheric damage, or children with Focal Lesions, to instances of Aphasia, I believe a better understanding of the natural language process at hand among normal children can serve as a road-map to uncovering exactly where the linguistic anomalies will surface in the speech output--leading perhaps to better methodologies in therapy. To put this on more concrete grounds, take for example recent reports dealing with *in vivo* PET studies. Although such early studies--which initially set out to locate and map precise areas of language activity in the brain--have come about with not much success (see Peterson, Fox, Posner, Mintun, and Raichle 1989), there nonetheless have been some sound reports cited to suggest that when a part of language is indeed effected, the effected part pertains to the more *formal* aspect of language--particularly those categories dealing with *Inflectional Morphology* and/or *Case*. This seems to go hand-in-hand with the standard assumption that suggests that *Neural Plasticity*--which speaks to a critical period of language acquisition: (cf. Lenneberg 1967)--may facilitate recovery more in children than in more mature subjects. In short, this has the flavor of saying that it is those more formal categories of language--i.e., categories prone to maturational development such as Inflection,

Agreement paradigms, and Case (cited herein)--which seem to be effected most due to their having a qualitatively different mapping system in the neural make-up of the brain.

Although research concentrating on the effects of Left/Right hemispheric damage is still in its infancy, some early signs suggest that significant delays show up in the child's usage of morphological inflections--including *plural, possessive, present progressive, and regular past tense (-ed)* forms (Fenson et al. 1993). (See Galasso 1999 paper no. 2 in prep. for further discussion). If by examining the type of errors made by normal children we begin to spot similarities to that of SLI children, we may begin to hypothesis exactly where and how language problems will arise.

In closing, the overall analysis presented here may shed some light on what we know about SLI individuals. The fact that *Word Order, INFlectional*, as well as *Movement Operations* seem to be the last of a series of systems to mature due to their abstract nature, it therefore should be of no surprise to find that certain similarities hold with respect to '*what gets missed out where*' when contrasting the SLI speech of young-adults. It may very well be the case that some SLI individuals simply have a higher threshold with regards to what amount of formal speech input is required in order to *trigger* a certain formal system into production. This amounts to saying that a five-to-six year old typical SLI child may be in parallel development to that of a two-to-three year old normal child. Perhaps, it could only be such an analysis that ultimately accounts for scattered reports which tend to show that the speech of young SLI children eventually does catch-up to the appropriate normal level of linguistic production.

The main aim of the second paper is to focus primarily on the Quantitative/Qualitative measurements behind an SLI individual--using what has been found and discussed in this paper as a theoretical starting point from which to precede.

Acknowledgments

This paper represents a rather simplistic view of my Ph.D. Diss. (1999). I am grateful first and foremost to Andrew Radford (Essex) (my mentor and Ph.D. supervisor) for his valuable comments on earlier drafts of this paper. I also thank Sam Featherston for his reading through an earlier draft, and Harald Clahsen (Essex) for lending me access to his data-base coding convention. I thank Hiro Matsumoto for our lengthy discussions on Kayne.

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