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For Tudor

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Foreword

The primary purpose of the present paper was to add value to the actual evidence in the domain of L1A by providing a salient analysis aligned to the predictions and the objectives set from the beginning of the investigative process. The generative theoretical framework was selected inquiring upon the syntactic models available in conceiving the paper. The thorough incursion and the research results led to compelling arguments favouring a nativist perspective on L1A. Although many problematic situations found salient explanations in the generative models, many elements still seek accurate description. Still, it proves to be a reliable model for the field. The arguments have been built based on the evidence provided by the empirical data. The main theoretical directions narrowed the presentation to the core conceptual properties fostering an insightful analysis of the results.

The investigation process revolved around two key aspects, the quality of the empirical data and the dimension of the corpus. The purpose was not to provide longitudinal studies and narrow the research to changes and syntactic developments attested during EMWS and LMWS. Notably, the investigation started with the data collected from the files of 5 TD participants (the M-corpus proved to be very resourceful as well). The original speech productions were recorded in familiar settings, without influences or biased interpretations, reflecting natural processes in L1A. Another visible contribution is corpus transcription, which can be used for future investigations into L1A processes. At the same time, the methodological approach to data analysis confers quality to the results. Although it started by selecting and presenting individual elements, common patterns could be traced. As such, the presence of

similar and sometimes identical functional traits and properties in assigning meaning to sound could be outlined.

The investigative process contributes to the domain of L1A research; moreover, speech productions can be further explored as there are longitudinal and cross-sectional studies regarding the acquisition of L1 Romanian. Any new proposals and investigations aiming to support, contrast, and further explore the domain are salutary. The corpus selection seeks to address specific stages in the acquisition process; the investigated empirical data were attested in most participants; this way, the predictions' arguments gained more weight. The data is substantial as children have been recorded weekly over several months. The selection was qualitative, and the corpus, as a whole, can be used for future research into the acquisition of specific features. Some of the critical aspects are the emergence of structures and the innate tacit knowledge manifested in children during the first stages of L1A, the lack of impact in applying corrective feedback, the acquisition of Tense and Case features, during the EMWS and the LMWS, and a minimalist interpretation of generalisations and extensions in child language.

The theoretical foundation of the approach was built around studies attributed to L1A, and, methodologically speaking, the primary experimental studies crediting continuity hypotheses in child Romanian were relevant and impacted the registered results directly. Notably, from a theoretical point of view, a contrastive analysis of nativist, behaviourist, social-interactionist, and constructivist research directions were considered necessary. It began with an inquiry upon empiricist theories proposed by BF. Skinner, Lev Vygotsky, Elisabeth Bates, Michael Tomasello, Jerry Fodor, among many others, then pledge in favour of Chomsky's nativist proposal and further develops its impact on the domain of L1A. The contributions made by authors such as Kenneth Wexler, Luigi Rizzi, Nina Hyams, Hagit Borer were compared with the research developed by Larisa Avram and Martine Coene for child Romanian. Some of the core properties of the theoretical framework were

selected from Noam Chomsky, Steven Pinker, Richard Kayne, Jamal Ouhalla, and Naoki Fukui, to name a few.

From a structural point of view, the study is organised into three sections. The first purports the theoretical foundations of the analysis. As a result, it is dense and attempts to address the theoretical assumptions in a broad sense to narrow down the presentation by selecting the core conceptual framework of the present study. The second section is functional and focused on the empirical analysis and outlines the contributing elements to L1A in the form of qualitative analytical results. To further develop, the first section refers to the existent theories of L1A and is structured into four chapters. Each chapter is preceded by an abstract that scrutinises the core aspects presented in the chapter and ends with partial conclusions meant to synthesise what has been discussed or debated. The sections were structured this way to easily peg the core concepts and ease the immersion into the narrative of the research paper.

Chapter 1 – *Theoretical perspectives on language acquisition (LA) and language learning (LL)* outline the main empiricist and nativist arguments associated with LL and LA, insisting on the strengths and weaknesses of Skinnerian behaviourism, structural constructivism, and connectionism. The analysis further develops with cognitivist theoretical interpretations on modularity to transition towards the last segment, which outlines the argument and concepts attributed to the nativist perspective on LA.

Chapter 2 – *On the nature of language* illustrates, although not in a detailed fashion, the general aspects reflected by research to this day, arguing in favour of a definition of FL from an evolutionary perspective. The chapter selects noteworthy contributions to the domain to give a detailed presentation of the theoretical background to underpin, in a unified account, all the theoretical outcomings and the salient examples presented. The chapter highlights the arguments in favour of FL as a property of the mind, the arguments supporting an evolutionary perspective, the innate character, the influence of theories addressing modularity, general intelligence, cognitive mechanisms, all the way to

solid nativist arguments like PoS, CPH, and the role of the feedback provided by caregivers.

Chapter 3 – *Generativist hypotheses to language acquisition (LA)* outlines the main directions of research in L1A and address them critically to bring arguments in favour of a continuity approach to L1A. Many aspects have not found proper description under the latest theoretical proposal. The main directions in the domain of L1A are described, ranging from strong continuity to weak continuity, all the way to discontinuity in the process of LA, reflecting, once more, the difficulties acquisitionists face in analysing empirical data and attributing syntactic models to particular languages. The strong continuity models offer the analytical instruments necessary for the present research inquiry, which must be optimised.

Chapter 4 – *Functional Categories (FCs) and first language acquisition (L1A)* describes the main concepts utilised in the present paper. Since there have been many changes from one syntactic model to another, under the general generative framework, a gradual presentation of the evolution and interpretation of FCs under each model was preferred to explain the new direction adopted under the latest MP (Chosmky 1995). This chapter outlines the analysis framework, with the selection of the most relevant theoretical concepts defined and explained in terms of use and impact to the domain of L1A.

The first two sections of the research paper are followed by a segment allocated for general conclusions, making the transition towards the corpus's third section. The second section is organised into two chapters. Chapter 5 – *The acquisition of Tense features in L1 child Romanian* focuses on comparing the empirical results with what has already been described so far, with implications to L1 Romanian. It brings salient examples favouring a continuity approach to L1A aiming at a minimalist interpretation of feature interpretability and its syntactic manifestation during the EMWS and the LMWS in L1A. Chapter 6 – *Case asymmetries. Evidence from the empirical data* addresses standard features under a *Case Theory* framework, insisting upon visible asymmetries and hierarchies in

child language at this stage. Such hierarchies are explained as universal underlying binary patterns. The *Annexes* were created to support further the empirical examples analysed throughout the paper, reflecting, once more, the universal character of the syntactic patterns identified in the participants with specific phonological and morphological manifestations.

A few aspects need to be addressed from the very beginning. First, the approach on the analysis was gradual and defined the core concepts and the description of the manifestation of FCs under the latest minimalist approaches to LA. The main directions from empiricist and nativist perspectives aligned the research to a continuity framework of L1A. The paper aimed to validate existent theoretical models and compare the data against existing studies. However, as seen in *Section II*, the experimental results and the corpus analysis support nativist theories. Although a theoretical approach was not assumed in totality, and the empirical data were interpreted in a minimalist key with room for future research developments, it is believed that the contribution is valid and noteworthy. Moreover, transcribing the participants' productions made possible future investigations. The validity of the approach resides in the analytical methodology employed and in taking a closer look at the selected data and glossing the examples relevant to our study.

Third, the data collection gives a strong argument favouring our results and the validity of the interpretation. The participants were not constrained or influenced in the process. The speech productions reflected variation. It was evident that the interactions occurred in an unbiased and natural way, an important aspect that added value to data analysis. Once specific patterns were identified in the natural speech productions, the frequency in use was measured, validating the predictions.

Forth, given the need to find a unifying account in L1A, the results qualitatively support previously made claims. Notably, based on the experimental results, the argument favours successions, hierarchies, and asymmetries in the acquisition of L1 Romanian. Additionally, the genuine

speech samples reflected in-depth processes and inner mechanisms activated by children during the first years of their lives. Some of the examples given are intricate and difficult to explain, marking features specific to particular languages. In contrast, others have a universal character and can be associated with features in other languages.

To sum up, under the latest minimalist interpretation, the most crucial argument is the simplicity and elegance of syntax in creatively processing language knowledge during the early stages of LA. However, optimality needs to be addressed in light of new empirical results. A continuous reassessment and a critical analysis of the data to improve a theoretical model have to become a core property. The research could be enriched by continuing with the data collection and addressing the results cross-sectionally via elicited productions tasks. Moreover, by taking a closer look at the corpus and the empirical resources provided, new research directions can be proposed, reflecting, once more, that the domain is striving and highly resourceful.

SECTION I – THEORETICAL APPROACHES TO L1 ACQUISITION. A DESCRIPTIVE FRAMEWORK

List of Abbreviations

C	complementizer
CH	continuity hypothesis
C-I	conceptual intentional
CP	critical period
CPH	critical period hypothesis
CP	complementizer phrase
DH	Discontinuity Hypothesis
DMM	Dual Mechanism Model
DP	determiner phrase
EMWS	early multi-word stage
EPP	Extended Projection Principle
EST	Extended Standard Theory
FC	functional category
FI	full interpretation
FL	faculty of language
GB	Government and Binding
I	inflection
IC	inclusiveness condition
*i*F	interpretable feature
INE	indirect negative evidence
IP	Inflection phrase
L1	first language
L2	second language
LA	language acquisition
L1A	first language acquisition
L2A	second language acquisition
LMWS	later multi-word stage
LAD	language acquisition device
LC	lexical category
LF	logical form
LI	lexical item
LL	language learning
MP	Minimalist Program
NE	negative evidence
NP	noun phrase
NSP	Null Subject Parameter
OCC	occurrence
OI	optional infinitive
PE	positive evidence
PF	phonetic form
PIC	Phrase Impenetrability Condition
PLD	primary linguistic data
P&P	Principles and Parameters
RI	root infinitive
SCH	Strong Continuity Hypothesis
SIH	Split-Inflection hypothesis
SL	sign language
SLI	specific language impairment
S-M	sensory-motor
SMT	Strong Minimalist Thesis
ST	standard theory
TD	typically developed
TP	Tense phrase
UG	Universal Grammar
v	light verb
*v*P	light verb phrase
V	verb
VMP	Verb Movement Parameter
VP	verb phrase
*u*F	uninterpretable feature
UEP	Unique Entry Principle
WCH	Weak Continuity Hypothesis

Chapter 1 – Theoretical Perspectives on Language Acquisition (LA) and Language Learning (LL)

This chapter outlines theories relevant to the fields of language acquisition (LA) and language learning (LL) by focusing on the impact registered in the domain of first language acquisition (L1A). Although the present study adopts a nativist theoretical framework, this chapter aims to bring arguments in favour by setting a broader academic background to justify the conceptual approach adequately. In what follows, some of the main assumptions launched by main theories of LL and L1A will be described, insisting, at points, upon the strengths and weaknesses observed in analysing each proposed approach or framework. The defining elements of the theoretical models are outlined. In short, a clear conceptual split and an adequate explanation of LL and L1A theories are necessary before further developing the conceptual and theoretical framework. The most substantial arguments in favour of a nativist approach are the poverty of stimulus and the innateness of FL. The keywords in this chapter are *input, output, skill, competence, performance, inner mechanisms, and mind modules.*

1.1. Preliminary remarks

The intention is to give a brief account of the main theories that outline the domain of LA and LL by presenting the core concepts and the strengths and weaknesses of the approaches. The main endeavour is to mark some of the distinctive traits associated with LA and LL while analysing some of the strongest arguments in the nativist literature. These ideas will be detailed and supported by examples provided by the

experimental data in *Chapter 2* and *Chapter 3*. The rationalist-empiricist, social-interactionist, and nativist theoretical accounts aim to foster a fair outline of the framework and apparatus from an evolutionary point of view. One of the implicit core differences between the nativist and empiricist accounts is the questioning of *Universal Grammar* (UG) and the *faculty of language* (FL) as a property of the brain, inherently a biological system. Connectionist models based on general intelligence theories claim general adaptability and use of such mechanisms, contrasting with the description and functionality of linguistic abilities. The former claims are not adequately supported, and empirical evidence leans towards nativist arguments in developing a valid theory of LA. The introductory chapter explains why a nativist approach to LA and processing was adopted and argues that a framework based on the emergence and continuity of UG, as a core element of grammar, is the most viable in the light of the new minimalist accounts.

Moreover, this position is supported, as outlined in the chapters that are to follow, by the resourceful empirical, experimental data that support the qualitative research on empirical data in child Romanian. The research is validated by the empirical data reflecting qualitative studies on the acquisition of FCs in the case of children who speak Romanian as L1, with a focus on Stage 1 and Stage 2 of development. The results, corroborated with previous studies, contribute to a better understanding of L1A processes from a generative perspective and strengthen the arguments supporting a *Continuity Hypothesis* (CH) in L1A (Wexler 1994, Wexler 1998, Avram and Coene 2005, Avram 2010). One must note the divergent accounts regarding the acquisition of functional categories (FCs) and the learnability factors involved in the process. The hypothesised generativist theoretical accounts are complex, and theorists are far from reaching consensus, whether one addresses theory internal or theory external assumptions. Still, a broad sense review of the main directions of LL and LA is necessary before emerging into the conceptual framework of this research, all underpinned by the moment that revolutionised the domain of linguistics in the 1950s. To better grasp the

emergence of a different direction in the study of language, in the first place, the attention must shift to the details provided by the linguistic background of that time, with a focus on the gradual inner developments. Psychological behaviourism, linguistic structuralism, empiricism, and other cognitive approaches are outlined for a deeper understanding of how linguistic theories evolved. Moreover, such resourceful theoretical grounds are envisioned to serve the purpose of arguments in favour of a nativist perspective, generating an epistemology of language.

1.2. Skinnerian behaviourism and structuralist theories in language learning (LL)

The behaviourist school of thought, which emerged in the 19th century (Watson 1913), continued as a legacy into the very psychology of behaviour analysis by B. F. Skinner into the 21st century (Skinner 1957). In this traditionalist view, any LL mechanisms were controlled and conditioned by the environment and necessarily defined behavioural acts. The Skinnerian approach is limited and interpretable solely at the *performance* level in a broad sense. Thus, as a mind concept, competence is not considered in the equation of a linguistic theory. It is argued that any ill-formed, deviant structures are attributed to external factors, and language had to be described as learnability rather than acquisition. BF. Skinner was the greatest proponent of a *nurture* approach to language, and his theoretical model became the framework of analysis for learning theorists (Bloomfield 1933). Behaviourist theories are embraced even today and argue against the proposal of a model which would describe FL as a property of the mind.

In the behaviourist literature, imitative mechanisms are associated with the input. Children learn a language as they would any other skill, permanently relying on reinforcement, analogies, overgeneralisations, and other means that fall under the incidence of distributional learning algorithms. In this sense, imitation cannot exist without input. Given that,

the input analysis played a crucial role in construing such theoretical models for the most part. The child is an empty box, and learning responds to conditioned and unconditioned stimuli. As a result, the child learns new structures by trial and error, imitating and repeating what is existent in the input. Another assumption associated with behaviourist theories consists in children manifesting high receptivity to corrective feedback provided by the adults, the latter being the only entities that can offer the right kind of input. The purpose behind such an assumption was to create a model that could measure the observable behaviour in children. In this equation, the linguistic community of the child was highly valued and was assigned responsibilities that went beyond what the empirical data attested. In this view, the environment and experience became decisive factors. As a result, from this traditionalist perspective, a complex and detailed description of the elements became instrumental in contouring an imitation model of LL (Skinner 1957). Granted that all these predictions were embraced and further proposed by structuralists, the theory of imitation and the role attributed to corrective feedback proved to be deficient and unsatisfactory since it did not offer answers regarding the input and its relation with the output grammar.

For this reason, such theoretical accounts could no longer offer a convincing description of why children can generate much more than what experience has to offer. The evidence that they can build structures beyond the input submitted could no longer be ignored. In like manner, the available empirical data reflected a different reality, and, correspondingly, a new perspective emerged aiming to explain language as a property of the species, understood as an acquisition, an inborn process, rather than an external learning algorithmic process. A shift in the theoretical paradigm was observed by directly addressing the evidence provided by the empirical data. A different interpretation was due as the structures generated by children surpassed the complexity of the input. Social and cognitive aspects are essential in describing language. The empirical evidence of syntactic development transgressed generalisations, analogies, and various connections solicited the proposal

of a new paradigm in language. Children could no longer be described as using mere expressions offered by the input via the adults surrounding them, as they are not conditioned in learning. A child could no longer be addressed using words such as *tabula rasa* (Locke 1956). Experimental data proved that they were endowed with knowledge of syntactic and semantic nature, which could explain language acquisition as an effortless, creative process (Chomsky 1959b). It could no longer be interpreted solely as social interaction and imitation.

Significantly, another assumption that needs to be addressed inquisitively is the role played by corrective feedback associated with negative, indirect negative, and positive evidence. These matters will be presented in a more detailed fashion in *Chapter 2*. The Skinnerian operant conditioning of stimuli was used in the learning process associated with the corrective feedback given by caregivers, with operations such as copy, repetition, association, etc. As evidenced by the empirical experiments, the present paper will hold such assumptions to build a nativist approach. On such grounds, *negative evidence* (NE) and *indirect negative evidence* (INE) (Chomsky 1981b) associated with LA is insufficient, cannot be accounted for, and does not stand as a LL argument for behavioural patterns. The behaviourist approach resonated with structuralist theories, the role of the input becoming the primary means of addressing LL.

Consequently, Skinner's work influenced the research domain of psychology and how Western cultures perceived the environment and its role in hypothesising the modelling and the shaping of human behaviour, with its implicatures to LL. However, the new revolutionary approach to language posited that it could be defined via mental representations, with sound arbitrariness associated with meaning. Moreover, it is innate and not the result of internalisation of external behaviour via reinforcement, the verbal behaviour of the adults. Chomsky dismantled the arguments towards an operant conditioning approach to LL, as reflected in the well-known review of Skinner's book (Chomsky 1959b).

1.3. Social-interactionist and constructivist approaches to language learning (LL)

Another important aspect regarding the given theoretical approaches was that rational human abilities gained value within such specific theoretical model proposals. The first observable changes benefited from a new interpretation on defining language as "a faculty of the brain" (Chomsky 1965) because, for the first time, cognitive abilities and the stages of cognitive development were considered relevant and viable arguments towards a sound hypothesis. The Russian psychologist LS Vygotsky first proposed the socio-cultural theory (Vygotsky 1978). Even though mental processes were neurobiologically conditioned, any form of cognitive ability resulted from interaction with the available social media. According to this theoretical view, children become successful learners because they interact with adults who know that particular language. Vygotsky believed that language was instrumental for thought but believed that convergence was possible only if found in the developmental process. His arguments were in favour of *nurture* rather than *nature.*[1] As a social constructivist, the author posited that the environment, the social context, and the adults actively participating and moulding children's cognitive development were the key actors involved. One would be the importance of *private speech* and the delineation and definition of the *zone of proximal development* (ZDP). Mainly, there are sets of skills that a child can do by himself and some that a child can only do if assistance is provided, and, in between these two aspects, he placed a proximal zone that needed filling. In the author's opinion, interaction becomes a vital component of the model and the means of addressing the child; as such, he supports the idea of *Motherese* being a definitive factor during the early stages of development (Clark 2003).

[1] Here reference is made to the well-known *nurture-nature* debate regarding the role of the environment and the genetically predetermined factors.

Another well-known psychologist favouring a social-interactionist approach to LA and the education field was Bruner, who proposed a *Language Acquisition Support System* (LASS) (Bruner 1975, Bruner 1983). The system contains the environment, social and cultural elements and routines, child-directed speech, and other learning methods via interaction with caregivers. The author shifted the focus from syntax to pragmatics and communication in conceptualising a theoretical apparatus in his work. At a closer look, both Bruner and Vygotsky proposed research models which shared features with cognitive approaches such as Jean Piaget's, the established Swiss psychologist. However, there are different aspects; the former conferred a more well-defined role to social elements, communication, context, and the environment, while the latter attempted to identify and define universal principles. As a theorist, Piaget argued in favour of stages of cognitive development in children. His contribution needs acknowledgement since it became instrumental and of great relevance to the domain of LA (Piaget 1970).

Mainly, Jean Piaget was a proponent of an interconnection between linguistic and cognitive development, known in the literature as the *constructivist theory* (Piaget 1970). Although the language is not understood as autonomous with specific functional properties, it is still connected to mental processes of understanding and conceptualisation. As a developmental theorist of cognitive theories, one crucial aspect is that Piaget didn't argue against linguistic development as a property of the mind. He postulated cognitive development in stages and described cognitive development abilities as age and stage-specific. If children are assumed to generate mental representations under such theoretical accounts, they have to operate with constructs to conceptualise. In addition, the experience was a critical factor in the dynamics of such complex cognitive processes. Among the author's legacies, it is notable how he argued for a separation of language and thought; language results from the intrinsic cognitive mechanisms, although, from his perspective, thought preceded language. Piaget's cognitive theory was

ground-breaking at the time. The proposal of a cognitive-developmental hypothesis, structured into four stages associated, in turn, with aspects on language development, impacted many research domains. Another significant contribution to developmental theory was his observation of how children develop cognitively, gradually, in a brief period. Piaget believed that first it was the thought, and then came the language that described the particular thought. The four well-known developmental stages proposed were *sensory-motor* (birth-2;0), *preoperational* (2;0-7;0), *concrete,* and *formal operational* (7;0-11;0 and 11;0 – adulthood). According to this approach, cognitive development governed linguistic development in children (Piaget 1970). As seen in *Section 1.4.*, the shared properties with other cognitive accounts became the main legacy of his theoretical framework. The developmental stages were the foundation for future theoretical accounts in studying language and its nature.

During the 1950s, a visible paradigmatic shift in the theoretical domain emerged, particularly regarding the assumptions on LL and LA, starting with Noam Chomsky's analysis of the Skinnerian programmatic work (Chomsky 1959b). Consequently, new windows of opportunity opened to acquisitionists, and the research domain of L1A extended to the broader spectrum of L2A. Extensive empirical investigations amounted to a new model of syntactic development. Piaget also acknowledged the paradigmatic shift in linguistics. It would be counterproductive to place the nativism-constructivism debate on opposite sides in the argumentation process. Although Piaget identified at the core of his research the very nature of cognitive development, he did not ignore the nature of the FL. He agreed that there could be a *nucleus* nurturing the ways languages are constructed (Piaget 1970). Under the new framework, it is postulated that the FL is human-specific, innate, and recursive and constrained by invariant principles of UG (Chomsky 1965), which make us unique in the universe, particularly with a focus on nature and manifestations of early child grammars.

1.4. Empiricist approaches to language learning (LL)

In this sense, connectionist frameworks (Elman 1991, Elman, Bates et al. 1996) propose recurrent associations as learning mechanisms based on networks at a neural level (Rumelheart et al. 1986, McClelland et al. 1986). From these perspectives, neurons have corresponding units, the input being received and passed along to other units, constructing a network that is set value in its final form. The initial units can suffer changes before reaching the final state because the connections are set with context network units, which can be recurrent. As a result, the multilayering of the networks aims to explain the differences between the input and the output. The proposal of connectionist models aimed to argue against a nativist approach. Criticism came from cognitivist (Fodor and Pylyshyn 1988) and nativist (Pinker and Prince 1988) directions, arguing that such models could not possibly offer an account that describes connections as having a general and abstract character. Such models could not adequately explain language ambiguity which arises when interpretation requires syntactic processing beyond lexical units that enter probabilistic network processing. The learning mechanisms driven by specific data to connectionist relations do not give answers to *a priori* knowledge, which indicates different spell-outs in child and adult grammars; therefore, LL could not be limited to distributional patterns probabilistic mechanisms (Legate and Yang 2002).

The starting point was on the experiments that analysed the acquisition of irregular verbs in English (Yang 2002). In the nativist/non-nativist debate on LA, if the former hypothesised a LAD associated with underlying mechanisms specific to the LF, the latter adopted a functionalist approach, where language is not a separate entity but integrated into the cognitive development. Linguistic emergentism (Bates 1999) was rooted in the constructivist approach to language (Piaget 1970) associated with connectionist models. A unified account on grammar and lexicon was proposed as "a class of possible solutions to the problem of mapping back and forth between a high-dimensional meaning space with

universal properties, and a low-dimensional channel that unfolds in time, heavily constrained by limits of information processing" (Bates 1999, p. 4).

As a developmental theorist, she was assertive against grammar as being innate, genetically predetermined, and rejected the idea of FL as an autonomous system of the brain. The model she proposed was designed to provide answers to language learning in general and the developmental processes involved in the process (L1, L2, etc.). Such a proposal was not without flaws, for the sets of rules and modules, as defined within the emergent framework, could not explain why child grammars develop to adult/target grammars very fast. Moreover, it did not provide enough arguments to explain specific features attributed to L1 and L2.

The *competition model* was described as *an input-based model* (Bates and MacWhinney 1981) designed as a formal and functional model, and the forms were meant to express communicative functions. The model was proposed as *cue-based*, where *cues* entered competition using relevance as a criterion to generate linguistic structures, and their validity was matched against the input. It attempted to offer a unifying approach in explaining how child and adult learning and processing occur, attributing special attention to exceptional cases of linguistic impairment. Moreover, extensive research was conducted on individuals that suffered from aphasia, and such models attempted to explain the interaction between emergent modules (Bates 1999, Bates and MacWhinney 1981). The model tried to provide the mechanisms for acquiring different languages by relying on cognitive abilities and interaction, using operational constructs such as resonance, competition, entrenchment, etc. Evidence towards the functional approach of this model came from working with children who suffered from linguistic impairments. In addition, fMRI results provided evidence towards brain neuroplasticity. Still, questions regarding the differences in LA between L1 and L2 and the role played by a critical period in LA remained unanswered.

Another emergentist proposal, the *Coalition Model,* aimed to distance its position from the *connectionist competition model* since *cue* assignment was not strictly associated with the input but rather with

what was available to the child during the early stages. This model did not deny a hypothesised innateness. As a *cue-based* model, it addressed accessibility in terms of availability and windows of opportunity, which could be accessed only at specific stages (Hirsh-Pasek and Golinkoff 1996). The input still played an important role, and the child's knowledge was associated with the environment and experience. Accepting specific stages in the learning process is associated with an innate approach in conceptually addressing language knowledge.

Another model in cognitive science was the usage-based LL model proposed by Tomasello, which relied on items resulting from acoustic exposure. Conservative proposals on models of LL do not acknowledge UG; on the contrary, they reject such an initiative as a core concept of LA. Syntactic structures and the assumption of universal principles are denied. The only means of explaining learning mechanisms is the repetition and substitution of nominals in sentences mirrored from the input, and the structures have to follow specific templates or patterns. Any expression produced by the child would result from the interaction with the input, as no innate knowledge is attributed to the child's ability (Tomasello 2003).

Additionally, he explained non-adult structures as omissions of words from adult structures attested in the input. In his proposal, the assumption was that structures produced by children are the equivalent of truncated adult structures. However, his theoretical model and his means of explaining tense and non-tensed child language occurrences were not without problems. First, anything associated with production was explained via experience, and the speech productions of children were apprehended as syntactically-limited in terms of creative string productions. In this regard, children learned from experience, and language structures resulted from using units or items of the language they could hear around them repeatedly. In addition, such items had to be learned intensively as the models employ mechanisms that rely on

memory as a critical component. According to his approach to LL, the child will gradually transition from concrete to general, in a patterned and recurrent way, until the items become automatised due to intensive usage. The fundamental operations that strengthen language are recurrence, frequency, and use count on repetition. The frequency with which children repeat is subdivided into token and type frequency, the first refers to how often words occur, and the latter tells how many structures it can be applied to (Doughty and Long 2003). High token-frequency error reduction in this theoretical format, while type-frequency increases the chances of future use of words and constructions. Pre-emption is a concept placed at the opposite end regarding frequency and use, assuming that children in low-frequency constructions will not further use words in structures with higher frequency.[2]

An alternative model, van Hoek's *Cognitive Grammar Model*, detracting from an innate hypothesis by emphasising the role played by the input, adopted algorithmic mechanisms to explain linguistic processing. This approach falls under the traditional, reductionist approach to LL and inductive processes and analogies and has as a primary objective the PLD matching. Correspondingly, according to this model, meaning can be postulated by children only about what is available in the input, and the environment becomes a key component of the model. It is also assumed that the child cannot generate beyond the structures rendered available in the environment. The author proposes an account that denies the innateness of language and allots any internalisation processes to the input (van Hoek 1995). Notably, children will produce only structures that can be matched in experience, translated into PE. Nativist arguments can dismantle such a theoretical proposal, as the PoS argument discussed in *Chapter 2*.

[2] Tomasello proposed this account for root infinitive structures opposing the nativist views such as the ones presented in the present paper in *Chapter 3* and *Chapter 5.*

1.5. Modularity, theories of mind, and cognitive development

Evolutionary accounts on modularity have been expressed in the literature under different theoretical models, which develop upon brain architecture being modular, language being such a module (Chomsky 1988c, Piatelli-Palmarini 1989). Fodor's proposal also focuses on the brain's architecture associated with computational modules; however, it needs to be mentioned that these brain modules have different roles in functioning and interpretation. In light of a cognitive approach to language, the brain's architecture is represented by a series of modules, and the FL is assumed to be one of these modules, all being processed by the central system (Fodor 1983). As is has been signalled in the description of models in *Section 1.4.,* the input still plays an important role. In the case of processing mechanisms, the information is parsed by the modules and transferred to the centre to be interpreted about what is received from the other modules of the brain. Fodor assumes a local interpretation of the operations associated with brain mechanisms and relations. In light of this theoretical proposal, modules are defined as self-sufficient without establishing any connections that would go beyond their set domain with a clear delimitation about the central level. Interpretation cannot be applied locally at a modular level from this perspective. The author believes that higher functions cannot be interpreted (Fodor 1983). To continue, a cognitive model that would allow interpretation of higher functions in a unified way was developed by Pinker (Pinker 1997b) and is different from Fodor's proposal. The cognitive revolution of the 50s redesigned the architecture of language and presented it as a reflection of the mind. The language was described as an *instinct*, an unconscious and effortless ability of the human being (Pinker 1984), as a LAD equipped with inner mechanisms (Chomsky 1965), or even as a *computational module* of the brain (Fodor 1983, Fodor 2000).

Remarkably, the theory on modularity divided and defined cognitive processes into *general*, operations like problem-solving, thinking, etc., and domain-*specific*, the human mind being equipped with a central system and several modules of specific domains; language is such a module of the mind. Although a definitive linear response was indeed challenging to provide, one question that needed an answer was whether the process of language acquisition could be described as an independent system or linked with the cognitive system. Theories evolved, and new neurological, genetic, and evolutionary discoveries brought evidence favouring a unified, integrated approach to LA. Detailed accounts will be presented in *Chapter 2* and *Chapter 3*. It has been argued that language cannot be reduced to generalisation strategies, analogies, and the role of the input, for theorists and acquisitionists had to surpass such accounts in LL and LA based on the evidence. As stated above, Fodor defined cognitive processes as general and domain-specific. In his view, the central system was designed for higher cognitive activities, and the FL was a domain-specific module with shared properties. Under the language of thought hypothesis, modules are domain-specific input systems imposing determining developmental stages across species and are, to some degree, autonomous. Such highly operational modules directly relate to the central system (linked to memory, reasoning, belief, etc.) (Fodor 1983). The author redefines the concepts of the model. Many theorists ended up detracting from his previous assumptions regarding the inaccessibility of the central system for research, somewhat agreeing that the central system must have some sort of structure. The modular language definition met the common ground with the nativist approach because the innate hypothesis presents LF as an independent component. There were still debates on both sides on whether language is connected to other cognitive systems or independent.

The *Modular Hypothesis* (Fodor 1983) provided great insight into investigating aphasia cases of individuals that suffered lesions on Broca's and Wernicke's areas, which led to speech impairments or speech loss.

Conversely, language functions were assumed to be concentrated in the left hemisphere and the two areas that help us process expression and understand language. The data revealed that any damage to these areas generated a type of aphasia, *global* aphasia if both regions are damaged, or *fluent* aphasia if only the latter were damaged. Nerve fibres connect the two areas, which also function in the case of deaf people, that is, in sign language (SL), and when this connection is damaged, conduction aphasia occurs. In short, the Modularity Hypothesis offered significant support in predicting and explaining situations when language was not affected by other cognitive abilities. Such results contributed to building arguments towards a nativist approach to LA.

Moreover, specific forms of aphasia were associated with loss of grammatical morphemes or comprehension impairment. In this sense, the contributions put forth by Roman Jakobson, as he observed similarities between LA processes and knowledge loss manifested in aphasic patients, play an essential role (Jakobson 1968). Broca's aphasics tended to use verb infinitives and unmarked Nominative cases, such as in the case of the "optional infinitive stage" in L1A (Wexler 1994). Children acquire the last marked ones in terms of marked elements, but such features are lost first by aphasics.

There are also radical approaches to the language-thought tandem, and one can mention linguistic determinism as one direction. Language theorists subscribing to this hypothesis assumed that language influences thought. On the one hand, the weak theory or *weak linguistic determinism* posited a particular influence from language onto a thought. On the other hand, the strong hypothesis or *Strong linguistic determinism* supported the idea that language influences thought thoroughly (the Whorfian theory). Linguistic determinism is another extremist from claiming that the mother tongue is the language of thought which implicitly determines the thoughts one thinks; in other words, language controls the way people think (Gentner 2003).

To sum up, cognitive approaches to language acquisition contributed to defining the role played by the FL as part of a modular

mental representation framework from which the language of thought was hypothesised. The proposal of *organs* as modules contributed to better explaining the very structure of FL as a modular system. FL is modular and intentional from a generative perspective, subdivided into smaller modules with specific roles. It is also independent and autonomous, a claim supported by the data resulting from the research on individuals who suffered lesions on particular brain parts, which impacted their language and cognitive abilities. From a modular perspective, language must be defined as input and output. Still, the two components are not mutually exclusive, and FL and its inner mechanisms are part of the knowledge system. Fodor did not subscribe to an evolutionary selection theory. He did not localise an FL module in Chomsky's terms but rather as mechanisms of the brain that make language processing possible by humans. The contribution made to the domain of the philosophy of mind is paramount. It links the concept of the innateness of language within modularity of the mind theory since experimental data reflect how humans with excellent linguistic skills are cognitively deficient. Vice-versa theorists had to look at FL and its degree of autonomy and dependency of interaction with other cognitive systems.

1.6. Language acquisition (LA). A nativist perspective

A change of perspective in LA occurred with the proposal of a language description based on transformational rules (Chomsky 1957). The author argued that grammar, the knowledge of the language, was not the result of induction mechanisms but a property of the brain (Chomsky 1965). Thus, the shift was towards *competence* rather than *performance*, syntactic mechanisms and perception, and production. A new definition was attributed to FL and a new direction in describing how child grammar emerged. Two new concepts were proposed within this new theoretical framework, *competence* and *performance* (Chomsky 1965). An argument towards an independent formal model in the

description of structures was posited without necessarily being interpreted semantically; the famous expression "colourless green ideas sleep furiously" supports the claim (Chomsky 1957 p. 15). From this perspective, language and its faculty are innate and biologically determined, respectively is a property of the species. Chomsky assumed that the *knowledge of the language* was represented in the brain and that it was an intrinsic property of the brain, genetically predetermined. The FL was endowed with underlying universal principles belonging to UG. Four questions were addressed to offer salient answers towards a syntactic theory of language acquisition. The first had to do with knowledge as a system, the second referred to its emergence in the brain, the third referred to its manifestations and use, and the fourth addressed the nature of the mechanisms involved from a biological perspective (Chomsky 1988b). In his view, the first question has a descriptive role and attempts to explain what in the mind/brain makes possible the construction "of a particular grammar" (Chomsky 1988b p. 133). The answer to the second question takes us back to Plato's problem, the infinite use of finite means, in the well-known *nature-nurture* debate (Chomsky 1959b). Plato attributed an essential role to nature in LA, and Bertrand Russell explained its innateness: "how comes it that human beings, whose contacts with the world are brief and personal and limited, can know as much as they do know?" (Russell 2009 p. xiv). The new approach was rooted in an argument that led to ground-breaking results and propelled the development of a new syntactic theory of L "the poverty of stimulus" – Plato's problem (Chomsky 1986b, Chomsky 1988b), or the "logical problem of language acquisition" (Baker and McCarthy 1981, Hornstein and Lightfoot 1981). In the generativist literature, the input-output relationship experienced a shift in interpretation; as such, children with exposure to limited PLD are assumed to generate infinite structures by activating the LAD. They can solve problems creatively even when the input is deficient.

Furthermore, the structures generated by children do not resemble adult/target-like forms. The evidence coming from linguistic descriptions

of different languages could no longer give a satisfactory interpretation in terms of external performance, as in behaviourism, but rather as a mapping of the linguistic competence; this syntactic representation being identified in grammars in general. To sum up, so far, the empirical evidence reflects that there is more to process than what the input, the environment, and the social interaction have to offer; however, none of these factors should be excluded. The third question attempted to explain how language is used in terms of perception and production. Innateness was given another dimension by association with Cartesian thought. Descartes pointed out that language has a creative side, and language creativity makes us unique, differentiating us from other species. Last but not least, the fourth question addressed carried more load and complexity, attempting to describe the linguistic theory in terms of its *properties*, *abstract by nature*. As a result of the *physical mechanisms of the brain*, "when we speak of the mind, we are speaking at some level of abstraction of yet unknown physical mechanisms of the brain" (Chomsky 1988b).

The nativist approach assumes that we are genetically (pre)determined to acquire and develop language from an evolutionary perspective. There are still unanswered questions about what degree, but progress is visibly made. At its core, the theoretical apparatus has the FL, an innate brain faculty endowed with universal principles. The behaviourist theory defined language as a mapping between linguistic patterns, cognition, and social interaction (Skinner1957). The generativist approach to LA signalled that one could no longer ignore the evidence of specific internal mechanisms capable of generating syntactic structures that must be described and explained beyond what the theory of imitation and correction offers (Chomsky 1957, Chomsky 1959b).

From a generativist perspective, language is an autonomous, independent creature and can establish connections to human thought, action, and social relations. In this sense, when acquiring early grammars, children rely on mechanisms used in cognitive domains, but, more importantly, they use means that apply to language and are innate. The faculty of the brain is defined as an independent system and, being

biologically determined; it cannot be reduced to mere responses to stimuli. Still, one must understand it within a larger framework, for the environment and the other cognitive domains still play an essential role. LA goes beyond the input in terms of processing, and early child grammar is characterised by uniformity as children reach full competence in a short period, with some variation from one individual to another. As for the means of syntactic processing and projection, the nativist approach to language is seen as maximal, with minimalist elements that govern the process, uniform in terms of stages of linguistic development. However, parametrical/algorithmic variability must be adequately understood and explained in TD children and children who suffer linguistic impairments. For nativists, language can be interpreted as an instinct (Pinker 1984), a mental organ, a psychological faculty, or a computational module. From a nativist perspective, children are endowed with language knowledge and are biologically predetermined to learn languages. In this sense, they are genetically designed to acquire language. In the following chapters, the theoretical accounts supported by empirical data will be described, supporting the assumptions regarding language endowment, inherent properties, stages in LA, availability, critical/sensitive periods, and maturation.

To sum up, nativist theories support the assumption that language functions as an organ, to an extent, but it is envisioned to manifest other properties as well, and these specific properties set it apart from other systems of our body. The autonomy of LF is defined in terms of the degree of independence it has among different systems. Still, the idea of a degree of innateness stands and contributes to the optimal design of a linguistic theory in LA.

1.7. Conclusions

The first chapter synthesised some of the main directions in researching language and the impact observable in the development of

L1A. The chapter started by presenting theoretical accounts of structure building conditioned by operators, reinforcement, and imitations, instead of innate and recursive representations in the brain. It displayed aspects regarding perception-comprehension processes and how they were defined under different accounts. Of relevance for the first chapter are some hypotheses that explained language as an experience-based process paired with the main empiricist approaches and theoretical models, which relied on statistical learning and connectionist patterns. The empirical data reflect whether the methods presented were empirical, emergent, functional, social-interactionist, or cognitivist. Such directions did not provide enough evidence to support the accounts. Namely, theoretical perspectives which express language in terms of distributional learning, ignoring the innate attributes of the acquirer, are rendered to be weak accounts. Therefore, starting with the representation in the brain, which attempted to explain the acquisition of substantive and functional elements, to the role played by the sensitive periods in LA proved to be a critical argument towards a nativist approach to natural languages. Sign languages and creolised languages are included here, all the way to the recent neurocognitive research. The predictions regarding the FL are strong and satisfy the perspective adopted for the current account.

Chapter 2 – On the Nature of Language

The main arguments underpinning the nativist approach to LA will be outlined in this chapter, supported by examples from case studies and experimental data. In this context, FL is defined and its innate UG specificity from an evolutionary perspective, with sharp distinctions between adaptation and exaptation perspectives associated with language growth. Another relevant argument consists in the role played by the input concerning the output, namely the evidence related to the input-output connection, whether it is positive (PE), negative (NE) or indirect negative evidence (INE) (Chomsky 1981b) concerning the hypothesised poverty of stimulus (PoP) (Hornstein and Lightfoot (eds.) 1981, Baker and McCarthy 1981), Chomsky 1988b). The theoretical approaches explain the connection between cognitive systems and language as a module of the brain, with evidence from creoles and pidgins, as well as the data resulting from research in the domain of pathology, are pegged sequentially, insisting upon the impact of the hypothesised critical period or sensitive period onto the acquisition process during the early developmental stages of LA. The chapter concludes with a revisitation of the role of UG to the evolutionary arguments that contributed to the outline of the *Principles & Parameters framework* (Chomsky 1981b), which was optimised under the *Minimalist Program* (MP) (Chomsky 1995). The keywords are FL, *innateness, positive evidence, negative evidence, indirect negative evidence, LAD, Motherese, Fodorian modules, Chomskyan modules, creolisation, poverty of stimulus, and critical period.*

2.1. Preliminary remarks

The nature of language has been debated extensively in the field of LA. In light of the directions presented in *Chapter 1*, the main nativist arguments are traced with supporting evidence from experimental data.

With the emergence of the new nativist theory as a response to empiricist accounts (Chomsky 1975a), new perspectives were developed and impacted the research domain of L1A and L2A. The field of research fostered the development of various emergent hypotheses attempting to describe competence adequately in child grammar, as opposed to adult/target grammar. It was coupled with the dynamic relationship between *perception* and *production* at symbolic, modular, and representational levels regarding language-specific properties, valuations, and features checked in licensing derivation. The theoretical assumptions have evolved during the past 40-50 years. Salient arguments grounded in the nativist approach to LA are instrumental in outlining the theoretical framework of the present research paper.

With different takes in terms of full or partial UG availability from the onset of acquisition, it is acknowledged that during the stages of LA, children acquire full competence in a brief period. The following chapter addresses aspects such as full or partial access to UG from the onset of acquisition, the milestones in the acquisition process in children, the role of negative evidence, the presence or absence of FCs during the first stages of acquisition, and the maturational process of FCs, among many others. With room for improvement and growth, evidence provided by actual empirical data could no longer be ignored. Children were able to generate target-like structures early on, in many languages, with acceptable variations from individual to individual. Thy exhibit proper syntax, manifest an explosion at the lexical level, marked progressively through the linguistic developmental stages, and, more importantly, can map semantically and syntactically in an effortless way. Still, the question that theorists needed to address was how was this possible and which were the driving forces or the underlying mechanisms that pegged such manifestations in language. Some of the solid arguments towards an evolutionary approach to FL (Chomsky 1995) are the sound computation observable in TD children, the growing lexicon, the innate characteristics of the mechanisms attributed to the language "organ" or instinct (Pinker 1994), and discrete infinity (Chomsky 2005b), as predetermined

mechanisms of the mind. Child grammar emergence can be allotted to the knowledge of the language as a brain property, which explains LA processes and cuts a clear distinction between acquisition and learning processes, thus easing and adequately solving the tension generated between the two distinct approaches to language. The evolution of language, from Pinker's perspective (Pinker 1989), is assumed to be the result of natural selection as opposed to a non-selectionist perspective that explained the emergence of language as a by-product of the course of evolution regarding the development of the brain and its architecture (Chomsky 1968/1972, Gould 1987, Piatelli-Palmarini 1989).

The arguments synthesised in this chapter contributed to the development of the nativist theoretical approach, which, to this day, although with room for improvement and evolution, offers a satisfactory account supporting the architectural framework, contributing to a better understanding of how the inner FL mechanisms work in relationship with the *input-output* tandem (Chomsky 1995). This chapter readdresses some of the most ardent questions regarding language, its nature, and its relationship with other parts of the cognitive domain. The evolutionary approaches do not provide sufficient evidence in a narrow and broad sense. Some data support a narrow path, others do not, which hypothesises that languages could result from a genetic mutation that fostered an internal language at a representational level (Chomsky 2007b). Still, more data needs to be gathered and measured. Such a bold account explaining how language evolved in humans underpinned a theory of UG from a minimalist perspective, as argued in the *Minimalist Program (*MP) (Chomsky 1993, Chomsky 1995). One theoretical view posited that any form of mutation was assumed not to be directly related to any means of communication; as a result, it opposed other views which supported an association driven by the need to communicate. Therefore, under the first assumption of the *Saltational Theory*, UG asymmetries between LF and PF were acknowledged; the former offered a unified account to UG across languages, while the latter, being secondary, was attributed the role of explaining variation across natural languages. The

lexicon is conceptualised and universal under the evolutionary approach to language and its emergence and is the source for PF and LF representations. A different account takes adaptation and communication as essential factors in defining LF (Pinker and Bloom 1990, Pinker and Jakendoff 2005).

2.2. The faculty of language (FL) from an evolutionary perspective

The conceptualisation of FL has been described under different generative accounts and culminated, in recent years, with a complex investigative interpretation under the MP (Chomsky 1995). The core biological features of FL and their function aim to explain the evolution of language, or language growth, as a biological system in relationship with other cognitive systems and with other systems of living organisms, all in support of a unified theoretical account. In the domain of LA, necessary steps were made under the *P&P framework* (Chomsky 1981b); however, the new bold minimalist proposals required a review of the status quo of the theory, which became problematic. More specifically, according to the new evolutionary approach to language, a shift was necessary in studying language and its faculty as a computational system using principles and rules that govern other systems in the world. Under the evolutionary theory, FL must be accepted as a critical component. As such, new theoretical perspectives emerged regarding the evolution of language in a broad and narrow sense. These accounts contributed to the way the domain of LA evolved, together with the means of interpreting the empirical data in relationship with I-language or the initial state of FL. On the assumption that FL is the result of nature's selection (Gould 1987), although there were theorists who posited that an evolutionary account was not supported and, even if it were, it would need more time than what was allotted from a theoretical standpoint. Other researchers embraced such an account and perceived language as a growth, endowed with properties identified in biolinguistics. The assumption is that

language fits the evolutionary account since it is adaptive; its grammar is equipped with underlying mechanisms, which are highly complex and bear representation at the interface level. Moreover, the autonomous and revolutionary approach to language is presented as possibly being the result of a gradual change, on one hand, or exaptation, on the other.

From a nativist perspective, grammar became more and more specialised in time, and its selection properties generated evidence in this sense. Suppose it is accepted that UG is universal to all humans. In that case, one can explain and understand the difference between learning and acquiring a language, as reflected in the extensive corpora investigation on CL1A first and foremost. One of the core properties of UG existent in humans is recursion, and it is effortlessly used in languages to abide by UG rules (Chomsky 1956). Therefore, the child will always generate structures that comply with UG and would not violate any principles based solely on the positive evidence delivered by the input. The language system bears abstract properties. One such property associated with FL is *discrete infinity*, a property shared with natural numbers (Pullum and Scholz 2010)[3], recursion being a unique feature specific to the system (Lasnik 2000). From a UG perspective, FL is genetically predetermined in children; they are biologically equipped to acquire language and operate with it due to evolutionary developments in the language (Chomsky 1965, Chomsky 1986b, Chomsky 1995, Chomsky 2000a). The posited proposal became axiomatic in the work of syntacticians and acquisitionists. A thorough account distinguished between a *broad* and *narrow* interpretation of the FL, the former being described as a shared property that developed gradually, as a necessity to communicate, equipped with recursive underlying mechanisms able to generate infinitely from a finite set and sequences interpreted at interface representational level of the S-M system, respectively the C-I system (Hauser et al. 2002). At the same time, the latter is assumed to

[3] It is a critical account regarding the mathematical foundations of generative grammar, as well as the role played by discrete infinity in natural languages is presented by the authors.

have unique syntactic property specific to FL, namely *discrete infinity* (Pullum and Scholz 2010). In the narrow-broad tandem, the *narrow syntax* is hypothesised to be autonomous to the ability to communicate, reinforcing the twofold account assigned to the evolution of the language system, based on communication, on the one hand, and abstract, recursive, and intentional computation on the other. Under the minimalist approach to FL, discrete infinity is associated with the *Merge* operator (Chomsky 1995).

From this perspective, operation Merge, as a result of a gene mutation, experienced an internalisation process. In explaining, it is assumed that the changes occurred all at once in humans and were genetically transmitted, with the need to communicate being ancillary, an externalisation process (Chomsky 2005b). A critical contribution to the present study is the proposal of new reasoning for the emergence of FL in the narrow sense, other than the need to communicate. The proposal would require strenuous research to be fully supported, and the best instruments available are at the computational level. Representing underlying structures and their output mappings at primary and secondary interface levels could provide much needed empirical evidence. Going back to the previously mentioned article, the authors initiated a proposal that envisioned three equally viable directions regarding the possible evolutionary outline of the FL (Hauser et al. 2002). The first launches an account where FL is a property shared with other species, and the second addresses the two debated perspectives to FL, gradual and saltational. The third signals two possible accounts for the communication system, either bearing *a priori* determination or resulting from adaptive occurrences. Critical to the domain of LA is the definition of I-language, under an evolutionary approach to FL, in a narrow sense being understood as *internal*, with *recursion* as a specific property of *narrow syntax*, and as a subset of containment in a broad sense. *I-language* is individual, inner, and aims to explain the particular elements of natural languages, highly constrained as opposed to *E-languages* which are external (Chomsky 1986b). In a narrow sense, the FL can generate an

"infinite array of discrete expressions" (Hauser et al., p 157). The ability to generate infinitely was assumed to be a language property. This universal property allowed for extended syntactic generation and linguistic creativity because, via *recursion,* new sentences could be built. The child can infinitely generate from finite means, for language properties permit discrete unit interpretation, creatively, at the syntactic level. It is assumed that, syntactically, children unconsciously rely on rules and principles; therefore, *discrete infinity* applies to syntax and not to the meaning of words or strings of words. In *Chapter 3* and *Chapter 4,* the syntax-semantics relationship and the role of the lexicon, how it evolved from one theoretical proposal to another, and how such theoretical accounts influenced the adequate explanation of LA. Children can generate and apply syntactic patterns and sub-patterns, leaving aside possible variations from one natural language to another. In this sense, *discrete infinity* could be explained by the *Saltational Theory* evolutionary model (Chomsky 1995).

The ability to generate discrete units infinitely in a gene mutation could have constituted the origin of human language and a critical moment in the evolution of humans. The saltational emergence of FL was assumed as part of the intellectual capacities developed in humans (Chomsky 2001) and supported the evolutionary assumptions resulting from qualitative archeologic findings (Tattersalll 2012). However, it is still difficult to address the fossilisation of FL and the *great leap forward* regarding brain wiring and rewiring during the evolutionary process.[4] Therefore, Chomsky did not associate the evolution of FL with the necessity to communicate, as supported by the conceptual definition of human capacities, including FL, in a broad sense, but rather in a narrow sense, the scope being to reach an optimal state. The three factors proposed by Chomsky in defining FL and its evolutionary path were *genetic endowments*, *experience,* and *principles* (Chomsky 2005b). The first

[4] The assumptions are made by dr. Jarred Diamond on the evolution of creativity and language in humans and the triggering factors. His contributions were embraced by Chomsky in outlining the evolutionary proposal to FL.

factor is tightly connected to LA and the stages of development in early grammars. The experimental data support the role of the FL as an innate capacity of humans, alongside other intellectual capacities, some of which are available across species. Therefore, FL must be identified and explained in the bigger picture and other biological systems. In light of an FL description, the first proposed factor gave rise to hypotheses in L1A from full competence and availability of FCs from the onset to maturational accounts on L1A and L2A determined by genetic premises. The second factor explains the system's representation and variability, specific to other systems.

In contrast, the third factor addresses the universal character of FL and different systems, the computational force at the structural level, with the specific constraints applied to language. Several hypotheses have been predicted from FL being a shared property of the species; in a broad sense, natural selection as a viable factor in explaining a gradual approach to an adaptational account for language, namely a core-periphery system to the shared properties of language. FLB contains various cognitive and perceptual mechanisms shared with other species to explain better. Still, only those mechanisms underlying FLN – mainly capacity for discrete infinity – are uniquely human (Hauser et al., 2002).

The evolution of language described as such addresses the knowledge of language optimally in easing and satisfying the PF-LF tension at the representational level. The scope of such a proposal was to generate a language design that could constrain, encode, and decode properties and core features of the language. The constraints posited to have developed gradually in language or be caused by an *a priori* form of linguistic knowledge; however, such hypotheses needed to be verified for any predictions to be made. For the domain of LA, many questions still looked for satisfactory answers. The assumption of a narrow syntax, limited, constrained and independent, a UG characterised by recursion, specific hierarchies, and the ability to generate infinitely with evidence from a limited PLD fostered a rich research domain. This way, it supported the counterarguments to associationism and Skinnerian behaviourism, namely

that languages are intentional, independent, biologically predetermined, therefore, acquired, not learned (Chomsky 1995).

2.3. Universal Grammar (UG) and its innate character

Innateness, a nativist linguistic theory argument, emerged during the 1950s and revolutionised the map of theoretical approaches to language. It came as a response to Skinnerian behavioural approaches to LL, and it inevitably became a highly debated topic and stirred traces of controversy among theorists (Chomsky 1959, Chomsky 1957/2002). Such an assumption was revolutionary in the given historical context; however, issues were raised regarding relationship with experience and the environment. It was argued that one could not separate language from the environment. Consequently, references were made to the domain of LA and to how children learn languages. The input-output relationship gained relevance as well, and, with the new approach, previous researches had to be defended by their proponents, the core of prior theories being shaken. Although there was evidence from the empirical data, many biologists, neurobiologists, and psycholinguists argued that such an approach should not be considered. Due to ethical concerns, there were and still are difficulties in bringing enough evidence in support from neurological domains for the genetical account to FL; therefore, the model had to be based on formalised grammars to confer adequacy to the description of inner mechanisms. From a generativist perspective, language is defined as a system characterised by independence and autonomy, a module equipped with specific instruments which are part of an acquisition device for language, genetically predetermined. The traditional account of language as a mere response to environmental stimuli, behavioural and habitual, rather than mental and intentional, is replaced.

The innate characteristic of the FL in the more extensive network of a principled system, with rules and conditions, gave insight into LA

during the early stages of development. No one could ignore the fact that children acquired language at a very high speed, without any effort, and in a creative manner. There was evidence that the process was not an analogical or connectionist trial and error but unconscious, intuitive, and predetermined. The innate capacity of FL was supported by the PoS argument as well. With limited and deficient PLD at hand, the child could generate beyond what experience and the environment had to offer, visible in the output grammar. UG is the initial state of FL became paramount to the theory. What was visible in the output, with the degree of variability coming from the exposure to the input, could explain some mechanisms of the brain that were language-specific. Generally speaking, if UG could be described as a set of properties specific to the species, the effortless acquisition of language in children could also be explained as the initial state and the core element of the theoretical framework. From the perspective of generative grammar, UG is what makes LA possible. The child can generate strings associated with properties and assign them at the representational level. In this view, the ability to select results from specific UG evaluation measures (Chomsky 1965). As we can see in *Chapter 1*, the LF was defined as an organ, an instinct, a biological endowment with general and specific properties able to adapt as a necessity urged by the communication system, a brain module (Pinker 1994). Children were assumed to be pre-equipped with mechanisms that allow for the acquisition of L1 in an effortless way, the innate capacity being argued in terms of genetic predetermination, either gradual and adaptive, or saltational and specific to humans.

The first generativist theoretical account that fostered this nativist interpretation of LA is the *Principles & Parameters Theory* (Chomsky 1981a). As it was one of the most prolific stages of theoretical development in the domain of LA, its premises assumed that children are genetically programmed for language, as it can be extracted from the particular stages of development attested in children irrespective of the language acquired. Some studies on the empirical data claimed that during the early stages of development in L1A, children could

distinguish linguistic properties early on, even before they begin to utter the first words. Such assumptions on tacit knowledge in children, supported by experimental data, became valuable assets in developing strong theoretical accounts on LA (Gleitman et al. 1988).

2.4. Positive evidence (PE), negative evidence (NE) and indirect negative evidence (INE)

Negative evidence has been associated with the domain of LA; researchers attempted to quantify its effects, the availability in the environment, the frequency with which it is made available, mainly by caregivers, and the degree of association with the PLD. The role of input in LA has been highly debated; nativists, empiricists and structuralists attempted to explain language acquisition under NE, PE and INE (Chomsky 1981) in empirical contexts to better understand the input-output relations contribution to derivation during the early stages. In this sense, the input, deficient as it is and with its attributed imperfections, is relevant to the acquisition; however, the necessity of NE in the environment and its efficiency was questioned by nativists, while structuralists supported the idea that NE, in various forms, is required and beneficial. An essential assumption by nativists was that NE did not impact the acquisition process, and the rich empirical evidence supports such a claim (Pinker 1989, O'Grady 1997). The evidence resulting from empirical studies reflects how children do not learn structures from adults by imitation or actively taking in explanations. The forms that surface in child languages are based on PE rather than NE, which proved inefficient in context-sensitive situations. The role of PE/NE became a strong argument for a nativist approach to LA in early grammar and, in this sense, observed across particular languages.[5] One must agree that PE

[5] Among the explanations provided was that the adults focus more on the truth value of the expressions, rather than on the degree of ungrammaticality. It is point out the lack of consistency when it comes to caregivers in providing negative

fosters LA, not NE, resulting from empirical data. In particular, caregivers or parents generally do not correct or disapprove of the structures the children produce but rather try to understand what they are saying. Although there are situations when corrective feedback is given, no conclusive evidence has been registered as to whether the child will seize to make such mistakes. In addition, the reinforcement via NE proved to have minimal impact on children, supporting the claim that PLD is what children rely on from experience (Brown and Hanlon 1970, Bowerman 1988, Marcus 1933). In this sense, the Bristol experiment (McNeill 1966) contributes to the assumption mentioned above with qualitative data. Some of our examples from Romanian corpora are added to support this claim.

(1) MOM: No, say "nobody likes me."
CHI: Nobody don't like me.
MOM: No, say "nobody likes me."
CHI: Nobody don't like me.
MOM: Now, listen carefully, say, "nobody likes me."
CHI: Oh, "nobody don't likes me."

(2) CHI: Want other one spoon, daddy.
FAT: You mean, you want the other spoon.
CHI: Yes, I want other one spoon, please Daddy.
FAT: Can you say "the other spoon"?
CHI: Other...one…spoon.
FAT: Say "other".
CHI: Other.
FAT: "Spoon"
CHI: Spoon.
FAT: "Other spoon".
CHI: other…spoon. Now give me other one spoon. (Braine 1971, p. 161)

(3) CHI: *Mă dai apă?
CL.1SG.*ACC give.PRES.2SG water
'Can you give me water?'

evidence, for they do not signal ungrammatical forms all the time by offering corrective feedback, therefore it would be difficult to support Saxton's account.

MOT: Nu mă dai apă, T., îmi dai apă!
NEG CL.1SG.*ACC give.PRES.2SG water T. CL.1SG.DAT give.PRES.2SG water
'Not can you give meACC water, T., can you give meDAT water!''
CHI: La mine mă dai apă!
to CL.1SG. *ACC CL.1SG.*ACC give.PRES.2SG water
'To meACC give meACC water!'
MOT: La mine! Mie îmi dai apă?
to CL.1SG.*ACC CL.1SG.DAT CL.1SG.DAT give.PRES.2SG water
'To meACC! To meACC! Give (meDAT) water to meDAT?' (T. 2;04)[6]

Although there were other theories meant to counter such arguments, they didn't prove strong enough. They did not collect sufficient and relevant evidence to dismantle the fortress built around the *PE* argument. Yet, one such proposal came from the *Contrast Theory of Negative Input* (Saxton 1997). Corpus from the CHILDES database was analysed, and the prediction was that children manifest awareness and react to corrective feedback from parents; therefore, reinforcement would prove efficient. However, the results were insufficient and inconsistent, and sufficient arguments did not support the presupposition that NE prevails before PE. The presumptions did not give enough answers for LA processes; the results of his analysis were not conclusive enough regarding the short-term and long-term impact of corrective feedback (Saxton 1997).

Examples (1), (2), and (3) reflect how children are aware of what is available to them and "acquire unconscious patterns unconsciously, with little or no deliberate training" (Jackendoff 1994, p. 25). Even with INE (Chomsky 1981b), there was still no sufficient information gathered to explain how it might work. In any case, acquisitionists agreed that it had to be more than adequate explanation, and the empirical data supported such assumptions. The linguistic input had an important role, but the data had to be processed by the hypothesised LAD. Another aspect that became an argument for a nativist account was the INE. Consequently, we must point to its relevance towards a nativist approach to LA. In short,

[6] The examples (3) and (4) is selected from the T-corpus. There are other examples selected from our corpora in *Annex 2.*

Chomsky makes clear distinctions between the three aspects defined in this section, if the first is innate and is fixed by parameters, the second is, as previously stated, a reaction of adults soliciting the target-like structure, while they last

> Can be devised with the operative principle that if specific structures or rules fail to be exemplified in relatively simple expressions, where they would be expected to be found, then a possibly marked option is selected excluding them in the grammar so that a kind of ''negative evidence'' can be available even without corrections, adverse reactions, etc. (Chomsky 1981a, p. 9)

As such, INE has been attributed an important role in LA (Chomsky 1981a) but directions in cognitive science support evidence of INE and observe its impact on LA (Pinker 1979). Meanwhile, other arguments were construed against a nativist perspective explaining LA, such as the hypothesised effect of the finely tuned language used by mothers or caregivers, known as Motherese (Gleitman 1984). It was posited that the acquisition process happens faster and efficiently due to intonation patterns, voice-pitch and elements of prosody, among other features used by mothers or caregivers in general. One cannot omit the role of the input in LA, as there is proof found in empirical data that the child can perform beyond what is available in the input. Irrespective of the interpretations in literature, Motherese is not a sufficient argument to accept a structuralist approach to LL.

Moreover, it is not a core feature necessary for LL, as reflected by empirical data, and anything in the input can contribute to a better segmentation (Wexler and Culicover 1980).[7] Still, the inner mechanisms of the LAD cannot be set aside as unnecessary, for *Motherese* is not a universal

[7] The authors do not justify such account, as children are not exposed solely to a fine-tuned simplified structure as the one provide by the caregivers, moreover they provide evidence that caregivers do not consistently generate Motherese, they alternate finely-tuned utterances with utterances that are characterised by a higher degree of complexity, therefore it would be difficult to argue in favour of Motherese as a sole factor towards an accelerated development of language during the first years.

characteristic. To be more specific, cultural and social differences reflect that it is not a common practice across cultures (Boysson-Bardies 1999).

In sum, the assumption is that grammar is in the brain, and linguistic knowledge is innate. The universality of grammar is contained in its invariant abstract principles, with constraints on form and meaning, encoding properties in natural languages. Learning via imitation (Skinner 1957), reinforcement (Saxton 1997), or association (Elman 1993) is generally attributed to theories that can no longer stand in front of the empirical evidence built under the UG framework. The latter corresponds to the initial state of language, and innateness to the sets of properties encoded in abstract principles which function as constraints and outline what is expressed in the form of knowledge of the language (Chomsky 1959). Another important aspect is that the UG constraints are predetermined and universal; therefore, they cannot be learned. Children come equipped with these instruments and select from the PE available in the environment.

In conclusion, what is essential and relevant to our theory is that the PoS as a nativist concept is explained by the assumption of the very absence of NE, not by degrees of presence in the input; it contributes to the description of syntactic mechanisms from a UG perspective. It remains one of the strongest nativist arguments to this day. The child will generate structures that comply with UG grammar and are not the result of the evidence from the input. Therefore, language cannot be addressed during the early stages in terms of learning, it is not a data-driven process, but in terms of the acquisition, for UG is innate and is primarily based on PE.

2.5. Language acquisition (LA) and general intelligence (GI)

As outlined in *Chapter 1*, one of the general debates in LA is associated with the relationship between language and the cognitive system, coupled with language autonomy or interconnectedness with human intelligence. Answers were sought by observing TD children compared to children who suffer various impairments to support

different emerging hypotheses. One common argument in this endeavour was that language has human specificity. Although there are some shared properties, the new considerations regarding language change and its evolution in homini and the definition of language as a system, in a broad and narrow sense, indicated a linguistic specificity associated with the child's computational abilities.

The evolutionary argument is supported by several case studies and the split-function theoretical accounts regarding language and intelligence. Well-known research case studies include Cristopher's, a savant suffering from movement impairments, the clinical cases of individuals diagnosed with Williams Syndrome or Turner's Syndrome, and various other cases under the SLI category. Christopher is a complex individual with extraordinary linguistic abilities coupled with many disabilities. As a result of extended investigations, he was diagnosed with apraxia (O'Connor and Hermelin 1991), associated with his movement impairments (Baranek et al., 2005). His IQ was very low, and he also exhibited some speech disfluencies, which sometimes impeded proper pronunciation; moreover, his deficiencies impacted his visual abilities (Smith and Tsimpli 1995, Smith et al., 2010). It was assumed that he also suffered from a mild form of autism since he had difficulties with forms of make-belief play[8] , which served as arguments towards a theory of other minds and to the interpretations at the representational level that is not concordant with the given reality. The researchers concluded that he could not entertain such deviations "young children and autists are unable to entertain the idea that someone else could have a representation of the world which deviates from reality, they cannot understand 'false belief'" (Smith et al., 2010, p. 19).

In outlining the theory of other minds, the quasi-modules are domain-specific, in Fodor's sense (Fodor 1983, Fodor 2000), and manifest

[8] An important aspect regarding the acquisition of language during the early stages had to do with false belief assumptions. Sally Ann tests and Smarties tests were used in the case of TD children and individuals that suffered from various forms of autism who had difficulties with false belief assumption in order to support the hypothesis.

sub-modular properties, in Chomsky's sense (Chomsky1988c). Under the assumptions of a quasi-modular theory, Christopher manifests both *strong and weak central coherence* (Frith 1989/2003), depending on the degree of complexity of the structures he is supposed to compute. TD children would not violate constraints regarding embedded structures. Still, in Christopher's case, interpretation of complex embeddings and garden-path linguistic phenomena proved relatively unsuccessful; he preferred to acquire the lexicon (Smith and Tsimpli, 1995, p. 57ff). The authors explained that his flawed interpretation of structures had to do with limited syntax; he did not have access to heavy computation such as a second parser, the first being used by default. He manifested asymmetries between the lexicon and syntax; this was proved to be similar in his acquisition of *British Sign Language (BSL),* which he treated as a natural language, but encountered problems with the acquisition of subject-object agreement marking and topicalisation. Such findings proved valuable for the domain of LA and in explaining how the underlying mechanisms work in TD individuals, as opposed to individuals suffering from various forms of impairment. His case shed light on the mechanisms of the brain and how they work in TD individuals in contrast with individuals that suffer from impairments, such as autism (Smith and Tsimpli, 1995).

Another category that got the attention of research was individuals suffering from Turner's Syndrome or Williams' Syndrome, who are impaired cognitively but with perfectly functional linguistic skills. Empirical data comes from neurology in specific cases where linguistic and cognitive capacities are dissociated. Although individuals suffering from such impairments have a low IQ, they manifest linguistic fluency and excellent syntax control, differences between computational abilities and associative memory (Bellugi et al. 1994). Christopher performed asymmetrically on the long term and short-term memory tasks. Individuals suffering from Williams' Syndrome, a genetic malfunction of chromosome 7, manifested dissociated interpretation of morphology and syntax, supporting the assumption of a distinction between the system

assigned to associative memory and the computation system specific to language.

To sum up, among the language disorders investigated by researchers, such atypical cases deviated from the typical means of acquisition and could explain some specific properties of LF. The existence of individuals that suffer from SLI launched assumptions of the presence of language genes; such cases were hypothesised to be genetically determined, existent in the DNA, rather than determined by external factors. With such predictions, the attested experimental data support such claims. Different forms of impairment have been studied by linguists, from aphasics to specific cases associated with the genetic endowment in families, the most talked-about case being that of a family with SLI manifested in more than 50% of the members (Gopnik 1990). The disability developed by the family members indicated the existence of an affected gene, and the MRIs investigations reflected a lack of asymmetry on the perisylvian areas, namely, the left hemisphere of the brain (Pinker 1994), with evidence of sign language bearing the responsibility of the left hemisphere as well (MacSweeny et al. 2008). In the case of individuals who suffer from specific impairments, cognitive abilities are sound but prove to be flawed in their linguistic skills. A twofold interpretation based on the studies' results can be outlined regarding such deficient instantiations.

On the one hand, it is posited that such linguistic impairments cannot be corrected, as seen in the case of SLI subjects suffering from deficiencies in morphological processing but able to interpret semantically thematic roles (Gopnik 1997). On the other, it is assumed that they could overcome such weaknesses (Rice and Wexler 1996). In Christopher's profiling, it was noted that he manifested sensitivity towards morphological and lexical properties, while SLI individuals attested morphological disabilities; moreover, their interpretation at the semantic level was not affected. In conclusion, the case studies presented in this section support the hypothesis that linguistic impairments are

separate from other brain cognitive abilities. The authors mainly argued for a quasi-modular approach associated with the theory of minds (Sminth and Tsimpli 1995), such modules having domain specificity in Fodor's sense (Fodor 1983, Fodor 2000), being equipped with sub-modular features as well, in Chomsky's sense (Chomsky1988c). Empirical data on the variability of syntactic and semantic interpretation and the dissociation between general intelligence and linguistic abilities could provide vital support in favour of an adequate explanation of the relationship between the two levels of representation. The approach was recommended to be equidistant and addressed them as distinct aspects, drawing attention to another relevant element, chiefly that genetics might explain LA to general intelligence (Jackendoff 1994, Pinker 1989).

2.5.1. Language acquisition (LA) and the modularity of the brain

This section focuses on asymmetrical architecture as a shared property in the evolutionary course. Identifying biological features, brain circuits, and specific mechanisms raised questions regarding the possible location of the FL. It was not an easy theoretical assignment to prove the existence of a language organ and a language gene encoded at the neural level with genetic substance. Under these circumstances, using indirect methods to look at the evidence coming from specific cases of language impairments gave insight. It provided some answers regarding the location and means of functioning of the FL, and there is no need to mention that other research methods would prove unethical. In addition, research studies on infants and adults used exact modern techniques in brain analysis such as CAT (Computerized Axial Tomography), CT scans, fMRI (Functional Magnetic Resonance Imaging), EEG (Electroencephalogram), PET (Position Emission Tomography), and Magneto-Encephalography. Such elements contributed to supportive proof explaining how cognitive processes and brain patterning function and the possible location of functional categories (FCs) and lexical

categories (LCs) in the brain. The new and improved research proved efficient and provided some answers to the role and the location of FCs in the brain's architecture, with critical syntactic and conceptual differences. Moreover, the analysis of any forms of inherited impairments supported the explanation of possible causes in the case of disrupted grammars or control structures and the functional properties of the underlying mechanisms of syntactic computation.

Mainly, investigations reflected connections between speech impairments and brain lesions (Sieratzki and Woll 2002).[9] For example, loss of speech and the inability to use grammatical morphemes were attributed to expressive aphasia, linked with the left hemisphere brain affections and identified by the French physician Paul Broca. With the help of precise algorithmic computerised reconstructions, similarities were identified in other Broca aphasics, the patterns indicating towards the left side of the brain as the locus for abstract inner mechanisms of language. In this sense, the region assigned to the abstract FL would indicate association with the left hemisphere in the sign language use of deaf aphasics (Bellugi et al. 1983). A complementary impairment to Broca's aphasia, linked to the perisylvian cortex and assumed to be responsible for syntactic processing, was attributed to Wernicke's area. It has been hypothesised to trigger sound processes, word and meaning impairments, with effects on comprehension. The generated strings of words were reported as nonsense words for the most part. Impairments in aphasics are manifested in different ways, from the omission of nouns in anomic patients to the omissions of verbs and specific features to cases of truncated inflections. Conclusively, such differences reflect that FCs and LCs are represented differently in the brain.

[9] There are various studies on the acquisition of language in association with different forms of impairment, for example, an experiment on children that suffered from spinal muscular dystrophy, showed that they had unimpaired syntax, but impaired lexical development.

Aphasia in the context of LA had as a premise of investigation the early phases of linguistic development and the syntactic knowledge lost by aphasics. Similarities were identified in how the optional infinitive (OI) stage emerged in children by drawing attention to the syntactic similarities with aphasics. Moreover, the marked phrases were assumed to be late acquisitions which tend to be lost first by aphasics (Jakobson 1941/1968).

All in all, asymmetries must be understood in the bigger picture of modularity and its description within cognitive domains. Hence, we must clearly distinguish between Chomsky's and Fodor's language interpretation as a brain module. The latter presents a two-fold account that is asymmetrical, distinguishing between the central system, where all the general cognitive processes occur, including problem-solving, and domain-specific input systems with their shared properties, the modules. One such module is the FL, and it is assumed to determine ontogenetically the same developmental patterns across species. Fodor hypothesised that the relationship between the modules and the central system is unidirectional in terms of access, the latter being assigned the role of provider. Such an interpretation differs from the one proposed by Chomsky. In his view, language cannot be interpreted solely as an input system but must be described as input and output. The FL must be comprehended as a system that fosters both the parsing and the production, such operations being supported by the same system, not by separate systems. Modules such as Theta Theory, Case theory, Binding theory, etc., can be distinguished with their specific functions within this system (Chomsky 1975a, Chomsky 1986b). Although we embrace the generativist modular proposal, we must mention Fodor's contribution in delimiting and defining the modules of the brain and the predictions for the domain of LA and the investigative research regarding the dissociation between language and other cognitive processes.

2.6. Pidginization and creolisation. A nativist perspective on language acquisition (LA)

Although difficult to explain in terms of emergence, evolution, and as a module of FL present in the human species, UG's assumption applies to any natural language, whether it is transmitted via vocal cords, sign language or written accounts with its descriptive and prescriptive conventions. Sign languages are natural languages. Therefore, they obey the constraints of UG, syntactically, as language is part of the human brain, of cognition. This section will outline the process of creolisation in languages with its implications for the theories on acquisition. The creolisation of languages proved to be an intricate process. One of the outcomes was the association of the results with UG as a genetic mechanism accessible by all humans. It could be observed in the systems created by second-generation speakers who could develop from simple systems without FCs. Reference is made to pidgins, complex systems with specific abstract features (Bickerton 1981, Romaine 1988).[10] Such patterns were observed in various linguistic contexts, supporting a UG claim regarding the acquisition of FCs and the role they play. In the case of creoles, the input did not offer the syntactic information needed. Still, children could develop upon and use a priori knowledge to establish, with limited resources. These new complex syntactic systems involved complex computation and movement of FCs, reflecting, once more, that the categorial aspect of language is at the core of UG. Given the rapidity with which children could generate such complex systems, a continuity account to LA could be hypothesised based on such empirical findings.

Two salient accounts favour a nativist approach to how languages work. Therefore, irrespective of the input rendered available to them, it could be generalised that children achieved full linguistic competence in

[10] Bickerton launched the hypothesis regarding the emergence of creoles, the *Language Bioprogram Hypothesis* which associates the development of grammars, the process of creolization of languages with complex systems from considers default settings as last resort. Romaine analysed the productions of early speakers of creoles on the subject of creoles and pidgins from an evolutionary perspective.

a short period, marking the same specific stages in natural languages, including creoles and sign languages. Studies support this assumption on how congenitally deaf children had exposure to American Sign Language (ASL) at different stages, from around the age of 4;0, until late stages, after 12;0. The conclusion was that the sooner signers had exposure to the input, the better were the results in terms of syntax complexity at the inflectional level. A second study supporting the prediction referred to sign language acquisition processes in children concluded that the same phases could be observed. The signing process suffered a creolisation process (Newport and Supalla 2000). Although the input was limited, children could generate grammars with complex syntax and morphology. Similar results were registered in adult and child sign language systems in the case of deaf people from Nicaragua. The first generation of signers construes a somewhat functional system, namely Lenguaje de Signos Nicaragüense (LSN). In contrast, creolisation was fostered with the second generation of signers, resulting in Idioma de Signos Nicaragüense (ISN). In conclusion, children were able to generate from a limited input complex grammars with functional elements, contributing to the nativist theoretical approach to LA (Sengas 2000).

To sum up, pidgins are simplified systems, while the resulting systems map complex abstract features. If the first lack FCs, the last exhibit FCs and syntax form. Creoles are languages with a syntactic system that functions, and an important aspect conditioned the results, namely, the second generation of speakers/signers were children for the most part. There are examples of acquisition of language systems in sign language where children were not given a specific external model. Although the context was minimal, they could create a fully functional language without a linguistic input, and the sign language systems were equipped with lexical and functional elements. Such systems of language presented both FCs and LCs, reflecting, once more, that by using innate knowledge, children were able to generate effortlessly and in a creative manner complex, abstract, syntactic structures (Bickerton 1988).

2.7. Poverty of stimulus (PoS) as a nativist argument

The strongest argument towards a nativist view on LA, and in favour of cognitive sciences in general, is the intuitive approach to PoS traceable back to Plato. Whether it is called the logical problem (Hornstein and Lightfoot (eds.) 1981, Baker and McCarthy 1981) or Plato's problem (Chomsky 1988b), it is the most viable argument towards a nativist approach and a starting point in developing theories in LA. Knowledge of grammar structures cannot be defined by induction and connectionist and associative processes; "language acquisition is based on the child's discovery of what from a formal point of view is a deep and abstract theory – a generative grammar of his language – many of the concepts and principles of which are only remotely related to experience by long and intricate chains of unconscious quasi-inferential steps" (Chomsky 1988b, p. 58). As an illustration, the child is not usually instructed in a specific manner by caregivers and can generate more from exposure to somewhat limited data.

To clarify, PLD is not sufficient in explaining knowledge of grammar, and the evidence of how children can converge target grammars effortlessly with exposure to limited data does constitute a strong argument against inductive processes. With this in mind, by using finite sets, children can generate infinitely, and the generated structures do not violate the universal invariant constraints, as they are translated into UG under the *P&P framework* (Chomsky 1981a). The conclusion was that children could reach complete linguistic competence based on PE rather than NE, which was made possible by the predetermined knowledge of the language. Such clear-cut evidence comes to support the hypothesised PoS in the process of LA (Pullum and Scholz 2002).[11]

Under the PoS argument, the limited PLD concerning the LAD generated theoretical accounts to support the specificity of early

[11] Pullum and Scholz posit that negative evidence plays an important role, he questions whether there is sufficient negative evidence, while nativists hypothesize the absence of negative evidence. The authors argued that the data gathered from the corpora does not offer solutions to the PoS issues.

grammars in L1. The tension in explaining language development during the early stages via internal constraints instead of associationism, connectionism, analogy, and generalisations was eased by the emergence of solid arguments supporting nativist accounts. PLD is related to the child's exposure from the onset of LA, and the PLD debate traced distinctions between acquisition and learning. Here it is argued in favour of the nativist argument regarding the innate use of structure-dependency; the inversion of the subject with the auxiliary is a structure-dependent rule (Crain and Nakayama 1987). The auxiliary inversion relies on innate knowledge to process structures hierarchically, the structure-dependency condition being an inherent part of LA and not of LL (Chomsky 1971, Yang 2002). [12] Likewise, other empirical data support the claim that no violations occur during language acquisition; significantly, we mention the *wanna a contraction, backward anaphora* (Crain and Thornton 1998) or Baker's paradox (Baker 1979), and the inner property of alternation in Dative structures among many others. Crain, Thornton, and Pinker support the claim that linguistic input does not suffice in interpreting forms, as children do not learn in linear order. Under the structure-dependence constraints, the child cannot rely only on learning strategies that correspond to cognitive domains (Crain and Thornton 1998, Pinker 1989).

The redefinition of UG under the *P&P framework* (Chomsky 1981b) contributed to the attempt to provide a unifying account to LA, and this is a theoretical aspect that cannot be ignored. By constraining the grammar and hypothesising a limited number of principles to permit valuation of parameters without linking parameters with the visible properties available in the PLD, a clear and essential distinction was made between empiricists and nativists in the way formal theoretical models were accounted. This perspective contributed to explaining

[12] The authors tested the hypothesis via elicited production test on 30 children and the results supported the claim that children do not violate structure dependency constraints in speech, and any of the errors that occurred were not the result of fronting an auxiliary from a relative clause.

language typologies and how variations occurred across languages. Another important aspect, which will be addressed in *Chapter 4*, refers to the phases of development observable in children, which propelled the P&P theoretical model and generated rich data which aimed to explain variation and uniformity across languages. However, the model proved deficient and needed an architectural reinterpretation and reduction for economic reasons. The new minimalist proposal was the next best thing in this sense (Chomsky 1981b).

2.8. The Critical Period Hypothesis (CPH)

Sensitive periods are associated with Eric Lenneberg's research and the concept of biolinguistics, as he was among the first researchers to talk about biological aspects related to language and its functional relationship with other systems in the human body and with other biological forms. Such theoretical assumptions have been associated with the evolutionary accounts, in a narrow and broad sense, pleading in favour of a PoS hypothesis and a hypothesised CP which aimed to explain the stages of development in LA. These stages which supported by explanatory adequacy during the P&P phase (Chomsky 1981b) and experienced a new interpretation under the minimalist programmatic proposal (MP) (Chomsky 1995). What is relevant to this day, from a nativist perspective, is the idea regarding the attested periods of sensitivity in language, which argue that the CP in LA, following the examples of sensitive periods observed in animals (Lenneberg 1967)[13], could be delineated from around the age of 2;0 until puberty. Equally important, the lack of exposure during this period could have seriously

[13] There are several examples that come to support such arguments, such as the critical periods in the stages of development attested in animals. One example is the experiment made by the ethologist Konrad Lorenz with the "imprinting" of goslings. The experiment explained how in the first days of the gosling's lives anything that would qualify as goose-like behaviour would be sufficient for imprint. By borrowing such behaviour, he ended up with a flock of goslings following him around. This *CP* is believed to occur shortly after hatching.

impacted linguistic development. There are several assumptions regarding the onset of CP and closing the window of opportunity in LA.

Moreover, Lenneberg was also one of the first neurolinguistics to hypothesise that language might be specialised in the left hemisphere. The author associated the brain's plasticity with brain function lateralisation, and several cases support such an argument (Konrad 1955). This account points to the differences between child and adult mechanisms involved in the linguistic processes and is associated with a critical period interpretation to LA. The perspective on language development gives insight into the biological functions of the FL if understood as a physical organ, a module of the complex cognitive system. Therefore, if the linguistic capacities of children are biologically anchored, then a CP can be hypothesised and, consequently, adequately explained with the help of such premises within this particular theoretical framework. In this sense, the nature of language is biologically based, and children have these abilities available and fully functional up to puberty. If we describe language as a module, such an explanation is sustainable, exposure to stimuli during the sensitive period being paramount accounting for the biological functions of FL (Lenneberg 1967).

In the same fashion, cases of feral children deprived of linguistic input early in their lives support an association between the CP and LA. As it could be seen, these children no longer had functional syntax and had difficulties acquiring language at a late stage. Genie's case is one such relevant example (Curtis 1977). The observed setbacks regarding her syntactic and morphological processing have been associated with the researchers who conducted extensive studies on her isolation during the *CP*. During the recovery process, she mastered some language skills but manifested limitations in syntax (pronouns, auxiliaries, passives, to name a few). In addition, she also lacked specific functional components, and, as a result, her linguistic abilities were impaired, and her syntactic structures suffered. To explain the context, she was discovered in pre-adolescence, and her isolation resulted in stagnation at the linguistic level, although cognitively, she registered significant progress (Curtis

1977). The CP characteristics, functions, and the unavailability of syntax adequately explained the setback. Another case is Victor, "the Wild Boy of Aveyron", discovered around eleven-twelve (Itard 1932). He developed cognitively and socially but never succeeded in acquiring language, he learned isolated words, but there were no syntax signs in his production.

A CP argument supports a strong account of modularity and the acquisition of language (Smith and Tsimpli 2010). Going back to Christopher and leaving aside the impairments associated with different brain modules, his syntax proved to work fine in acquiring L1 but was flawed in acquiring subsequent languages, sign language included. It was assumed that he could no longer check features after the CP. He could not re-set parameters, and an apparent asymmetry between syntax, morphology, and the lexicon was observed. Experimental studies were run on congenitally deaf signers with early exposure to *American Sign Language* (ASL) as L1, on children with high exposure to sign language from the onset of development, age 4;0, respectively 6;0, and on learners who had late exposure to ASL, at around the age of 12;0. It was observed that morphological and syntactic asymmetries, with visible differences in the use of inflections, favour a hypothesised CP in L1A (Newport and Supalla 2000). Researchers predicted that infants could acquire any language with the proper exposure to input during the sensitive periods and could discriminate between languages. Although speech productions are visible only after six months, the process is assumed to start before. Studies support such predictions for deaf infants who began nu sign babble was believed to start at around the same phase as vocal babbling.

2.9. Conclusions

The chapter described the nature of the FL by insisting upon core arguments such as the availability and the innate character of UG and the evolutionary views towards a nativist perspective in a narrow and

comprehensive sense. The impact of positive, negative and indirect negative evidence on child speech productions was backed by empirical data. Then, the relationship between LA and the other cognitive domains was outlined, concluding that the concept of modularity needed to be presented in a detailed fashion, as will be seen in *Chapter 3* and *Chapter 4*. It ended with examples illustrating the role played by pidginisation and creolisation of languages supported by two essential nativist arguments, namely the PoS and the role played by CP in LA and in delineating the boundaries between the stages of L1A.

Chapter 3 – Generativist Hypotheses to Language Acquisition (LA)

The chapter outlines the main theoretical approaches developed under the generative grammar tradition gravitating around the UG. The perspective is meant to give an insight into the role of FCs in L1A by highlighting the core technical concepts of each theoretical model to gain more awareness of the existing proposals that underlie the analysis of the qualitative data coming from child Romanian. It describes the theories that attempted to explain the manifestations of adult and non-adult structures generated by children in L1 to compare developments in light of the *P&P framework* (Chomsky 1981a) and the latest minimalist proposals (Chomsky 1995). The hypotheses presented in this chapter revolve around the role played by FCs in L1A, from assumptions of complete lack of FCs during the first stages of L1A, to predictions of adult-like competence in children. In the analysis of the proposals, a strong continuity approach to LA is adopted. The empirical data provided by the accounts in other languages and child Romanian support such a position. The keywords are L1A, *Strong Continuity Hypothesis* (SCH), *Weak Continuity Hypothesis* (WCH), and *Discontinuity Hypothesis* (DC).

3.1. Theoretical background

As it might be expected, some of the core elements associated with the emergence of theoretical perspectives in LA are presented. The theory of *Government and Binding* (Chomsky 1981a) fostered the development of the *Principles & Parameters* framework (Chomsky 1981b) and the conceptualisation of modularity in defining core aspects, the linguistic knowledge being understood as human-specific and placed between

autonomy and connectedness with other cognitive systems. Equally important, language knowledge has to be understood as a component layered into subsets or submodules constrained by universal principles. As a result, in the domain of L1A, cross-linguistic analyses and inquiries into the structure and typology of particular languages have been developed, with a focus on the field of acquisition and syntax, the former concentrating the research resources on the early stages of linguistic development meant to solve any possible tensions and find an adequate explanation to linguistic phenomena in a principled way. New and challenging directions enriched typology, functionality, and language structure data. The framework aimed to find answers to processes such as the emergence of UG principles, UG innateness, and the logical problem of L1A, which made possible the assumption of various accounts in providing valuable insights and propelling the syntactic and semantic theory inquiries with the abilities mapped in early grammars (Chomsky 1995). The very nature of the emergence of FCs in early grammar is an intricate process, as has been the UG perspective. To this day, it is a topic of reference vehemently debated among acquisitionists. Different theoretical accounts postulated hypotheses and generated research programs to explain language properties and the availability of operators in child grammars compared to adult grammars.

In what follows, the comparison and the selection of core concepts will set the main directions of research developed over the past 40 years. Such an approach will provide the data necessary for the position assumed in this research. It will outline the role played by FCs, in each of the models described, based on the empirical evidence that serve the specific predictions. The main theoretical hypotheses revolve around continuity, weak or strong, and discontinuity in the process of LA. The main questions address the accessibility of UG principles from the onset of acquisition, the responsibility of the underlying mechanisms, and the assumption of the existence and emergence of FCs during *Stage 1* in LA. The qualitative case studies are woven into continuity theoretical accounts. Therefore, a clear presentation of the theoretical background is

rendered necessary. Technical concepts will be defined under hypotheses that assume full availability and interpretation from the onset of LA to maturational accounts that address UG principles and their availability and the emergence and impact of FCs in terms of licensing derivation at the structural level. The intent is to see the given accounts within the bigger picture and peg the outcomes they serve. The way they are interpreted within the minimalist approach to LA is innovative and started by placing UG principles in the extended frame, avoiding the trap of language specificity since the proliferation of parameters affects the initial approach.[14] The challenges were visible, and acquisitionists had to address salient issues children faced during the L1A process and provide an adequate explanation. Still, as reflected by recent research developments, necessary steps have already been made to reassess previous syntactic theories and find support towards a minimalist and elegant approach aligned to the *Strong Minimalist Theory* (SMT) (Chomsky 1995).

The theoretical background of generative grammar has been very resourceful; therefore, in outlining a paradigmatic approach, in a broader sense, besides a theory of UG (Chomsky 1995), other relevant views, reflecting models and offer interpretations in a different key must be adopted. The lexicon-syntax dynamics should be mentioned regarding the resulting data of the investigative process of specific frameworks that contributed to the domain of L1A. However, the direction taken goes beyond the objectives set and the theoretical apparatus adopted in the present research. As such, contributions to the theoretical domain such as the *Lexical Functional Grammar* (LFG) (Bresnan et al. 2015) and the theoretical model, which envisioned a simplified syntax (Jackendoff and Culicover 2005),[15] enriched the research field and should be briefly mentioned as components of the bigger picture of the generative framework.

[14] The evolution from a *P&P framework* to a reductionist MP proposal will be presented in detail in *Chapter 4.*

[15] Unlike minimalists adopting the UG theoretical framework, they argue in favour of a tripartite generative composition in interpretation containing besides syntax, semantics and phonology as well.

3.2. A general understanding of the functional stages of development

Regardless of which approach is adopted in researching the domain of LA, it is generally accepted that children mark specific milestones in L1, conferring a universal character to the LA process, supporting the claim that syntax is universal. The mappings and parametrisation in languages are driven by morphology and phonology in the first place. The way acquisitionists explain different stages in language development contributes to contouring and the needed description of the core model, the I-language (Chomsky 1965), and its defining role in the computation of structures by children. As stated before, whether the adopted models support a weak or strong continuity approach, more evidence is solicited. The MP proposed a new and improved program that could efficiently interpret the observed data attempting to explain FL from a biological perspective by associating it with other biological systems (Chomsky 1995).

The literature generally accepts that children first experience the single-word stage, then move to the holophrastic stage to get to a multi-word stage in acquisition. During these stages, the status of FCs shares different interpretations under different syntactic models, with support from empirical data stemming from particular languages, all aiming to provide a unifying account. However, cross-linguistic investigations led to different interpretations. Some acquisitionists assumed that FCs were absent during the first stages or significantly diminished (Radford 1997). In contrast, others claimed that FCs function fully likes in the case of adult systems (Wexler 1998). Still, the developmental stages are visible and recognised in all the generative accounts on L1A, reinforcing the biological approach to the evolution of language.

3.3. Main hypotheses in first language acquisition (L1A)

The debate regarding the FCs and their acquisition in L1 makes the affiliation with a specific account rather complex. Each attempted to provide solutions on the functions of syntactic operations during the early stages to set a clear distinction between the lexical and categorial aspects of syntax and the brain's architecture. It is generally hypothesised that the syntactic knowledge of the language is predetermined. Humans can project functionally from a biological perspective on the FL, the Fibonacci patterns being part of our biological construct. As such, language is described as an L-system, and its algorithms make language function optimally, these abstract structures being part of our innate ability (Chomsky 1956). The simplicity and elegance of the theory of syntax are concentrated in the movement of syntactic features to generate grammar. One question addressed among acquisitionists was how it happens in children, as one can see differences in computation between children and adults. When can children use this innate ability to its full potential? There are two prominent positions adopted regarding the availability and target-like use of FCs by children, based on empirical studies first developed in the early nineties and extended to present-day research.

On the one hand, a continuous approach to LA, assuming that the syntactic knowledge is *a priori* and FCs emerge at once (Boser et al. 1992, Wexler 1993, Wexler 1998). On the other hand, some authors assume that FCs emerge gradually; therefore, features could be progressively checked and result in specific stages of emergence, hypothesising a maturational approach to L1A, although maturation is also interpreted differently by acquisitionists (Radford 1990).[16] The domain of LA has also been associated with studies on SLI children to support evolutionary accounts

[16] In his research work, the author argues that children do not have access to FCs from onset, and this is explained under the proposed *Visibility Hypothesis*. Maturation is also proposed under continuity accounts by Wexler, but it is interpreted in a different key.

to L1A. Patterns in TD children and children suffering from different impairments could explain assumptions regarding brain functionality and its properties, lateralisation, and the connection with other cognitive domains. The acquisition of FC in L1A posed some difficulties in analysis; several studies on individuals that fall under specific pathologies, such as aphasia, revealed impairments in morphology and syntax computation. The structures generated by these individuals were ungrammatical; however, arguments were brought in favour of specific brain functions for language. The new investigative instruments increased research development (Rizzi 1993/1994, Guasti 1993/1994).[17]

3.3.1. The Strong Continuity Hypothesis (SCH)

In acquiring early functional grammar structures, the specific stages of development are paramount as children can achieve full competence at a fast pace with limited resources. The phases offer great insight and valuable syntactic information towards building an I-language model (Chomsky 1965). Any linguistic information that might surface following inquiries into the spoken input of children, paired with extensive qualitative and quantitative corpora, would contribute to creating an optimal, economical, and satisfactory theoretical model. There were several interpretations in reasoning the discrepancies between child and adult structures, from the unavailability of a LAD to the ability in children to hypothesise structures that do not exist in the given target language as a result of UG constraints. Another important aspect associated with UG principles and their full availability was their possible violation; in light of such a perspective, under an SCH, the development of wild grammars would not be possible. It is not an easy assignment, and the domain of L1A offers creative research material in this sense. Under the CH, with its strong and weak version, the models

[17] The research developed by the above-mentioned acquisitionists will be addressed in a detailed fashion in *Chapter 5*, when experimental data on RI/OI stage.

proposed and adopted by acquisitionists mark core elements such as the total or partial availability of UG principles and parameters from the onset, the emergence of FCs, the ability of the child to project in early grammars, and the adequate explanation of child and adult syntactic structures in the context of LA with its specific developmental stages, among many other aspects.

According to strong continuity accounts, child and adult grammars are uniform and operate the same way; mainly, children can compute and generate structures in an adult manner from the onset. Suppose children respond to and obey the same sets of restrictions and conditions as adults develop grammar. In that case, the empirical data should reflect such assumptions or provide adequate theoretical support in this direction. In a broad sense, the means of interpretation among acquisitionists are different. In what follows, some of the main accounts are considered with their subsequent theoretical and empirical developments. One of the central claims is that child, and adult systems operate similarly. A continuity approach to LA supports the theoretical premises with data aiming to demonstrate full competence in children from the onset. The research targeted children acquiring German and French as L1. The compelling results entitled the investigations to claim that UG principles and parametrisation are available in full, from the onset (Poeppel and Wexler 1993, Wexler 1994).

The quantitative studies reflected the use of finite forms early on, suggesting that movement was possible and that Tense features could be moved to higher positions to be checked. The results were favourable to a complete continuity approach to syntactic competence in children. The corpus analysed reflected how features were checked against CP by attraction from *Stage 1* (Poeppel and Wexler 1993). Under the new minimalist account, the conclusions of the empirical data could be interpreted, claiming that during the early stages, the children have the knowledge that makes movement possible and *u*F is deleted in derivation before *Spell-Out* in child German visibility of features in the PF interpretation. In addition, Tense features being checked against a higher

available position are assumed to be satisfied in CP. *Chapter 5* addresses the central challenge posed to the domain, the existence of optionality in the use of infinitives. This approach affected the core assumptions of an SC to LA, and, naturally, the proponents of a *Weak Continuity* (WC) challenged the satisfaction of [+/- finite] during *Stage 1*. As for the emergence of *FCs* in early grammar, it was argued in favour of FCs emergence as early as at the two-word stage level of LA (Poeppel and Wexler 1993). The assumptions of similar syntactic operations in children and adults determined the movement of the syntactic objects to higher positions, with no differences between child and adult phases. Even if the child was assumed to have all syntactic operators in check from the onset and ready to be put to use, the adequate supplementary explanation had to be offered given specific syntactic manifestations attested during *Stage 1*.[18]

It is essential to realise that SCH approaches stressed that the alleged absence of *FCs* posited by maturational accounts could explain the movement of syntactic objects, hence feature checking being justified under these conditions (Radford 1990, Wexler 1994).[19] With this in mind, if lexical elements come fully inflected from the lexicon without delay, the syntactic features could be checked from the onset of acquisition. For this reason, it has been assumed that if features could be checked, there was movement, even in situations when there is information to fill the available position in derivation, explaining, this way, the presumed lack of functional projection of movement during *Stage 1*. Early on, empirical studies supported a continuity approach, such as analysing inversions

[18] *Chapter 5* presents the OI/RI stage and its possible analogue in child Romanian and provides evidence in support of such claims as well as on how FCs further develop in EMWS.

[19] Maturation is interpreted and defined in a different way by Wexler and Radford. The former hypothesized a maturational account to explain optionality in the use of infinitives during the first stage of L1A, under a continuity framework. He defined the syntactic knowledge children have at a particular moment in association with other aspects that have to do with the cognitive development in children, domains which are available to adults, but might not be available to children during the first stage of LA.

(see wh-words) in speech productions and the interpretation at the structural level in terms of acceptability (Crain and Thornton 1998, Roeper Weissenborn1990). The outcome of the experimental data aimed to support the hypothesis that child and adult structures differ since adult languages differ from one another. Any alleged imperfect forms observed in child speech are associated with a corresponding form in adult grammars, in particular languages.

Consequently, hypothesising that child structures violate UG principles would not hold under this hypothesis, with the existing empirical data supporting evidence. The methodology used in building a specific language processing model invoked arguments aligned to a UG theory. Crain and Thornton proposed a theoretical model aligned to a CH to L1A (Pinker 1984, Crain 1991). To further develop, the authors predicted that children and adults were endowed with the exact predetermined mechanisms and language was defined as a module with specific properties, not shared with other modules of the cognitive domain. In light of such an approach, ambiguity or vulnerability in interpretation was claimed to no longer be a determining factor. In light of real-world knowledge, the main interacting elements were principled in syntax, semantics and pragmatics. As such, from a UG perspective, language properties were rendered as innately specified, and, as a result, no evidence coming from experience would be needed to satisfy a theoretical account of their emergence. The syntactic model adopted conceptual approaches on parsing strategies that work similarly in adults and children, easing explanatory proposals during the early stages.[20] Still, many unexpected syntactic aspects surfaced. As investigations got deeper in different languages, the syntactic models had to be further developed to explain non-target like structures adequately. Children

[20] The authors aimed to explain the differences between child and adult structures the same way one can observe differences between different adult/target languages; as a result, the structures generated by children during the early stages are acceptable since they find correspondence in other adult grammar as a result of comparative-syntax approaches.

experience specific phases before reaching full linguistic competence in the target language. The stages and the occurrences produced by children proved to be very insightful and provided evidence towards the role played by the I-language inner mechanisms of UG (Chomsky 1965).

At a closer analysis, the inquiries and issues raised regarding the emergence of FCs are still far from being solved. Although the progress made in L1A is tremendous, many questions still need proper and adequate answers. The *P&P framework* offered great insight in this sense. The empirical data supports the claims and explains what triggers specific features and their emergence in derivation. Even if it is assumed that syntactic knowledge is fully available, milestones are observed in how children select some elements for derivation without adequately explaining why optionality and availability from the onset are problematic. Many theorists, who align their research to a continuity based theoretical model, adopt the weaker version (Pinker 1984, Hyams 1986, Hyams 1996).[21] The former attempted to explain the processing at the representational level via bootstrapping strategies and assumed full ability of syntactic encoding in the child. Any alleged boundaries in semantic and syntactic processing the child might be facing were attributed development milestones and possible means of interpretation in terms of the progress made from *Stage 1* to *Stage 2*.[22] The latter aimed to bring arguments in favour of the full availability of FCs from the onset of acquisition. Under the SCH, the data was matched against adult languages to find adequacy for the syntactic description. Different accounts that subscribed to the weak version argued various hypotheses. Given the underspecified features of FCs, the interpretation under the *P&P framework* assumed that parametrisation could suffer from a mis-set

[21] These two research papers are attributed to the *P&P* framework, however, Hyams further developed the research, especially on the optionality of finiteness in child Greek in support of a continuity account to LA, as presented in *Chapter 5*.

[22] In a section in *Chapter 5*, following Pinker's interpretation it will be explained how his syntactic model proposal was used in maturational accounts from a minimalist perspective.

during the early stages (Chomsky 1981a). It was argued that languages have different structures for inflections, and a real challenge is posed with the proposal of uniform accounts on the inflectional systems. The underspecified structures were associated with discourse elements to adequately explain the differences between child and adult structures (Hyams 1996). The account contributed to an elegant explanation of the OI stage (Wexler 1994). In this sense, the knowledge of the language is fully available, but there are visibility conditions that are not met at the PF level. Any observable errors were assumed to result from derivation being explained comparatively, for such structures would be acceptable in other adult languages; therefore, UG principles would not be violated. To sum up, any structures that deviate to any extent from the target, adult languages are explained cross-linguistically as mere differences that are observable in comparing different particular languages.

3.3.2. The Weak Continuity Hypothesis (WCH)

A weak approach to LA posits that FCs could be affected by maturation, influencing the syntactic development in children at different stages of development (O'Grady 1997). Language specificity is associated with lexical items (LI), which, in turn, is reduced to FCs (Borer 1984).[23] In the attempt to define categories functionally, FCs are described by their syntactic features concerning their c-selectional properties and theta-role assignment on argument heads; this account will be further explained in *Chapter 4* (Ouhalla 1991). Most of the maturational accounts on L1A have been associated with the maturation of principles and the setting of parameters under the P&P account (Chomsky 1981a). The acquisition of passive structures and the syntactic mapping of A-chains has been researched extensively (Borer and Wexler 1987). The

[23] Borer tackles parametric variation from a slightly different perspective, where lexical entries encode information that makes parametric variation possible attempting to explain, this way different ways of setting parameters within the same natural language.

maturational account of UG principles and their availability had to be necessarily conditioned by the specific stages of development children go through. Tsimpli adopts Borer's report on the theory of parametrisation in the form of a hybridised theoretical account combining elements associated with continuity and maturational accounts. FCs are assumed to undergo maturation processes and not the UG principle. Arguments are brought in favour of such an approach, stating that the dangers of wild grammar structures could be elegantly avoided and any possible cases that would lead to UG violations (Tsimpli 1992/1996).

Moreover, it was claimed that such an approach would adequately explain, cross-linguistically, the syntactic structures attested during *Stage 1* of L1A. Consequently, a *Functional Module (FM)* for *FCs* was proposed as part of the LF level of representation with a hypothesised gradual emergence of FCs (Tsimpli 1992/1996, Tsimpli and Ouhalla 1990), as opposed to a radical approach where all the *FCs* are assumed to emerge at once during the functional stage of L1A (Radford 1990). The maturational account, which resulted from analysing child Greek corpora, a richly inflected language with a complex Case system, predicted that maturation is associated with FCs and not with UG principles. The attested forms in child grammar, as opposed to adult grammars, accounted for the growth of FCs and the inability of children to check features against the head features during the early stages of L1A (Tsimpli 1992/1996). However, the knowledge of languages is biologically endowed in humans. FCs become available and are used in processing structures, but the emergence is conditioned. Maturational accounts to L1A tried to explain the processes of LA by addressing UG and parameters in proposing adequate theoretical models. If UG was accepted as innate, a universal biological endowment, expressed in the form of invariant constraints, it had to explain language variability. The research domain channelled the explanatory efforts into parametrisation and property clusters that surfaced to explain differences in features between adult and child grammars. Therefore, there were different takes on parameters associating them with UG principles (Chomsky 1981a),

with hypothesised triggering or cueing at surface level (Drescher and Kaye 1990, Fodor 1998) or with FCs to explain variability among languages (Borer 1984).

Acquisitionists subscribing to the *Weak Continuity Hypothesis* (WCH) were divisive regarding the operativity of *UG* principles from the onset of acquisition, some positing full availability (Goodluck 1991, Hyams 1996), others partial availability (Radford 1990), and some proposing a no availability of *UG* principles from the onset (Felix 1984). The WCH presented a maturational account and attempted to explain the interpretation at the PF and LF, gradually, with radical approaches such as lack of functional projection from the onset, to truncated model proposals where some FCs are available from the onset. Empirical data analysis developed different accounts on whether FCs are present from the onset or not. Under SCH, the assumption was that FCs are available from Stage 1, enabling children to generate adult-like structures. Proponents of the pre-functional stage assume that the child must search for, discover, and select specific FCs and their features in the acquisition process (Radford 1988, Radford 1990, Guilfoyle and Noonan 1992, Fukui 1986/1995). Radford claims that categories such as Complementizer, Tense, and Agreement become available to children at around the age of 2;0; during *Stage 2* of acquisition, *Stage 1* is described as when syntactic features are absent. He addressed the availability of T-systems and C-systems in early grammars and distinguished between lexical, thematic structures, which he believes are available to children and functional-nonthematic forms, available after 2;0.[24] To support his claim that *contentives* are acquired before *functors*, he relied on functional parametrisation (Chomsky1989) and maturational hypotheses (Borer, H. & K. Wexler).

There are maturational accounts (Radford 1988, Radford 1990) and accounts positing that some FCs are absent in the initial state and become

[24] Andrew Radford is the main proponent of a pre-functional stage in LA. He adopted Fukui's proposal for *FCs* according to which *FCs* must be visible and the child had to be able to discover them in overt evidence.

available only later (Meisel and Muller 1992).[25] Still, the structures generated by children during the early stages do not violate UG constraints. Radford's research on empirical data has been associated with the new minimalist approach and the syntactic operations available at the onset of acquisition, namely the emergence of Merge and Move and the assumption that FCs are absent at the onset of L1A (Chomsky1981b).[26] The theoretical proposal might seem incomplete since it has been countered by studies that support a continuity approach and the existence of some FCs from the onset of L1A (Roeper and *Weissenborn* 1990). Moreover, some theorists assume the presence of FCs from the onset in the early grammars but consider that they have representation in the lexical items but lack visibility at PF. The emergence and the manifestation of operation Move in LA encountered difficulties in explanation, as the empirical data from particular languages reflected a rather intricate long-term process in some cases.

Under the WCH, truncation theoretical models of LA were proposed. According to the *Truncation Hypothesis* (TH), in the acquisition process, functional projections are divided; therefore, only the lower projections are available to children during the early stages (Rizzi 1993/1994). The higher functional projections become available only later on in the developmental process. Some of the most analysed truncated forms by acquisitionists were the omission of subjects in Italian and other Romance languages with null subjects in clauses that are Tensed, as opposed to Germanic languages and English, which do not allow such structures in a final state. The author argued that during the early stages, children opt for IP instead of CP, postulating the *Null Subject Parameter* (NSP) in support of a cross-linguistic analysis. The hypothesis was supported by comprehensive empirical data, which reflected a predisposition in children to omittance of subjects during the early stages

[25] The authors claimed based on the empirical data analysis that TP and AGR were available from onset, while IP was not.

[26] Within the *P&P* framework the operation used at representational levels was Moveα, move any time anywhere.

of L1A, both in languages that allow null subject positions and in languages that do not allow it. The author predicted that the omission of subjects would be part of the developmental process in L1A and proposed other parameters to be verified to contribute to the existent proposals and provide a unifying account in the acquisition of natural languages (Rizzi 1993/1994).

The UG theories of acquisition associated with WCH subscribed to theories of parametrisation, later being reinterpreted under the MP framework (Chomsky 1995). The heuristic analyses adopted different maturational arguments. Some researchers adopt models based on UG grammar constraints and the universality of UG principles assuming that children cannot rely on evidence without innate predetermined constraints to their syntactic knowledge. Some theoretical directions hypothesised the maturation of UG principles associated with the fixing of parameters. Based on empirical data, other approaches posited that parameters should be related to the maturation of FCs. The latter aimed to explain the issues raised regarding the absence or lack of FCs during the early stages in the speech productions of children across languages. There are shortcomings to both proposals because the accounts are not satisfying enough to explain the input-output relationship and the way clusters of properties surface in particular languages.

3.3.3. The Discontinuity Hypothesis (DH)

The third direction assumes that principles are not available from onset; therefore, the structures generated by children violate UG principles; moreover, child structures differ from structures in adult grammars. The *Discontinuity Hypothesis* (DH) assumes the maturation of UG principles, in an emergent way, conditioned biologically, the order being dictated by maturation processes and the child's general development (Felix 1984). As such, L1A is seen as a maturational process, but, according to this theoretical account, UG principles are not available from the onset but rather emerge successively. UG is not fully functional,

and principles operate in specific stages/orders given by inner biological mechanisms. By contrast with previous accounts of UG constrained maturational theoretical models in which the child and adult phrase markers are identical, under the DH, the assumption is that the two are not similar. More importantly, UG principles are violable, therefore, not viable, for example, the X-bar theory, or the Binding theory, or the Theta theory, to name a few. The CHs was associated with perceptionism and the DHs with *maturationism* (Felix 1984). One strength is the association of language and its development with other biological systems in the body, with maturation cycles and stages of development. It fails to explain how the child uses selectional properties to process syntactic structures without clearly set UG constraints. If in SCH child and adult phrase markers were equal, DH claims that they are different; as a result, in the evolution from child to adult grammar, discontinuity is witnessed in marking critical moments in development. The research results on child German corpora argued that the empirical data on child German reflected how principled domains were violated. Consequently, UG grammar could not be a viable choice for natural languages. A series of examples where children produce utterances were exemplified; however, under the L1A accounts, these maximal projections lacked heads and child utterances were assumed to rely on semantic relations. An opposing account stated that what Felix coined as a violation of UG principles could easily be interpreted as a limitation in processing during attested stages in the development (Clashen 1986). Under a DH to L1A, language is believed to have a biological nature, like other systems, and the stages in the development of grammar are recognised as well (maturation of UG principles). Still, such an approach did not provide adequate answers to how children can construct grammar based on the input they receive or how they can reach full competence in a short period. The limited input does not provide sufficient information regarding how children acquire complex grammar and reach the target levels briefly.

3.4. Conclusions

Under a CHs to L1A, any observable differences between child and adult grammars were explained as differences attested in particular languages with their specific sets of properties and features. Consequently, any structures generated in a specific child grammar could have been interpreted as imperfect if set against the target language. Moreover, they were assumed not to violate any of the invariant UG principles, an assumption supported by empirical data cross-linguistically, and rendered acceptable if set against other adult languages. There were still many issues at the structural level that did not get a complete and satisfactory explanation; however, the significant amount of research conducted under the *P&P framework* could not be ignored and served as a foundation for future theoretical endeavours (Chomsky 1981a). Children face challenges in processing structures irrespective of the language acquired due to the tension established at representational interface levels, PF and LF. In addition, the tension and the linguistic challenges were solved creatively, with ease and at a fast rate by children. In light of such evidence, in a unified view across languages, general assumptions regarding the milestones in the linguistic development during the early grammars were accepted. As illustrated in *Chapter 4* and *Chapter 5*, recent theoretical accounts and the favourable arguments supported by the experimental data enabled the MP proposal to release the PF/LF tension; more so, the visibility conditions got a more satisfactory, adequate, economic, and elegant explanation. CHs explain the differences between child and adult grammars as differences between particular languages in their steady-state; therefore, the structures generated by the children during the early stages were associated with possible mappings in various adult languages. Researchers encountered problems explaining why some FCs emerged later than others and why there were limitations in processing at the structural level during specific steps of syntactic development in children. Consequently, comparative

cross-linguistic studies aimed to solve some of the tensions generated in derivation by the force of explanatory adequacy.

It is still challenging to adopt a clear position on how syntactic operators work during the early stages of L1A. Still, visible progress has been made in the generative framework, and it can be measured in the results of the cross-linguistic research projects. Such genuine endeavours aimed to give a unifying account and contributed to a detailed description of language typology in general. The theoretical frameworks evolved and have been optimised to explain the process of LA adequately; the speech productions of children offer a continuous resource for data analysis, making the domain more appealing and resourceful under the new and improved minimalist frameworks.

Chapter 4 – Functional Categories (FCs) and First Language Acquisition (L1A)

This chapter highlights some of the main theoretical generative approaches regarding the role of FCs in linguistic theory. The presentation focuses on the specific implications in the domain of LA, paired with mappings of FCs during the early stages of development in child grammars. FCs pertain to UG from an evolutionary perspective, explaining the functionality of the systems to the domain of L1A and the role they played in narrow syntax. The theoretical frameworks to the latest minimalist proposals are outlined, insisting on the strengths, weaknesses, and viable and relevant solutions proposed by syntacticians and acquisitionists. The present chapter is twofold; it will consist of an overview of the development and the evolution of FCs within the generative linguistic field with the main directions assumed by researchers, completed by accounts on the impact of such proposals to L1A. The keywords are *FCs, EST Model ('Y-Model'), GB Model, MP model, feature checking, valuation, Merge, Move, Agree, Attract, SMT, PIC, and phasal domains.*

4.1. Preliminary remarks

Qualitative and quantitative studies in L1A and L2A found solid theoretical support in all the generative accounts proposed so far. For the most part, with the advantage of the research opportunities made available at the time, the *P&P framework* proved to be the most resourceful (Chomsky 1981b). It could have been the result of the extended period attributed to this research phase. Confident in the research outcomes of the last decade, following the principled path of the new MP theoretical proposals, both for the domain of syntax and LA, excellent results are

envisioned (Chomsky 1995). All in all, following the line of analysis provided in the previous chapters, a synthetic approach is displayed regarding the main directions of the LA processes, LL associated with data-driven and distributional patterning mechanisms, and the effects of language change on particular languages under different nativist theoretical models. In what follows, the core conceptual framework necessary for a proper analysis of the empirical data is mentioned, as it will be further developed in *Section II*. This route is opted to describe the minimalist conceptual framework adopted in the present qualitative analysis of child speech. The EST model assumed a lexicalist position in the description of the language system (Chosmky 1973). The *P&P framework* (Chomsky 1981b) defined language inexpensively, enhanced by functioning economically and underdetermined manner. The syntax-semantics tension resulted from a modular definition and description of LF as carrying the charge of explanatory complexity. As a long-term result of genetic endowment or a short-term historical accident, language and its apparatus demanded functional understanding in a more extensive system. Core grammar must be understood as categorial, at the lexical and functional levels, with an adequate explanation at a deeper level of representation, processing infinite possibilities with finite means. Functionality in the generative framework was first signalled under the necessity of conceptual labelling, with a clear definition of the categories considered non-lexical (Chomsky 1970).

Under the UG framework, contentives encountered different proposals (Abney 1987, Culicover 1999); still, the premise is that FCs are part of the human knowledge conception, the categorising elements being anchored in the great evolutionary system of the world. The core FL operators are assigned universal functional roles alongside other systems from other scientific domains. On the same note, reaching an optimal result makes the endeavour challenging and exciting for the research domain. Previous theories proved to be limited and required a reinterpretation of the data reflecting the dynamic core of the approach born out of methodologies and empirical studies. The new context

needed a clear description of the framework within the bigger picture, avoiding the perils of domain-specific theoretical models. For the LA and other adjacent domains, the UG framework made it possible to establish a research direction, the continuity models of L1A in early child grammar. Such accounts developed under the *P&P framework* (Chomsky 1981b) stemmed from the EST (Chomsky 1973) and continue to be generated under the latest minimalist accounts (Chomsky 1995). Although the theoretical models and the interpretation and role of FCs endured significant changes from one theoretical framework to another, such changes proved necessary. They became valuable resources in interpreting and explaining specific representations at interface levels in addressing the means of computation in licensing derivation. Consequently, although some concepts were dropped and others emerged, such changes and assumptions within the theoretical frameworks, nonetheless, proved to be germane in building a solid syntactic model. The scientific inquiries and the significant amount of data became pillars of new matrix generations and syntactic configurations towards a promising platform of linguistic knowledge.

4.2. Functional categories (FCs) and the generative frameworks

4.2.1. Functional categories (FCs) and the Extended Standard Theory (EST)

The Standard Theory model (ST) (Chomsky 1986b) evolved into the *Extended Standard Theory model* (EST) (Chomsky 1973) and contributed to the development of models of acquisition and learnability in LA under the *P&P framework* (Chomsky 1981a) and the MP (Chomsky 1995). The phrase definition evolved from single-head structures to heads of sentences (Abney 1987, Chomsky 1986a).

This section describes the developments registered under the *EST* or the "Y-model" as the first to experience constant change and transformation. It had to be adapted, redesigned, and branded into a new architectural design. The natural outcome was the *P&P* research

framework (Chomsky 1981b), but the *'Y-model'* had its merits. It efficiently addressed cyclicity and transfer at the interface level serving as a base for future theoretical accounts. However, the model was not economical, and it did not explain the mechanisms of language processing adequately; many redundancies had to be eliminated. Ideally, a theoretical model must be economically principled and bear universal features; however, such conditions were not met given the circumstances. The model was costly and complicated; the mapping of the underlying structures, known as base structures, surfaced at the representational level and resulted from rules and transformational mechanisms. The theory hosted three levels of representation and multiple operations, and overt and covert movement. The language acquisition device was equipped with measures of evaluation and formal and substantive elements (Chomsky 1981a). As mentioned above, such a model was neither economic nor straightforward. The interface interpretation involved processing in the S-Structure, the D-structure, and the LF interface level. For economic reasons, multiple cycles were limited, and under the MP, the model functioned on one cycle. The new reductionist proposal gave up any superfluous elements; this way, the assumption of a single-cycled hypothesis became instrumental in explaining how language bears interpretation under the new minimalist theoretical approach (Chomsky 1995, Chomsky 2000a).

The new minimalist inquiry underpinned some of the problems associated with the *EST/Y-model* as its complexity, and intricate computation was unnecessarily complicated the definition of the members that entered derivation being changed. Instead of altering their realisations at different syntactic levels in the treelets, which generated complications associated with tracing and co-indexation, the syntactic objects no longer suffered changes after entering derivation. The means of transformation violated optimality conditions, one of the critical features of the new minimalist design. Chomsky himself admitted that the interpretation of traces in different positions via (co)indexing, with the members the entered derivation modified, was unnecessary to the

movement (Chomsky 1993, Chomsky 1995, Chomsky 2000c, Chomsky 2001a, Chomsky 2005b).

For the past fifty years, there have been several hypotheses regarding the role and development of FCs in linguistic theories. The focus shift towards functional elements was signalled in the mid-80s, starting with Chomsky's phrase structure proposal (Chomsky 1986a, Chomsky 1986b). Theoretical accounts on phrase structure-function adopted the X-bar format during this time, such as the role of the *Determiner Phrase* (DP) (Abney 1986). The determiner became the head of the nominal structure, movements to Spec position, wh-movement to [Spec, C], NP movement to [Spec, I], to name just a few. Of relevance for LA were the language variation and its definition. Syntacticians and acquisitionists met on the common ground attempting to explain and find shared elements that would explain in an adequate manner variation in languages under a functional approach to syntax.

The research field enabled a proliferation of FCs and generative means of operations; the split of IP into two heads, Tense and Agreement, under the *Split-Inflection Hypothesis* (SIH), which aimed to offer an adequate description and explanation to how structures are built and processed and how they work (Pollock 1989). For L1A, the explanatory power elucidated many problems faced in tackling the empirical domain, such as parametrisation and its interpretation under the *P&P framework*, attempting to solve tensions (Fukui 1986/1995) to propose a UG grammar theory to contain all the aspects unanimously accepted.

4.2.2. Functional categories (FCs) under the Principles and Parameters (P&P) framework

Starting from previous accounts, the focus shifts to the impact of the cost-free operations Merge and Move, the theory of Copy, the labelling algorithm and the matching operators as solutions for a descriptive process, all in an evolutionary key (Chomsky 1995). The generative grammar framework represented syntactic elements on the morphology;

the IP and the CP became relevant heads in the X-bar framework (Chomsky 1986a). In this light, the FC proposal under the *Government and Binding* (GB) theory was associated with a modular approach, some of the key modules being the X-bar module, Case Theory, Theta Theory, to name a few (Chomsky 1981a). Phrases were categorial and able to project. As postulated under the X-bar theory, a clear distinction between lexical heads (nouns, verbs, etc.) and functional heads (VP, IP, CP). The valuation was another relevant property, for values were highly formalised and mapped conceptually. The new approach was minimalist, and the interpretation of functional elements as heads of their projection in asymmetrical relations generated a hierarchical shift towards a simplified approach to derivation. FCs carried all the properties specific to a language and became core elements of UG. With a predetermined LAD, inner-mechanism contained the formal and substantive universals assumed to constrain transformational rules with syntactic features assigned to syntactic, semantic, phonological elements (Chomsky 1981a).

The syntax-morphology relationship contributed to the syntactic model description. The interactions between the lexicon and the morphological and syntactic levels were associated with cross-linguistic variation (DiSciullo and Williams 1987). The SIH attempted to solve cross-linguistic interpretation (Pollock 1989), which further developed the Tense/Agreement split into the subject and object agreement. The proliferation of phrases proposed hierarchies that depended on the properties assigned to each head (Chomsky 1993). The assumption of partial containment of morphological elements in the lexicon and the relation between syntactic and morphological operations in licensing derivation influenced understanding the inner mechanisms. By associating all the syntactic functions with the phase head, syntactic and morphological aspects were explained cross-linguistically, establishing constraint orders which could explain, to some degree, morphological variation across languages (Baker 1988).

The new model elegantly gave a descriptive account that could be interpreted across languages. One contribution was attributed to Baker,

and another to Kayne. The latter associated linearisation of structures with hierarchies. If phrase structures have different linearisation in particular languages, hierarchies should be different postulating a *Linear Correspondence Axiom* (LCA) (Kayne 1994). Chomsky assumed linearisation in languages but not in Kayne's general sense; instead, he attributed it to phonology (Chomsky 1995). With all the given variables and irrespective of the theoretical account adopted, FCs have posed interpretive challenges and required imperative review. In addition, the data reflected that they had different representations in languages making the task of finding a unifying, universal proposal extremely difficult. FCs played an essential role within the *P&P framework* and became the main instrument in explaining linguistic variation in values assigned to specific properties. The abstract features became the driving force behind the setting and fixing parametric values. Unquestionably, such interpretations accounted for particular word order in languages and explained variation (Hyams 1986). FCs were defined as "the locus of grammatical information which determines the structural representation of given constructions" (Pierce 1989, p. 8). Parametric variation, in this sense, was interpreted both at the lexical and functional levels (Ouhalla 1991).

In light of this view, languages were assumed to contain a computational system and a lexicon. In addition, serious attempts were made to define the core computational instruments under the main frameworks of generative grammar (Chomsky 1981b and the subsequent works), positing that the core elements featured universal containment and were well-grounded in the theoretical framework. FCs were responsible for most parametric variation (Fukui and Speas 1986, Chomsky 1986a, Chomsky 1988b, Ouhalla 1991). Descriptively, LCs and FCs could project and carry sets of properties. Feature specificity was contained in the syntactic, semantic, and phonological elements. The valuation was associated with the distinctive features projected at a syntactic level with a /+/- valuation/ or the associated phi-features. The Semantic level, as thematic argument structure properties, was also set,

Agent or Patient with assigned theta-roles that needed to be fully compatible (Chomsky 1981a).

Going back to the core of the P&P account, parametric variation constraints were directed towards FCs, which were assigned values and became the leading force in mapping at the interface levels, PF and LF. "If substantive elements (verbs, nouns etc.) are drawn from an invariant universal vocabulary, then only functional elements will be parametrised" (Chomsky 1988c, p.2). Moreover, the syntactic movement was explained in terms of triggers, cues, feature value assignment, and the strength and weakness of feature value specificity. Under this account, the linguistic properties of FCs, by accessing UG principles, allowed parametric variation and parameter clustering in particular languages with the associated constraints. FCs were defined as syntactic categories, "a somewhat arbitrary means of coding a variety of different properties in a single simple element" (Smith and Tsimpli 2010, p. 39). Strong and weak features were described as abstract and formalised language-specific properties that made *overt* and *covert* movement and raisings possible. The issue with how these properties operated was that they became highly restrictive and language-specific without mirroring an interpretation at a larger scale. Such variations posed problems for future developments under this framework.

A clear distinction between *substantive* elements and *functional* categories, both in child and adult grammars, defined the former as an *open* class, with s-selection properties, and the latter, as a *closed* class, which lacked property specifications and was submitted to a categorial selection (c-selection) (Chomsky 1981a). The c-selection properties of FCs differed from one particular language to another; the prediction was that typological differences and word order could be adequately explained in natural languages. The property clustering reflected relevant evidence both in child and adult grammars. FCs would project and offer landing sites for the moving members when movement was triggered. The theories of L1A worked extensively with parametric variation and FCs,

and the acquisition of language systems was assumed to encode both universal principles and particular properties of languages.

Many syntacticians contributed significantly to the *P&P framework* with a shared view on the hypothesised innate UG (Baker 1988, Kayne 2013), which became a "theory of fixed and invariant principles that constitute the human language faculty and the parameters of variation associated with them" (Chomsky 1988b, p. 133). Grammar was described formally, the universal abstract principles being the result of a "biological necessity and not mere historical accidents, that derive from the mental characteristics of the species" (Chomsky 1975a, p.3). Within this framework, principles were invariant, fixed, language-specific and explained cross-linguistic variation. The mere surface in natural languages was made possible by inner mechanisms, such as the *computation for human language* (CHL) (Chomsky 1995, p. 221). Under the MP, parameters are reconceptualised in association with language-internal *(I-language)* and language external *(E-language)* properties (Chomsky 1995). From a minimalist perspective, a solution to parametrisation and the problems encountered with the explanation of triggers and cues in micro-parametrisation, which aimed to give an excellent basis to *triggers* or *cues* (Fodor 1988, Fodor 1999, Lightfoot 1989), was the prediction that knowledge was available to the child from the onset (Chomsky 1995).

In the field of LA, linguistic variation in parametrised and non-parametrised principles aimed to explain the differences between what is variable and what is not in language. In determining such differences, the child is assumed to use innate knowledge and the LAD. Some studies in L1A explained that in choosing specific parameters for specific languages, the relevant information is found in the *lexicon* rather than in the *computational* element (Borer 1984, Hyams 1986). The idea was later picked on and developed by Chomsky and led to new developments and significant changes in understanding and explaining the inner mechanisms and grammatical processing in child and adult grammars equally (Chomsky 1989).

If it is accepted that one operates with substantive and functional elements, phrases replace sentences as a part of a syntactic structure of language. As such, FCs adopted new roles under the phrase proposals CPs, DPs, and Ips, and the definition and interpretation of the features and properties of FCs shifted under the UG umbrella with categories such as TP, AgrsP and AgroP being considered independent.[27] FCs function as hosts and offer landing sites for structure constituents by projecting abstract phrase structures. Under the generativist approach to LA, without FCs, children would not be able to map, process and compute linguistic information and represent it at the interface level. They are assumed to function as heads at the structural level and can project and make syntactic movement possible (Chomsky 1995, Chomsky 2000a).

The classification into classes/categories of lexical and functional/grammatical items as part of the lexicon was assumed to be part of the UG inheritance. Such items became abstract movement licensers, explaining the properties of particular natural languages. Without contentives, the child would not compute syntactic structures (Chomsky 1957/2002). The descriptive content is existent both in LCs and FCs. Traditionally, lexical items are theta-marked, while functional items are not, their role being abstract and associated with computation at the structural level. In a principled way, FCs such as C, I, and D were assumed to bear grammatical content which is abstract and carries a high degree of rigidity (i.e. categorial features associated with verbal inflection). The former interpreted expressions conceptually, having semantic features, while the latter was categorial, formal, limited and were concerned with computation. FCs, as opposed to LCs, became the driving force of the phrase structure by making movement possible; consequently, without FCs, constituents would not be able to project maximally (Chomsky 1981a).

The minimal classification of FCs was reduced to three phrases, CP, DP, and IP and phrases were assumed to function as heads in the

[27] It refers to the Split Inflection Hypothesis proposed by Pollock and cited in this section and to Chomsky's subject/object agreement split also cited in this section.

structure (Abney 1987, Chomsky 1995, Chomsky 2000a). Under the *P&P framework* (Chomsky 1981b), developing FCs was towards proliferation rather than reduction. In light of such a trajectory, new FCs were proposed. In light of a comparative syntax proposal paired to explain variation cross-linguistically, the explanatory power of the FCs faced a difficult task in that it had to bring a unifying account, the mapping in different languages being far from uniform (Rizzi 1997, Rizzi 2004). The properties of FCs were checked against particular grammars and played an essential role in comparative syntax and in ensuring adequate explanation to variation across languages. The proliferation of FCs was linked to the development of principles and parameters, which attempted to explain anything about language from an internal theory perspective, the focus being on the I-language as a component that required descriptive adequacy. There were restrictive proposals regarding the interpretation of FCs, and it was argued should be detectable in evidence, and it was reflected in particular languages, such as Japanese (Fukui 1986/1995).

The macro parameters also impacted the visible shift towards a minimalist approach to LA (Baker 1996) and notable efforts aimed to solve the micro-macro tension in parametrisation. The *polysynthesis parameter* was associated with large groups of languages (Biberauer 2008). Moreover, the empirical results on L1A reflected how children manifested early on simple and economic syntactic abilities. In hypothesising how FCs project, although it seemed that they were omitted in interpretation during early stages, there were proofs that children had tacit knowledge of the missing FCs, which was visible in the way, the structure was mapped at the representational level (Boser et al. 1991, Boser et al. 1992)[28]. Experimental studies aimed to shed light on how FCs emerged and projected. Special attention was given to DPs, IPs and

[28] Under the *Null Auxiliary Hypothesis* was assumed based on the experimental data that children possessed syntactic knowledge of auxiliaries although there was no evidence of mapping at the PF level, phonetically such elements were null, but they were interpreted in the LF.

CPs and how they were represented in early grammars cross-linguistically.[29] The unifying approach was far from clearly outlined and the relationship between the redefined LAD and PLD. The universal characteristics of features had to be encoded in languages; still, as empirical data research revealed, arbitrariness played an essential role in this process. One unanswered question was how much a child could process at the semantic level, especially during the early stages of acquisition and what was available to him semantically. It triggered the need for an investigation into the model to find answers from a conceptual perspective concerning the mechanisms of argument structure and theta-role assignment and syntactically to see what computational mechanisms were available at argument structure (Chomsky 1995). The different representations attempted to give a simplified account of semantic interpretation and the relationship between semantics and syntax in terms of priority and precedence in LA. The movement made any representation of PF and LF possible, and any form of licencing was conditioned. In this light, operations were costly, and the elements had to go under co-indexation to move; they left a trace, an empty category, not realised at the phonological level but essential at the computational level (Chomsky 1981a).[30]

The arguments favouring this theory paid excellent service in the debate regarding LL featured by data-driven content in opposition to natural language acquisition. This domain goes beyond such restrictive interpretation. One of the preliminary inquiries had to do with the information available to the child and the explanation concerning the way *a priori* knowledge is triggered. The LAD was the mechanism that held the answers to full linguistic competence achieved in the acquisition process in the target language at a very high rate. In contrast, the proliferation of FCs was associated with parametrisation. The setting of parameters was associated with the initial state in LA. Still, it was

[29] The corpora on English, French and German have been extensively analysed in acquisition studies.

[30] It goes back to the *Empty Category Principle*.

challenging to generate a unifying account that could entail the marking of specific values.

4.2.3. The transition from the P&P framework to the Minimalist Program

The new minimalist proposal first emerged conceptually in the 90s. A significant difference from previous accounts to language was its position and role concerning other cognitive systems, a germane difference, we must say. The C-I and S-M systems offered the optimal interplay in economy, elegance and relationship with other systems. The general principles proposed and the salient interface conditions were projected within a bigger picture and described the properties of LF from an evolutionary biolinguistics perspective (Chomsky 1993). The most outstanding contribution with the proposal of the MP was concentrated in identifying the biological sets of properties associated with the grammar of natural languages (Chomsky 1995, Chomsky 2000a). The program investigates the mechanisms of natural languages meant to release the tension between the conceptual and sensory levels of representation. Irrespective of the arguments presented against such a program for natural languages (Newmeyer 2003), one cannot ignore the empirical data evidence that supports such a theoretical account from a biolinguistics perspective.

As previously stated, UG is the "initial state"; it is assumed to contain invariant and universal principles (Chomsky 1981b). The developments from one framework to another reflect that the evaluation measures from (E)ST were replaced by principles and parameters under P&P. At the same time, the MP reduced the underlying interpretation mechanisms. FCs were conceptualised when associated with phrase structure and movement under the *P&P framework*. They played an essential role in comparative syntax studies and attempted to give unifying accounts to cross-linguistic variation (Fukui 1986/1995). Parametrisation was not ignored in the MP; however, the approach was minimal and narrowed down in definition.

It was necessary to explore the relationship between the lexicon and syntax and the role of semantics, pragmatics, and discourse factors. The new proposal created a pathway towards a satisfying minimalist account and made the departure from previously used models possible. The renewed operations were cost-efficient, a salient characteristic of the underlying mechanisms, and connected with other factors involved in the process. The universal invariant principles contain the formal, abstract properties; thus, parametric triggering was interpreted in terms of feature value and feature checking to functional heads, proving extremely economical by stripping away any unnecessary elements at the representational level. Only two levels were kept, the PF and LF, the latter being the only conceptual and representational mechanisms available before *Transfer* to *Spell-Out* (Chomsky 1995). The empirical investigations in LA needed to find theoretical support in the new framework. Parameters suffered both a conceptual and formal reinterpretation but were still associated with particular natural languages in terms of specificity. They were to be interpreted in a narrowed down and simplified way. Another matter was connected with selecting the parameters to be included and reinterpreted under the new framework. The agreement was that under the *P&P framework*, strong arguments were built towards the nativist approach (Hyams 1986).

It is accepted that acquisition happens very fast, and the emergence of property clusters is consecutive or simultaneous within the emergent window of opportunity. Some key parameters extensively investigated under the *P&P framework* include the *Null-Subject Parameter* (NSP) with the specified condition of *pro* as an empty category in *pro*-drop grammars and they were maintained and interpreted in a minimalist key. However, the new framework assumptions posit that the child must identify one property, and since the acquisition process is fast, the others would emerge soon after or simultaneously. *FCs* were scrutinised in terms of economy and optimality with significant differences under the MP proposal (Chomsky 1995). The new restrictive minimalist interpretation solved the problem regarding the proliferation of FCs warranted by P&P,

and it offered a simplified version with changes at the interface level regarding the derivation and syntactic operations used. Any FC had to find justification under the new program either in the theory internal arguments or in the output conditions resulting at the interface level (Chomsky 1995).

FCs play an essential role at LF, as a primary interface, and at PF, as a secondary interface. The levels of representation from previous theoretical frameworks are deleted, the D-structure and the S-structure from GB, keeping at representational level LF and PF. UG emerged from transformational grammar (Chomsky 1965) correlated with Kayne's proposal of uniformity among languages and the cycles of language acquisition (Kayne 1975). The latter compared English and some Romance languages in his first studies to find unifying accounts across languages. Some of the differences between GB and MP translate into how modularity, government, and economy are understood (Chomsky 1993, Chomsky 19995). The new program did not evolve to undermine the work and the empirical results developed under the *P&P framework* (Uriagereka 2012). As such, modularity is no longer a component of the theoretical framework. The operational modules aligned to the mental modules (Fodor 1998) were replaced by features attracted for checking purposes, and the government was no longer in place. In MP, legibility is correlated with syntactic representation. The *Full Interpretation* (FI) principle is required to prevent the structure from crashing "every element of PF and LF must receive an appropriate interpretation, must be licensed" (Chomsky 1986a, p. 98). Syntactic operations are economical, the two operations used in Derivation being Merge and Move, as opposed to Move alpha, the latter a minimalist instrument, operates only under the last resort axiom.

A derivation is sound if legibility conditions are met and crashes if these conditions are not met. Derivation does not crash because the principle of FI does not allow it. A thorough analysis of the two systems, representational and derivative, reflects the core differences. The MP framework is construed as simplified, parsimonious, and economical.

The necessary conditions are equipped with only two representation and command relations levels. At the same time, derivation requires only Merge and Move as alternatives that are explained in terms of dynamic elegance, a phenomenon understood and explained in quantum physics and mechanics (Fukui 1996). The lexicon is fully inflected, and derivation will meet the necessary conditions because alternative derivations can be value-checked to see if the conditions of legibility are met. As for operations Merge and Move, in terms of economy, the axiomatic proposal is genuine and limited as opposed to previous theoretical accounts. Variations are reduced to the minimum, the syntax has to look for optimality constantly, for projection to be activated, conclusively movement has to meet the Last Resort Condition (Chomsky 1995).

4.2.4. Functional categories (FCs) under the Minimalist Program (MP)

Any ideal theoretical model aims to be as economical and straightforward as possible, and the new program offered great solutions in this sense, especially for the domain of L1A. The operations are simplified and submitted to economic principles. The architecture proposal is minimal and involves limited computation as the elements enter derivation fully inflected and are interpreted at the phonetic and logical levels. The operations must be cost-efficient and must obey economy conditions to satisfy the syntactic and semantic demands, locality playing an essential role in this sense. Children are assumed to operate minimally and only out of necessity explaining how syntax emerges in children and how the resulting syntactic objects are interpreted. Feature checking is also reinterpreted, and an operator such as Move must be activated as late as possible; it is an operation that is also free of any cost. For the movement to occur, several principles must be obeyed, *Procrastinate*, *Greed,* and *Inertness*, among others. The first requires late movement, postponing the operation as much as possible. The second conditions movement to licensing in the derivation process,

and the third needs movement to be as limited as possible (Chomsky 1995, |Chomsky 2000a).

In the domain of LA, strong nativist arguments posit that children acquire languages in a limited period with limited input or experience exposure; therefore, the explanation must be found in the universality of principles and constraints. The data, however, must find interpretation in a broad or narrow sense, following the new evolutionary findings involving perceptual and cognitive systems. Therefore, the universality of grammar must be understood and interpreted in a complex setting. Under principles of minimality, economy, simplicity, and elegance are the underlying abstract operators such as Move, Merge, Label, and PF and LF. The phase proposal became the foundation of the Strong Minimalist Thesis (SMT) (Chomsky 2001a). Label as an asymmetric operation is associated with algorithmic patterns and the lexical items, which are selected fully inflected via Numeration and are made available to the child and set against the PLD since the child is equipped with all the necessary tools (Chomsky 2001a). Features are checked economically, and movement is activated by the features that need checking. Therefore, although children do not hear direct evidence of specific structures in the PLD, they use the available instruments before projecting complex FCs. Children move lexical items for feature checking and use *Last Resort* and *Procrastinate* as instruments of the economy in interpreting structures; the first is used only if necessary for convergence. The second requires delaying operations in derivation (Chomsky 1995). The *Last Resort* principle is associated with syntactic operations. Features must be fully interpretable, which means that "an element can appear in a representation only if it is properly licensed' […] 'licensing' under FI is expressed in terms of conditions relating to the syntax, broadly construed, to other systems of the mind/brain" (Chomsky 2015, p. 137). In a phase-developed model, feature checking is simplified, and children work with operations such as *Merge* and *Label.* At first, operation *Merge* helps the child in parsing and computing elements from the abstract domain to generate representations and make interpretation possible at

the interface level. In this context, FL is found in the system of human design together with other cognitive domains (Chomsky 1995).

4.2.5. Feature interpretability under the Minimalist Program (MP)

The MP proposed a radical approach to FL interpretation; due to economic reasons, Move alpha was no longer included and features raising in derivation aimed to solve the interpretability problems. The lexical items are described as full or subsets in the array, and features are attracted checked during movement, leaving a copy for deletion (Chomsky 1995). If features were described as [+/- strong] (Chomsky 1993, Chomsky 2000a),[31] the strength was associated with *i*F and *u*F. After operation Merge (internal), features had to be checked via operation Move, and Spec positions were searched for checking and matching purposes. An adequately licenced derivation will converge if *u*F is checked against *i*Fs for matching purposes, all the copies undergoing deletion before *Spell-Out* (Chomsky 2001a). Under the latest account, matching is made possible via *Agree*, an operation that becomes the feature checking mechanism, a cost-free operation specific to syntax; moreover, without Agree, *i*F and *u*F would not be matched. These elements aim to solve the tension between the syntactic and morphological features (Chomsky 2000a, Chomsky 2001a).

In addition, feature description is twofold, at the micro and macro level; on the one hand, the core, inner characteristics of features and the mechanisms that activate them at the skeletal level via Move result in syntactic objects described by core features. Features, as primitives, are attracted and activated cyclically, making possible the evolution of members from atomic structures. Feature interpretability is connected with minimalist cyclicity, for *u*Fs must undergo cyclic movement.

[31] The strength of the features that enter derivation was replaced by the EPP feature as a property of the Spec position in in phases that were above in derivation, the EPP feature was kept, more or less, in all of the minimalist accounts.

Moreover, *u*Fs must be set against *i*Fs, for they have no value assigned to them. After valuation, they are deleted or eliminated and are not transferable to LF; if transferred to LF, the structure is assumed to crash (Chomsky 1995).

The minimalist proposal defines heads as the locus of feature interpretability and the driving force for activation (via Edge features) and proper selection of constituents (Chomsky 2008). Also, the minimalist approach on categorial elements was merged with cartography (Rizzi 1997, Cinque 2002). Functional zones are delineated as a cartographic approach to syntax; in mapping, the peripheral components became paramount in structure building, and the left periphery became the *locus* of movement to functional heads. Under Rizzi's account, the functional properties of the heads (Q, Topic and Focus) of the left periphery are twofold. They have a syntactic role and function, under recent minimalist proposals, as *Probes*, by *Attract* making possible feature checking and matching, elements with specific features being attracted towards the syntactic heads. They have a role at the interface of sound and meaning via specific matrixes at the pragmatic-discourse interfaces. The positions of the left periphery were proposed in tandem with a low-periphery configuration; the author assumed a particular mapping that would match the minimalist phases C and *v* proposed by Chomsky (Chomsky 2001a).

4.2.6. Phases, cycles and the Strong Minimalist Thesis (SMT)

With the universal principles at the core of FL, the analysis adopted in MP was feature-based[32], bearing relevance and, consequently, contributing to a theoretical proposal to the domain of L1A in a principled way (Jakobson *et al.*, 1955). The *Strong Minimalist Thesis* (SMT)

[32] As mentioned by Chomsky a feature-base proposal was offered by Jakobson, R., G.M., Fant, & M. Halle, 1955, Massachusetts Institute of Technology, Acoustics Laboratory, third printing.

expresses cyclicity of computation (Chomsky et al. 1956). It was assumed that in the early stages, the child operates with Merge, respectively, with subsets of operation Merge; therefore, before moving elements syntactically to higher arguments, to check features, the children adjoin elements (Lebeaux 2000). After identifying the feature that meets the necessary conditions, syntactic movement is possible. Hierarchically speaking, partial movement in LA is part of the Strong Minimalist Thesis (SMT) (Chomsky 2005). Recursion builds hierarchies and asymmetries, which are theory internal. Under MP, recursion has to meet visibility conditions and its visibility is made possible by merger as a syntactic operation. Under the SMT, FL "arises at the optimal interface between the independent syntactic autonomous organ and the other mental capacities" (Uriagereka 2002, p. 38), and it's the optimal solution to interface conditions. The new account is more restrictive; the properties at the conceptual level (LF) interact with different components of the mind. Under the SMT, language is redefined in terms of elegance in selecting the alternatives for derivation, the economy in using the least amount of syntactic operation in licencing and interpretation, and necessity, regarding the obligatory conditions that need to be met (Chomsky 2001a).

Additionally, phases and cycles of derivation are associated with the architectural design of languages (Chomsky 200a, Chomsky 2001a, Chomsky 2001b, Chomsky 2005a). A phase proposal for derivation with implications to L1A, in particular, eases the process by lifting some of the heavyweights of computation and supporting the contribution of memory mechanisms and other external systems involved alongside the syntactic factors. The use of *Copy* and *Delete* as part of the economy of the process could explain intermediate stages in L1A acquisition when the child merges lexical elements available, by default, to process with the available syntactic information what is given by PLD in an attempt to move to the featural phase that goes beyond argument structures. Multiple *Spell-Out*, via cyclic transfer to PF and LF mapping, satisfies the necessary conditions for L1A. Phases undergo different interpretations in

literature, starting from Chomsky's proposal. In LA, *Merge* is the first available operation and substitutes *Move* during the early stages (Chomsky 2000a). Phases as heads that attract features in derivation are selected via Numeration from a more or less limited array of items (Chomsky 2005a). As such, the *u*F will be attracted for matching against the features of the head to licence derivation members. The *Phrase Impenetrability Condition (PIC)* becomes an instrument in assuring convergence by transferring phases. The Edge property of the phases plays an essential role in ensuring boundaries and cost-free operations (Chomsky 2001a).

The domains proposed under the MP are reduced syntactically to the C and v domains, where T features are attracted by C, and T is somewhat adjoined between the two phasal domains. The features are associated with heads, the primary sequences are C-T-*v*-V, and the heads have different structural interpretations. Moreover, an essential aspect regarding the characteristics of the given heads is the T-*v* relation, the features that enter derivation and how, via movement, are attracted to higher Spec positions. However, such reductionist approaches to feature clusters bear more complexity than a less tensioned approach where T and its features are made available and conditioned by the emergence of the C domain, under a Probe-Goal relation. Therefore C, (T) and v become loci of featural derivation, and the sets of phi-features become instrumental in this approach. They are defined as spaces with a specific outline. Search is made possible for matching purposes under Edge feature proposals, such cyclic phases having a degree of independence assured by PIC under an SMT approach. The Edge features, although rendered problematic to the structure and with a degree of arbitrariness, make a movement out of a particular phase to higher positions possible. The Spec-head position is an example of edge property conditions, and the specificity of some language mappings might affect such interpretations (Chomsky 2000a, Chomsky 2001a).

Phase heads become the driving force of derivation, and the *phi*-features (*i*F/*u*F) are in the heads of the phase. As such, in the searching

space, they look for matchings. The head is allotted several functions, and any operation, Agree or *Transfer* after *Spell-Out* into PF and LF, is made possible by the head, including feature valuation (Chomsky 2005a, Chomsky 2007). The phase theory aims to cast more light onto common elements across languages, supporting, at the same time, the means of explaining language specificity and idiosyncrasies. Moreover, a phase theory serves L1A accounts explaining language-specific aspects and the differences between child and adult structures. The syntactic domain can be correlated with the cartographic discourse-pragmatic proposal (Rizzi 1997, Rizzi 2007) since languages have to be understood in a broader sense and the illocutionary force plays an integral part in the movement.

4.3. Conclusions

In this chapter, FCs were defined under an MP framework. The inquiry started from the assumption that there are classes/categories of items, lexical and functional/grammatical. While LCs bear some descriptive content (nouns, adjectives verbs), FCs carry abstract grammatical content with a high degree of rigidity (features attributed to verbal inflections). As a result, without FCs, one cannot compute syntactic structures (Chomsky 1957/2002). Theories of LA stemmed from (E)ST, the *P&P framework*, continuing with the MP (Chomsky 1981a, Chomsky 1981b, Chomsky 1995).

Furthermore, the acquisition of FCs was presented in a larger framework from the first proposals of FCs as concepts supporting a theoretical hypothesis to the evolution and reinterpretation of the notion from one stage to another. From a minimalist perspective, FCs must be placed in the larger context of cognitive sciences; the syntactic force embedded in their categorial format must be described broadly, with the narrow conditions explicitly solicited by the new theoretical design. The experimental empirical data purport the rich linguistic history. Traditionally speaking, FCs are closed classes, without any semantic

value attached to them, the semantic-conceptual interpretation at the level of expression being attributed to LCs. FCs became the central driving force because they enabled the generation of the abstract structure (Abney 1987, Fukui 1986/1995, Chomsky 1995). The child reaches adult-like competence briefly because of the innate ability to use FCs to generate phrases. The development of the theory of LA demanded new means of interpretation under the new minimalist framework of inquiry. What was functional and optimal from previous proposals was preserved. The syntactic apparatus was redefined for optimisation and satisfactory functionality to express simply and elegantly shared properties across languages and cast its universal character in the more extensive framework.

SECTION II – ANALYSIS OF THE EMPIRICAL DATA

Chapter 5 – The Acquisition of Tense Features in L1 Child Romanian

This chapter adopts a threefold perspective in grasping the main elements. The first section provides a brief description of the corpora, a presentation of the participants, and an inquiry into the methodology adopted in the research process. The second section presents the main empirical results that contributed to a unifying theoretical account in L1A; the universal character attributed to the OI/RI stage, with an interpretation of empirical data to compare results with the existent analogue RI/OI proposal for L1 child Romanian. Consequently, the qualitative empirical results strengthen existing studies in L1A. The third section brings relevance and feasibility to the survey. The core minimalist concepts of elegance, economy and necessity are met under SMT and the viability of cyclic movement and phases in licencing derivation. The keywords are *OI/RI, stages in language acquisition, phi-features, person feature, split-C, v, Force, and Finiteness.*

5.1. Preliminary remarks

As mentioned in *Chapter 4*, a new substantive methodological proposal emerged with the new simplified program. The emergence of syntax in children is a fascinating phenomenon, which has been at the core of acquisition research. How FCs emerge in children remains a challenging and insightful topic. In this chapter, Tense features are analysed to explain the syntactic manifestation under the new minimalist proposal during the early and late stages of L1A, emphasising the debate regarding the assignment of T between C and *v* in derivation (Chomsky 200a, Chomsky 2001a). Additionally, the data selected from the corpora

contribute with arguments in favour of the direction assumed by mainstream acquisitionists supporting a continuity approach to LA and L1A under a minimalist account. The highly abstract features that require complex and heavy computation offer insight into the investigated data at a smaller scale, in particular languages, and at a larger scale, by taking a closer look at language development cross-linguistically, from a minimalist perspective. The investigative process corroborates the results of existing studies on early child Romanian (Avram and Coene 2005, Avram 2010, Avram and Coene 2011) with the results of the qualitative inquiry. The focus is on the EMWS and the LMWS in L1A. The speech productions recorded weekly by caregivers or the investigator over several months are associated, for the most part, with EMWS in L1A. There is compelling evidence to explain the specificity of emergent features and the paradigmatic frame generated in encoding syntactic behaviour.

With a significant degree of variability from one individual to the other, one of the conclusions is that age is not the determining factor. There are minimal age differences between most participants, and a few weeks or months could lead to considerable variation. In the methodological approach, agreement relations at PF and LF levels find an explanation in the L1A process via inner mechanisms and interpretation at the levels of representation via internal or external Merge. For Agree to be a cost-free operator contributing to the licensing of sound structures, the inner mechanisms must be fully accessible to the child during all stages of language development (Chomsky 1995). Even within the nativist approach, there are strong and weak accounts in L1A, making matters more challenging. The studies attempt to measure and explain the syntactic and lexical information charged in the early structures of child grammar and the layering of syntactic information from one stage to another. The domain of LA flourished due to the shift towards a nativist approach in explaining language mechanisms. As a result,

experimental and empirical studies paired with innovative, modern brain imaging techniques brought more precision in interpretation with contributions from neuroscience, psychology, and biology.

The early emerging structures attributed to the EMWS qualitatively contribute to studies in L1A, particularly regarding the acquisition processes in child Romanian. It is challenging to assume a specific model; thus, the empirical data support a continuity hypothesis under a UG grammar framework. As such, any means of further investigating the phenomena and a comprehensive analysis would add value in assuming a strong or weak continuity hypothesis. On a positive note, the child Romanian speech productions explore particular functional features observed in children during the EMWS.

5.2. A description of the corpora

5.2.1. Aim and methodology

The speech productions of 6 children contributed to the database; the children's identity was protected by using pseudonyms, and the caregivers consented to the recording sessions, a common methodological practice. The participants are monolingual children, the only exposure to other languages being limited to language learning in instructional settings, at preschool, weekly English classes. Teo (the T-corpus) is a boy, and the weekly recording sessions range from 2;10 until 3;05. Ela (the E-corpus) is a girl, and the sequences recorded range from 2;10 to 3;03. Oti (O-corpus) is also a girl, and the recordings range from 2;05 until 2;09. In Bea's case (the B-corpus), the weekly sessions run from 2;04 to 3;09, and Alex (the A-corpus) was recorded from 3;05 until 3;10. In addition, Mihai (the M-corpus) has been recorded from 1;05 until 1;08. The latter will provide valuable data, and it is qualitatively relevant in reflecting syntactic manifestations during the first stages of L1A.

Some general observations are required after taking a closer look at the files in each segment. There are visible differences regarding FCs and

their emergence, the frequency of adult and non-adult structures. As an illustration, although O. is younger in the O-corpus, there is salient evidence of acquisition of complex formal features instead of the other two corpora (the E-corpus and the B-corpus) reflecting, once more, how individual differences need to be accounted. The A-corpus and the T-corpus, as predicted, supported general assumptions and particular predictions made in the present research; in addition, the data selected from the O-corpus, surprisingly, supported such accounts as well, although the child is much younger. Moreover, the data provided by the M-corpus will be highly relevant as the child is transitioning from the holophrastic stage to the two-word stage. At the same time, the other corpora (the E-corpus and the B-corpus) offer arguments in favour of the emergence of specific FCs.

The children are at different stages of language development but share standard features. As an intrinsic part of the process, files have been created for each child resulting in several sets of recordings, in similar settings, for the targeted children. The pseudonym was used as a file title at the beginning of each segment while keeping the CHI entry code for every interactional entry. If other children were participating, they were coded with CHI1, CHI 2, etc., with the appropriate age description for each of them. The other interlocutors were coded as MOM, DAD, GRA 1, GRA 2 (for grandparents), and ANT. Taking stock of data banks is standard practice, and the public research on Adam, Eve, and Sarah's transcripts as highly mediated corpora is proof of it (Brown 1973). It opened the way to building instruments of an analytical approach to LA by creating a common domain that gained much-needed visibility.

The transcription conventions adopt the CHILDES (Child Language Data Exchange System) transcription; the standardised CA format and conventions as presented in CHILDES.[33] The purpose of the *Annexes* is to show, at first sight, that there are more pertinent examples

[33] As stipulated in the CHAT manual, by the year 2016, there were over 110 million words in the database with over 5000 researchers actively involved with ongoing contributions in data collection, transcription and interpretation cross-linguistically.

of the corpora to support the assumptions exemplified in different subchapters in *Section II, Chapter 5* and *Chapter 6*. All the targeted participants are monolingual TD children. In mapping the spoken language of children and adults, it was aimed to provide an accurate, authentic, and reliable source for language analysis to avoid over-and/or under-normalisation. The transcription conventions bring clarity and gain visibility at the structural and discourse level. Representing words associated with a CA transcription, possible misinterpretations at the phonological, morpho-syntactic, and discourse levels are avoided. Ambiguities generated by child and adult structures use avoided by using conventions for marking incomplete words, formulaic structures, and any forms considered standard or non-standard. It refers to specific mappings at the PF level or the occurring variations in the spoken productions of children at different stages in the early language acquisition and regional features that appear in the speech productions of adults and children. The segments are glossed and, for that purpose, the set of coding abbreviations is used to ensure morphological and syntactic readability. As for any other dependent tiers, the option was to code specific structures by selecting relevant examples out of the corpora, with particular use and targeted analysis where needed. To sum up, the data transcription is focused mainly on CA conventions and the syntactic and morphological coding format is glossed on the examples selected for the detailed inquiry.

The transcription format of the corpora used for the qualitative research will precede *Section III*, the individual recorded files with the marked conventions (MacWhinney 2000). This section describes the main directions as necessary for any investigative process. The interactions between children and caregivers occur in familiar settings; moreover, the conversations are spontaneous, natural, and authentic. The new recording methods helped achieve the desired accuracy. Problems with discriminating phonological segments or pronunciation elements that could generate ambiguities in the interpretation of the speech productions were ruled out for the most part. As such, minimal

conditions were met by having access to raw empirical data; therefore, the investigation is up to a good start. Several aspects are corroborated with other investigated empirical data for child Romanian. In light of such results, the minimalist interpretation of the mechanisms during specific periods is even more relevant, which shows that there are stages in the acquisition of FCs specific to languages contributing to this postulation via the actual data inventory.

5.2.2. Participants

As mentioned in the preceding section, the prominent roles are the Target-Child, Mother, Father, Brother, Grandfather and Grandmother, and Aunt of the Target Child. The children are from Transylvania, Cluj, Maramureș and Sălaj counties, and most of them are enrolled in day-care programs, except for Mihai and Oti. Three participants have no siblings – Teo, Oti, and Bea. In Alex's case, a younger sibling is 1;06. Ela has an older school-age brother who is 9;2. The only participants who stay at home with their parents and grandparents are Mihai and Oti, while the others are enrolled in preschools, public or private. All children have little exposure to English, but they are monolingual.

The parents are middle-class workers, and the grandparents participating in exchanges with children are retired, for the most part; therefore, contributing to the upbringing of the children. The mothers are working full-time or part-time. All the children are of Romanian ethnicity, the duration of the recordings is approximately an hour weekly, and most of them have excellent quality. In the transcription of the corpora, good quality headphones have been used to ensure qualitative work. Parentheses will mark the setting of the activities and the specific situations in transcription to get a detailed picture of the informal environment and better understand the interlocutors' interactions. The transcription of the corpus is set to offer valuable information regarding repetitions, overlaps, hesitations, context, etc. It is

a valuable instrument for future research in the vast domain of LA. Another relevant aspect in the transcription of the corpora is the use of regional features in the adult and child language. For the most part, the structures used are standard, but there are sections where regional forms with a high degree of acceptability are used. Such features could have influenced children's speech, especially when using auxiliaries and strong pronouns.

The relevant experimental data is set against experimental studies conducted on child Romanian (Avram and Coene 2005, Avram 2010, Avram and Coene 2011). The procedures will be limited to a twofold analytical approach. On the one hand, it approaches the phenomena identified to be matched against other research findings. On the other hand, it underpins the qualitative research findings and interprets them in a minimalist key. The generally accepted classical approach to language acquisition with the four stages of development will be instrumental for the theoretical apparatus. The collected data ranges from the one-word holophrastic stage to the early multi-word stage.

By placing FCs at the centre of L1A, the hypothesised approach is anchored in the generativist theoretical accounts. With the scope of the interpretation being minimalist, the empirical data supports the evolutionary assumptions associated with FL and a continuity approach to language acquisition, with variability regarding interpretation. Analytical and comparative methods are used; the speech data is natural, highly authentic, and the linguistic behaviour of the children and adults are not believed to be impeded if reference is made to the observer's paradox (Labov 1972).[34] Such relevant aspects are paramount in

[34] The *Observer's Paradox* addressed the impediment created by the presence of the investigator as observed in collecting natural speech data. The very presence and systematic methodological approach can affect the quality of the data. Such dangers were avoided with the recordings, since the child was in natural familiar environments, with caregivers during activities they enjoy very much such as daily family routines, story time, bed time, role play, walks in nature etc.

providing an accurate description as the investigator was not present for the most part during the recordings. There were instances when the effects of negative evidence were tested, but only to prove a strong nativist argument. More importantly, the purpose was not to alter the empirical data. The speech productions are natural, and neither children nor caregivers purposely filtered or altered their speech segments.

5.3. Empirical studies on the acquisition of FCs

5.3.1. The optional infinitive (OI) or root infinitive (RI) stage

Optional infinitives (OI) have been associated with *null* and *non-null* subject languages (Wexler 19994). Accordingly, the parameters that became programmatic for a theory based on principles and parameters, starting with the early 80s, contributed to a solid theoretical approach by providing refined adequate explanations to language phenomena to bring a unifying account. The *Null Subject Parameter* (NSP) resulted from a deep analysis of English and Romance languages; consequently, it generated comparative studies in languages and aimed to propose a theory that would work cross-linguistically (Rizzi 1986, Rizzi 1993/1994 and Borer 1984). They developed a strict and specific domain for UG, which led to a proliferation of parameters. As a result, many micro parameters were postulated, increasing the complex relationship between syntax and semantics (Kayne 2005). Macroparametric proposals were more in line with the new minimalist approach and thus got principled, economical, and straightforward (Baker 1996). Thus, Perlmutter distinguished languages into Type A (such as English and French) and Type B (such as Spanish and Greek) as evidence of null-subject patterns in languages typologically speaking (Perlmutter 1971). The following section will analyse the proposal's impact on CL1A supported by examples from the corpora investigated in the present research.

5.3.2. Case studies and language typology

The acquisition of FCs and, particularly of Tense features, has been highly investigated in TD and SLI children under the P&P theoretical framework (Chomsky 1981b) and continued under the latest minimalist theoretical accounts (Chomsky 1993, Chomsky 1995). As a result, the stages of acquisition with their specific morpho-syntactic properties were checked against the considered OI/RI model. The model looked extremely promising, and research was extended to children who suffered from SLI to support with noteworthy arguments specific phenomena manifested in children in general. The emergence and use of tensed or untensed forms during the early stages has been debated among acquisitionists. The *Optional Infinitive* (OI) (Wexler 1994) or the *Root Infinitive* (RI) (Rizzi 1993/1994) became cross-linguistic referential approaches to L1A during the first stages of L1A. The hypothesis stemmed from evidence in English, French, Dutch, and German; correspondingly, the empirical data reflected the use of infinitives primarily instead of other tensed forms. Thus, in response, acquisitionists supporting the no functional projection stage identified a pre-functional stage, manifested in the form of a complete lack of FCs (Radford 1990). Also, as underspecified at different stages, tense is problematic, and the acquisition is explained under a maturation process (Wexler 1994).

There are different assumptions regarding a corresponding or analogue form to OIs/RIs in *null-subject* languages (NSL). A possible explanation was associated with *pro*-drop and non-*pro* drop descriptions of languages. The latter has OIs/RIs as a core property, specific to the first stage in L1A, instead of the former typological class, which did not. The hypothesis resulted from analysing empirical data reflecting the use of infinitives in contexts where the adult-like structures requested an obligatory tensed form, rather than untensed, such as the infinitive. The optionality of the infinitival use was directly associated with *null* or *non-null* subject languages.

Furthermore, the phenomenon was analysed in *pro*-drop languages, which manifest *pro*-drop features (Japanese, Korean, Chinese, Slavic languages) and *non-pro* drop languages (English, German, and French) (Wexler 1994). Romance languages also manifested *pro*-drop features in some contexts, mainly *null-subjects*. Correspondingly, the occurrence of OI/RI forms was tightly associated with the emergence of morphological *phi*-features. The empirical studies were conducted in many languages. In the case of the Dutch, the conclusion was that *RI* occurrences were low (Haegeman 1995). In addition, similar case studies were developed for Swedish (Platzack 1990), for English (Radford 1990), and German (Weissenborn and Roeper 1990). As a result, there were different accounts of the impact of the OI/RI stage in CL1A.

Comparative studies based on morphological manifestations of infinitives in child grammars adopted a strong continuity position to L1A (Wexler 1998). The examples from child French, child Dutch, child German, among other languages, were set to support the claim of functional projections early on. As such, the assumption was that raisings were possible, and T features were assumed to be checked via Agree, positing that children have syntactic knowledge and make syntactic choices because minimal effort is sought. Under this continuity account, many aspects affiliated with early stages in syntax were explained, including the omission of syntactic objects. Still, semantics played an important role, together with other discourse features. Therefore, it was difficult to attribute the characteristic cross-linguistically, especially when an of languages syntactic objects mapped differently at PF during the early stages. However, what is relevant to the research is that Tense features and operation Agree are assumed to emerge early in particular languages.

Consequently, the problem is associated with the way they emerge and their representation at the LF and PF levels, namely their syntactic and semantic interpretation via phonological features. Wexler's minimalist assumption regarding the OI proposal is relevant to the interpretation. He posits that movement is possible during the early

stages without Case feature checking of DPs when attracted to higher positions (Wexler 1994). Under the MP proposal, features are the driving force. Therefore, the *u*F specific to both Tense and Agree is checked against the highest position of the DP and deleted before *Spell-Out*. Irrespective of which one of the two FCs is omitted at a particular stage of development, the other will make raising to Spec position possible by checking the D feature and deleting the copies before *Spell-Out*. The child cannot match the D feature twice in derivation. A *Unique Checking Constraint* is postulated for early grammar, which would allow for the D feature checking only once. The assumption is that children have the linguistic knowledge to know which feature is absent and check the D-feature against the emergent FC at the given moment for the child to reach complete competence and generate adult-like structures (Wexler 1998). The second interpretation of OIs/RIs assumes a truncated approach to projection, stating that Tense and Agree can be omitted during the first stage of L1A and proposes a bare VP stage, associating negation acquisition to structural hierarchies. However, not enough evidence could be found in analysing the data (Rizzi 1993/1994). Also, it is suggested that any deficient or underspecified forms surfacing during the early stage should seek an answer in the syntax-semantics-pragmatics interrelations (Hyams 1996). To sum up, the general assumption under generativist nativist approaches to L1A is that the child has innate competence, and the underspecified forms attested during the early stages can find an explanation in processing, and syntactic computation as various factors contribute to the outcomes evidenced in the empirical data.

5.3.3. The OI/RI stage in child Romanian

Suppose the early forms of syntactic representations are seen as limitations in the data processing. In that case, some aspects of the cross-linguistic analysis of the empirical data can provide adequate explanation starting with an OI stage in L1 (Wexler 1998) and continuing with the

quest for an analogue in child Romanian (Avram 2010, Avram and Coene 2011). Under a continuity approach to CL1A, at the representational level, a common feature was associated with different means of interpretation at the structural level, in children and adults, namely that children do not address in an adult-like manner the structures generated during *Stage 1*. The interpretation of the data was set against other proposals of OI analogue forms. It was also contrasted with results from Dutch corpora, a specific OI language, to get accurate radiography of the linguistic occurrence. The data was analysed by predicting possible corresponding forms to other Romance languages. Besides the infinitive forms, the study considered the imperatives emergent in Italian (Guasti 1993/1994) and the present tense 3rd person singular structures, as reflected by studies in child Catalan and child Spanish (Grinstead 2000). However, after a thorough analysis of the morphological, syntactic, semantic, and contextual elements, the conclusion was that similarities could be traced back to results on early child Greek rather than other Romance languages. Greek was a language that showcased extensive use of bare perfectives in early grammar (Varlokosta et al. 1998, Hyams 2002, Hyams 2005). In the case of child Romanian, the evidence led towards a bare subjunctive analogue. However, a limited number of inflected forms such as imperatives, present 3rd person singular forms, non-finite infinitives were reported.

The *Imperative Analogue Hypothesis* (IAH) aimed for a universal core, identified in the 3rd person singular indicative form and the imperative as an underspecified form. For Spanish and Catalan, the corresponding to the OI stage in L1A was the 3rd person singular form (Grinstead 1998). The imperative as an OI form was mapped as a Mood feature, positing that during this stage, the realis and *irrealis* features are not used as they are in adult languages. Another conclusion was that imperatives registered a higher frequency in child speech than occurrences in adult speech (Salustri and Hyams 2003). Based on assumptions checked in other Romance languages, the prediction was that a possible manifestation would be either an imperative or an underspecified, with

Italian having a corresponding match, the imperative. The research included longitudinal studies on three children who spoke Italian as L1 and a bilingual child who had two typologically different predominant systems, Italian and German. The analysis was on data on pro-drop languages compared to the OI proposal for *non-pro drop* languages (Salustri and Hyams 2003), leading to assumptions that OIs are not specific to Italian and other Romance languages (Guasti 1993/1994).

The predictions for child Romanian ended up not matching any of the accounts coming from the languages selected; the infinitive, the present tense 3rd person singular proposal or the imperative, as a possible correspondent, did not have enough supporting evidence in the analysed corpora. One relevant conclusion drawn was that in Romanian, a Romance language, the infinitives do not surface enough during the early stages to accept such an acquisition stage aligned cross-linguistically.[35] The infinitive in child Romanian was assumed to be replaced by the subjunctive, as modals in Romanian take subjunctives instead of infinitives, except for the verbs 'a *putea*' [can] and 'a *ști*' [know]. To continue, in the case of child Romanian, aspects about non-adult structures in child language were assumed to correspond to the rich inflectional system of the language.

Moreover, Romanian, like many other Romance languages, is characterised by paradigmatic syncretism. In light of such realities, interpretation could also be challenging at interfaces. Imperatives require movement, a merger is not an option, and for the 2nd person singular forms, morphological realisations are highly complex and require heavy computation. Likewise, the form encountered the most in child speech productions during the early stages of L1A was the present 3rd and 2nd person singular (Avram 2005). Even with the assumption that the present tense forms are fully inflected, it would be difficult to verify whether the behaviour of feature matching of overt subjects is that of an OI (Pratt and

[35] As pointed by the authors, Wexler was among the acquisitionists who posited that there is not enough evidence coming from inflectional language systems such as the Romance languages in favour of a generalized theoretical account.

Grinstead 2007). One must have in mind that Romanian is a *null subject* language. It would be difficult to delineate between the present tense and the bare subjunctive forms during the early stages due to syncretic features present in Romanian, both for 1st and 2nd person singular and plural. Even so, such ambiguities are assumed to disappear as soon as the subjunctive particle '*să*' emerges in child speech. One valuable aspect is mentioned: children are accustomed to using the subjunctive with deontic value early on (Avram and Coene 2005).

Overall, the OI remains one of the most researched phenomena under the *P&P framework* (Chomsky 1981b), and it became an argument favouring an innate FL with UG at its core. These two main interpretations contributed to the outline of the new minimalist approach to L1A. As the *Null Hypothesis* still holds under the new minimalist account, the linearisation of parameters (Head parameter) supported the optimality proposal of the new model. Another contribution is the minimality condition corresponding to constraints that require that the shortest move be made in derivation (Rizzi 1997) meant to explain the activation of operations Merge and Move. Other valuable instruments in delineating and defining specific manifestations in languages under the new approach to L1A are the structure of the left periphery, the parametrisation of tense under a Polysynthesis Parameter proposal (Baker 2003), and describing language typologies under the axiomatic linear correspondence (Kayne 2001)

5.3.4. The OI analogue. Evidence from the empirical data

In what follows, examples from the corpora are selected for analysis and description of the milestones in L1 child Romanian. As such, Tense features provide evidence regarding temporality, as the scope of the investigation was to describe derivation specificity. Furthermore, alongside the acquisition of *phi*-features via Agree, after the emergence of the mood marker 'să' in subjunctives, the studies conducted provide

qualitative examples corresponding to the first stage of L1A (Avram and Coene 2005). The E-corpus (2;09-3;02) and the B-corpus (2;04-2;08) proved to be more resourceful in providing evidence towards an OI analogue stage of acquisition, as opposed to the T-corpus (2;10-3;05). Moreover, the O-corpus (2;05 and 2;09) and the A-corpus (3;05-3;10) presented some of the sequences associated with the two-word stage and the EMWS. As such, the examples support the premises of an *OI* analogue related to previous assumptions in the case of child Romanian (Avram 2010). More examples are available for comparative purposes (see *Annex 4*). In acquiring *u*Fs, the focus is on the highly abstract [+/- person] feature. Although 3rd person singular forms surface early on, such forms are generated in a non-adult fashion; therefore, it is unclear whether the child acquires the realis property or formulaic structures during *Stage 1*. The staged approach to language development records variation in the case of the participants; however, they mark the same milestones in acquisition. All the participants are TD children and show no signs of speech impairments or delays. Some of the differences will be reflected by the onset of the acquisition or the emergence of specific categories and the specificity of intermediate acquisition stages. Examples (4) and (5) provide evidence in this sense.

(4) MOM: Cum plânge nenea?
how cry.PRES.3SG man.the
'How does the man cry?'
CHI: Asa pânge.
INT cry.PRES.3SG
'Like this cries.' (M. 1;06)

(5) CHI: Melge, melge?
go.PRES.3sg go.PRES.3sg
'[It] goes, [it] goes?'
MOM: Merge tractorul?
'The tractor goes?'
CHI: Da.
'Yes.' (M. 1;06)

One aspect associated with the early stages of LA is that children tend to address themselves by their names, and parents do not seem to mind and do not intervene; on the contrary, they seem to embrace the child's perspective. There were instances when the parent insisted on correcting the child (B-corpus), but there was no evidence of improvement. This stage is generally checked in the developmental process, and children need more or less time to surpass it. To continue, it is still difficult to interpret whether the form used by the child is the realis Tense feature or a Tense feature with binding force. Although still ambiguous, children use their name instead of the NOM case form of the pronoun 'eu', [I], and the *phi*-features marking agreement [+number] and [+person] are good indicators in this sense (see the examples from the E-corpus in *Annex 4*). Given the corpora's array of data, some relevant qualitative examples would support the OI analogue theoretical accounts (Avram and Coene 2005).

(6) CHI: Opece! Opece!
stop.IMP.2SG. stop.IMP.2SG
'Stop! Stop!'
MOM: Săracu(l) tren.
'Poor train.'

(7) CHI: Bea.
MOM: Bea, da. Spune eu.
Bea. yes say.PRES.3SG CL.1SG.NOM
'Bea. yes. Say I.
CHI: Eu.
CL.1SG.NOM
'I.' (B. 2;04)

(8) CHI: Nu, lasă Bea. Nu, lasă Bea.
NEG leave.PRES.3SG/?IMP.2SG Bea. NEG leave.PRES.3SG/IMP? Bea.
'No, let Bea.'
MOM: Nu îl lasă Bea, nu. O să i-l dăm la tata când vine acasă.
'B doesn't let him. We will give it to dad when he comes home.'
(B. 2;04)

The use of the verb 'a ridica' [lift] with [+person] and [+number] checked and matched in derivation could be associated with the pattern explained in the following section, where 3rd plural forms will be overextended to the 1st singular form for a limited time. The pattern is further extended to subjunctives before and after the emergence of the mood marker 'să'. There are no attested examples in the E -corpus, particularly for the verb 'a ridica' [lift]. Still, examples with other verbs belonging to the same class, 'a mușca' [bite], support evidence for feature choice during this stage of development. It is difficult to predict whether the emerging form is a *realis* or *irrealis* mood, a bare modal structure. However, the parent constantly uses the modal forms in speech with high frequency. After carefully analysing the files in the E-corpus, the conclusion was that the caregiver uses modal subjunctives with increased frequency in speech. Although the impression might be that the child does not use subjunctives during this stage, the derivation reflects the use of bare subjunctives and the syntactic information is specified in these forms. In this sense, the interpretation of patterns and the *phi*-feature mismatches become indicators of syntactic development. Children will always use the *default* available item to find speech solutions for economic reasons. Such a creative example is with 'foame' [hunger], usually used in obligatory contexts expressing states with the verb 'a fi' [to be], as opposed to 'mâncare' [food], which is the item selected for the verb 'a da' [give].

(9) CHI: Ela ***(ri)dic**. Ela male ***(ri)dic**.
Ela lift.PRES.1SG Ela [be.PRES.3SG] big lift.PRES.1SG
'Ela lift. Ela big lift.'
MOM: Poți să le ridici?
'Can you lift them?
CHI: Ela male ***(ri)dic**.
Ela [be.PRES.3SG] big lift.PRES.1SG.
'Ela [is] big lift.' (E. 2,09)

(10) MOM: Dar când nu e zăpadă, ce fac rațele?
But when there is no snow, what are the ducks doing?
CHI: Ela dau ***foame** iațele.
Ela give.PRES.1SG hunger duck.PL.the
'Ela give hunger the ducks.' (E. 2,10)

In support of an OI analogue in child Romanian given the specific structures that emerge during *Stage 1* of L1A, it is noted that auxiliary omissions are attested in the corpora. Such structures are assumed to be atomic units under some weak continuity accounts (Radford 1990), lacking inflectional properties, finiteness and temporality features. In this sense, in child Romanian, the past participle emergent forms function as bare structures during the early stages due to auxiliary omission, examples (11) through (14). Such forms were associated with temporal and aspectual features under the acquisition process. It is difficult to provide an accurate response in this sense; the data is not sufficient for a detailed analysis; however, some aspectual features and the way children interpret them will be briefly presented in *Chapter 6*.

(11) MOM: Unde e tata acum?
'Where is dad now?'
CHI: Acum. *__Pecat__.
now [AUX.3SG] leave. PAST.PART
'Now. [has] Left.' (B. 2;04)

(12) CHI: Da. Nimeni *__jucat.__
yes nobody [CL.2SG.ACC-AUX.3SG] play.PAST.PART
'Yes. Nobody played.'
MOM: Cu nimeni nu te-ai jucat?
You haven't played with anybody?' (E.3;01)

(13) MOM: Uite, citim.
'Look, we are reading.'
CHI: *__Venit__ T.
[AUX.3SG] come.PAST.PART T.
'T. [has] come.' (E. 3;01)

(14) CHI: *__Intat__ în casă.
[AUX.] enter.PAST.PART in house
'Entered the house' (O. 2;05)

A relevant phenomenon for the present analysis is the emergence of bare subjunctive forms. The E-corpus and the B-corpus exhibit structures that would fall under this sequence of development. In

particular, the first attested form with the emergence of the 'să' marker in the (B-corpus) is produced in a non-target manner. Examples (15), (16) and (17) present the *default* forms available to support predictions. In the structure, the matrix/sentential verb is not yet in the higher position if the assumption of a bare subjunctive, in this case, is valid.

(15) CHI: *__Am__ bultă vleau.
[SBJV] have.1SG belly want.1SG
'I have belly I want.' (E. 3;01)

(16) CHI: Și eu vleau *__chesc__ male pun aia.
and CL.1SG.NOM want.1SG [SBJV] grow.1SG big put.PRES.1SG that
'I also want to grow big and put that.' (E. 3;0)

(17) MOM: Să nu vină doctorul?
SBJV NEG come.3SG doctor.the
'Shouldn't the doctor come?'
CHI: Să ***vine.**
SBJV come.PRES.3SG
'He should come' (B. 2;4)

A subjunctive form with a strong illocutionary force could be interpreted as a *realis* Tense feature (Avram and Coene 2005). The irregular verb 'a da' [give] features are mismatched due to complex inflectional patterns in Romanian.

(18) CHI: A(l)tă pizdă *__cumpălați__. Tati tu.
other outlet [SBJV?] buy.3SG.PL daddy CL.2SG.NOM
'You [should?] buy another outlet. You daddy.' (E. 2;09)

(19) CHI: *__Daie__ jecție.
[SBJV] give.PRES.3SG? shot
'Give a shot.' (E. 2;09)

(20) MOM: Ce să facem? Să desfacem?
whatSBJV do.1PL SBJV do.1PL
'What to do? To open?'
CHI: (Des)__facem__. Pasteilina.
open.1PL playdough.the
'We open. Playdough.' (B.2;05)

(21) CHI: Haide *jucăm un pic.
come.2SG.IMP. [SBJV CL.] [REFL.1PL.ACC] play.1PL little.a
'Come [to] play a little' (B. 2;05)

(22) CHI: Hai, *ne jucăm. Haide.
come.2SG.IMP. CL.1PL.REFL.ACC [SBJV] play.1PL come.2SG.IMP
'Come [to] play. Come.'
(B. 2;05)

(23) CHI: V(r)eau *fac duș.
want.PRES.1SG [SBJV] take.1SG shower.
'I want take shower.' (B. 2;05)

If one analyses the subjunctive in Standard Romanian, the merger of the members results in new syntactic objects making a possible move to a higher position; the early attested structures are good indicators in this sense. The illocutionary force of the given forms reflects obligatory contexts and potential use of purpose clauses, although the mood marker is not visible (Farkas 1984). Examples of syntactic tacit knowledge in children are provided below.

(24) MOM: Păi, de ce are nevoie de injecție?
well, why have.PRES.3SG need a shot
'Well, why does he need a shot?'
CHI: *Nu mai pângă.
[COMP? SBJV] NEG INT cry.3SG
'Not to cry anymore.
MOM: Să nu mai plângă?
SBJV NEG INT cry.3SG
'Not to cry anymore?' (E. 3;01)

In the use of imperative forms, syncretism bears specificity. Therefore, ambiguity in feature interpretation could occur, the emergent forms reflecting default mechanisms used by the child. As an observation, in many cases, when the child is assumed to use the imperative, the parent's interpretation ends up being a modal subjunctive in reiterating or rephrasing the meaning of the structure generated by the

child in the negotiation of meaning. The corpora also reflect the use of irregular forms for 2nd person singular; see examples (25), (26) and (27). Still, imperatives have specific syntactic behaviour mapped at the morphological level unless that child uses default forms available to him locally, such forms being attributed to possible formulaic imperative use.

(25) CHI: **Fă** (plă)ciltă, mami!
make.IMP.2SG pie mommy
MOM: Să facem plăcintă?
SBJV make.1PL pie
'Should we make pie?' (B. 2;05)

(26) CHI: ***Face** ouă. ***Face** ouă, mami!
make.PRES.3SG eggs make.PRES.3SG eggs mommy
'Makes eggs. Makes eggs, mommy!' (B. 2;05)

(27) MOM: Să facem ouă?
SBJV make.1PL eggs
'Should we make eggs.'
CHI: ***Bate** ouă.
beat.PRES.3SG eggs.
'Beat eggs.' (B. 2;05)

In short, the proposals for an OI analogue in Romanian are complex structures, and the complexity of the feature bundles is mapped morphologically. The empirical data reflect forms associated with Tense features, for present 3rd singular in Catalan and Spanish (Grinstead 1998), imperatives (Salustri and Hyams 2003), and bare subjunctives (Avram and Coene 2005).

5.4. Tense features in relation with C and *v* domains

The examples selected for this section presents how Tense features enter derivation in L1A. The recorded segments of the children range from 2;04 to 3;05, with variation among participants; still, marking the same milestones. As such, while some participants were still at a bare

subjunctive stage (E-corpus and B-corpus), others were at a stage when the 'să' modal marker emerged with visible *phi*-feature bundles, [person] and [number] (T- corpus and O-corpus). The emergence of bare subjunctives has been associated with a possible OI stage in Romanian CL1A (Avram and Coene 2005). The corpus offers examples of adult-use 2;05 (see the O-corpus) and non-adult use; bare subjunctives at 3;01 (see the E-corpus and the B-corpus).

The theoretical descriptions addressing the morphological and syntactic tension between the elements entering derivation in LA are complex. The lexicalist-syntactic debate gained more ground favouring a syntactic approach to morphological mappings from one generative framework to another. Chomsky argued in favour of a split derivation between the lexicon and syntax (Chomsky 1970). A split morphology account assumes derivation at the lexical level and inflection at the syntactic level (Perlmutter 1988) instead of the assumption of a joint morphology, derivational and inflectional (Halle and Marantz 1993). Under the new minimalist proposal, the entities are fully inflected when selected from the lexicon to enter derivation and check features for licensing purposes (Chomsky 1995).

Agreement mismatches have been evidenced in child corpora, chiefly in languages with highly inflected systems. Not to mention that such underextended structures are not the result of the cognitive inability in TD children but are instead associated with stages of linguistic development and the computation of formal abstract features carrying a heavier computational load. Lexical objects are fully inflected when they enter derivation in light of the new minimalist proposal. The operations available to children become the driving force. If *Move* is an economic operator conditioned by *Last Resort*, it is predicted to support the assumption of the gradual emergence of FCs in particular languages, with cross-linguistic specificity (Chomsky 1995).

This chapter details productions specific to EMWS in child Romanian and explains the derivation from a minimalist perspective. There are several interpretations among acquisitionists as to which

mechanisms are employed during the initial stage. Moreover, in Romanian, operation Move is assumed to emerge early on due to the surfacing of fully inflected forms from the onset. This aspect is addressed under the continuity approach to language acquisition.

From a minimalist perspective, lexical items (LI) retrieved via *Numeration* are fully inflected and enter derivation to check their features, and as a result, the structures converge. Morphology is associated with language specificity, and children are assumed to select the properties and use them in derivation accordingly. *Transfer* to PF and LF and the accessibility of morphological knowledge before *Spell-Out*, are some of the mechanisms that need to be explained in CL1A; the prediction is that the empirical data represent the primary support in this sense. As observed in the examples provided from previous studies on L1A during the early stages of development, the non-standard structures need adequate explanation. The functional features linked to computation load are considered necessary in the checking and matching internal processes.

5.4.1. Data selection, methodology, and feature interpretability

The adopted method of work was highly analytical and paired to select empirical data from the files of each participant for deep and qualitative analysis. The files were examined monthly, as presented in *Section 5.2.1*. The emergence of specific FCs in child Romanian is associated with specific patterns. The data submitted is checked against the research developed already in child Romanian and confirms the existence of feature mismatches (Avram and Coene 2011). The qualitative data revolve around the interpretability of the [+/- person] feature and the stages of syntactic derivation in acquiring morphological features, which require complex computation at the syntactic level. Comparing *realis* and *irrealis* mood features as they emerge in speech and children's default mechanisms during such specific stages reflect that Romanian is a highly inflected language. Syncretism is a language feature that can generate

ambiguity in interpretation at PF or LF, leading to premature semantic interpretation in child language if insufficient information is available. As a result, different kinds of mismatches can be attested during the early stages. The child will always use economy and simplicity and look nearby to generate elegant structures with minimal means.

Tense and *phi*-features were analysed in a separate study as several feature mismatches have been observed. Under a continuity approach, one possible explanation would be that *u*Fs are transferred via *Spell-Out* to PF. The structure would be assumed to crash due to not being deleted in the LF after checking (Chomsky 1995), but children use default structures. Children have morphological knowledge with specific features of the inflectional paradigm and can access their knowledge at particular stages. The *default* forms available hierarchically and locally are used at intermediary stages. Syntactic patterns are mapped morphologically and phonologically for specific *u*Fs and cyclic movement, under the principle of economy, confirming that the child will always go for the shortest move. The assumption is that the child does not yet have all the necessary data available and accessible to them or choose to operate with *default* forms before establishing the parsing mechanisms for the specific structure.[36] The paradigm for the *realis*

[36] Some acquisitionists, who opted for a pre-functional stage one, a stage that precedes the OI stage stage in child language acquisition, with a split in derivation, according to the stage of development, while other acquisitionists assume Move as possibility from onset with specific features not being able to be interpreted early on. If morphological features are abstract, movement must be operable and functional in order for the features to check. The *Merge over Move (MoM)* proposal was supported by acquisitionists such as Radford, Galasso and Roeper. Move being delayed as much as possible in the PF/LF interpretation. Syntactic features are delayed and emerge during the second stage, in a gradual way, due to specific computation during syntactic stages due to maturational constraints. In the case of the verbal domain, under the *MP* account, lexical items *(LI),* after being retrieved from the lexicon are assumed to be fully inflected, therefore they already have phi-features associated with Agree, Tense and Case. The strong, uninterpretable features must be deleted by PF to avoid possible crashes.

Indicative mood (see *Table 1*) explains the evolution and the particular patterning, with the attested mismatches during the EMWS.

Table 1. Romanian Indicative mood paradigm

Verb	1st sg.	2nd sg.	3rd sg.	1stpl.	2ndpl.	3rdpl.
'a pica' [fall]	pic	pici	pică	picăm	picați	pică
'a (se) juca' [play]	joc	joci	joacă	jucăm	jucați	joacă

In Romanian, the Tense features corresponding to the present Indicative mood contribute to expressing temporality and modality. Discourse markers and pragmatic inferences support the Tense and Mood features. In addition, the paradigmatic syncretism, specific to Standard Romanian, is another aspect that contributes to the complexity of structure interpretation during the first stages of L1A. The study presented the behaviour of the syntactic objects via a merger. During the early multi-word stage (EMWS), the verbs [to eat] 'a mânca', [to listen] 'a asculta', [to sing] 'a cânta', [to fly] 'a zbura' and [to enter] 'a intra', [to fall] 'a pica', etc. with an infinitive '-a' marker presented feature mismatches for the 3rd person singular and plural forms. The assumption is that children have tacit knowledge; due to rich morphology, other structures are used by default adding to the vulnerability of features bundles acquired. Elements associated with the left periphery (Rizzi 1993/1994) play an essential role; therefore, Force and Topic must also be part of analysing *realis* and *irrealis* structures.

5.4.2. The acquisition of T in relation with C and v *in child Romanian*

Several hypotheses have been proposed in the domain of L1A, under the generative framework, from full access to partial access to knowledge of the language at different stages. The empirical data for child Romanian support a continuity approach to L1A. Tense features become the focal point of the research, the number of operations being reduced to Merge, internal or external (Chosmky 1995), acceptable for

strong and weak continuity approaches to L1A. The operator becomes the driving force, is guided by Last Resort and employs other operational means such as Agree and the Probe-Goal relation by algorithmically labelling and matching the objects that enter derivation under new licensing conditions (Chomsky 2000). Locality must be explained as Merge allows long and short distance movement, simplifying the cyclic derivational phases. The derivation by phase proposal became instrumental for syntacticians and acquisitionists (Chosmky 2000). Language is reduced, syntactic elements are fully inflected when selected from the Lexicon via Numeration and obey bare minimum conditions, such as the *Inclusiveness Condition* (IC) (Chomsky 1995). The newly proposed investigative process was born out of a necessity to restrict the theoretical framework by eliminating unnecessary instruments and redundant aspects from previous accounts and keeping only relevant and feasibility elements. As such, the child will be able to retrieve the features, decode, analyse, and use the combinatorial power of the brain for the structures to converge in derivation.

Operation Merge, internal or external, is one of the operations proposed under the MP (Chomsky 1995), which offered solutions to problems regarding the interpretation of FCs during the first stages of L1A, especially with accounts associated with weak or strong continuity. The first Merge is attributed complements of the previous versions, and the second Merge is related to the mapping of the specifier. If the former is associated with argument structure, the latter explains the means of valuation for Edge properties such as those related to discourse. These operations are meant to achieve interface optimality. As far as the interface interaction and the transfers from syntax are concerned, the new minimalist model assumes necessary conditions to be implemented at the C-I interface. The argument structure conditions are associated with the domain of semantics. The interface levels, PF and LF, receive the syntactic objects via *Transfer*. The interface transfer of syntactic objects is linked to the phases stipulated by Chomsky (2008). To be more specific, the first Merge was accounted for during the pre-functional stage, and, as a result,

it became an essential instrument for maturational accounts on LA (Radford 1990).[37] This operation, being extremely limited, cannot give a clear interpretation or reading of the generated structures or chunks and would result in ambiguous interpretations. After the first Merge, recursive features emerge with the activation of the second Merge when one operates with ordered pairs. Suppose operation Move is driven by converging structures at PF and LF. In that case, interpretation must focus on reading and visibility at the LF level, the PF level being asymmetric in interpretation. If inflected items are retrieved from the lexicon, entering derivation and getting mapping via *Transfer*, *Spell-Out* should no longer be a problem (Chosmky 1995).

The study attempted to present it as an OI bare subjunctive form to the perfective analogue as in Greek (Avram 2010). The syntactic behaviour of the subjunctive in Romanian is described with a focus on the Mood definitory particles by dissociating the infinitive occurrences in complement clauses (Farkas 1984). Lack of obviation in Romanian and Balkan languages is somewhat attributed to the infinitive form. The subjunctive *'să'* is the marker of the subjunctive Mood, always in preverbal position, the *pro*/pronominal marker is assumed to be free to refer depending on the available data. The interpretation in obligatory contexts, paired with the boundaries between specific phases, explains objects' syntactic licencing in child structures. The '*ca'* marker is Mood specific, and it makes possible the raising to CP in obligatory contexts, such as the purpose clauses. The proposed account is meant to explain any movement to a higher position, such as CP, if the purpose clause markers are in place, without any other markers inserted between the two syntactic elements (Farkas 1984). As such, if the complementiser *'ca'* is eliminated from the structure, *'să'* with its merged verb would move, via *Attract,* to the C position for feature checking, driven by saturation reasons. Finiteness would also become a driving property that licenses

[37] Radford's radical approach to L1A during the pre-functional stage found supporting ground under the minimalist approach and namely in employing the Economy principle.

'să' structures to a C position. The subjunctive mood marker *'să'* can move to C if *'ca'* is eliminated in obligatory contexts (Farkas 1984). If Romanian subjunctives can project to a C position from a *v* position, under the new minimalist account, in terms of phase, the emergence of syntactic objects that can move to available positions explains how milestones are marked in L1A and child Romanian (Avram and Coene 2010).

Endocentricity is a feature of a generativist theoretical framework. The subjunctive analytical marker attests to the syntactic manifestation, inherits the properties of a head, and can be associated with *Move* as a more complex operation with a [+/- finite] feature (Rizzi 1997). The movement to the matrix clause has had various interpretations in Standard Romanian. The assumption that in specific contexts, the surfacing of the *'să'* marker is associated with movement gives way to interpretations regarding the licencing of the syntactic objects in derivation associated with finiteness in interpreting featural aspects. The Mood marker merges with its complement. As a result, the new syntactic object can move in derivation in obligatory contexts (Farkas 1984, Farkas 1985). With syntactic knowledge pre-existent, the early use of possible bare subjunctives could explain specific means in licensing derivation, as the syntactic and morphological knowledge is mapped with the emergence of *'să'* (Avram 2010, Avram and Coene 2011). The attraction to a higher position in the matrix is driven by the need to licence its *u*Fs, case and *phi*-feature bundles to delete them before *Spell-Out.*

With this in mind, volitional words in the matrix verbs are associated with the subjunctive in Romanian. The matrix verb establishes referentiality differently in the case of Romanian subjunctives, as opposed to other Romance languages and English. A bare subjunctive OI proposal in child Romanian is supported. In defining referentiality under the Spec position of the main clause, Romanian doesn't have obviation or obstructions in structures as do the other Romance languages. With obviation, the *'ca'* marker is specific to the subjunctive, and by contrast, the *'că'* marker is particular to the indicative mood in Standard Romanian. The literature reflects that the syntactic relationship between

the matrix verb and the complement clause is complex. It is associated with a *pro*/PRO interpretation with the necessary computation means at the structural level (Farkas 1984, Farkas 1985, Alboiu 2006).

The syntactic interpretations on phasal domains and C movement in obligatory contexts for Standard Romanian (Alboiu 2006, Dobrovie-Sorin 2001 and Hill 2013) grasp the core syntax and its specificity better and use the information in outlining the syntactic interpretation during the early stages of L1A. Alboiu distinguishes between phasal and non-phasal domains; the 'ca' marker is associated with the former, during the 'să' marker with the latter. The asymmetry between the two markers is further labelled syntactically as high and low Cs. The C phase is directly associated with temporality features and yielding such features in derivation (Alboiu 2006). Mood and Finiteness can be associated with the subjunctive marker 'să'. T is conditioned by C, and T features can be checked and matched in higher positions against head features if a C phase is activated. The author also assumed that in light of the minimalist proposals (Chomsky 2005), T features in the case of subjunctives could be valued only if the C phase were active. If accepted that any feature checking and saturation is possible via Agree, an intrinsic operating property of UG and FL, the operator, from this perspective, is activated by the Matrix Probe, which must have access to the Goal, the complementiser, under the Probe-Goal dynamics postulated under an MP approach (Chomsky 1995). Via Attract, the Goal will Move for probing in the available position, generating a new phase via recursive patterning in language with the assumption of a full display of the *phi*-features of the complement as they move towards the Probe in the matrix. The lower features of the complement in *v* are checked in higher positions. The *u*Fs are checked against the *i*Fs of the heads and are matched. In addition, an essential economic mechanism of derivation is that copies are deleted, and, more importantly, the syntactic objects are not altered in derivation. The positions become available again by deleting copies, for all copies must be deleted before *Spell-Out* into the two levels of representation (Alboiu 2006).

5.4.3. Tense features. The empirical data

The syntactic mapping of Tense features is marked explicitly in licensing derivation. The examples are not selected only to show the marking of [+finite], as some of the participants already produce structures with temporal and modal features. The realis paradigm of the present shows how feature mismatches occur, from the *phi*-feature bundle, the acquisition of [+/- person] feature taking a long time as it is abstract. After counting the occurrences, it was observed that some participants produced structures with missing modal markers, auxiliaries, and copula. Other participants generated tensed forms, checked for finiteness with an illocutionary force and developed argument structures in the *v*P. The modal and temporal features identified in the forms support the inquiries into the emergence of the subjunctive Mood marker (Avram and Coene 2010).

Referentiality and temporal restrictions are associated with the matrix clause (Rizzi and Roberts 1989, Rizzi 1997).[38] One of the questions that arise is whether, during the initial stage, the inflected emergent forms are true bare subjunctives or not. There are contextual markers that lean towards such interpretations, but some contexts are ambiguous, and a clear conclusion is challenging to draw in this sense. The 3rd person singular and plural forms adopt a different syntactic behaviour. The prediction is that children will have difficulties computing such forms and, as a result, the structures will be vulnerable. The CP-*split* establishes a hierarchy to address features and their interpretation at the discourse

[38] The authors associate the referentiality markers and the relations established between the matrix and the complement clause, as well as the Probe-Goal relationship in derivation with finite and non-finite tenses, finiteness being defined by these relations the author's opinion. Rizzi connects movement of DP with Spec position in the matrix to discourse features rather than syntactic features such as the EPP feature reminiscent from the *P&P framework*, therefore the concepts associated with movement to higher position are Force. and Topic

level (Rizzi1997, Rizzi 2004). Finiteness is associated with *phi*-features, and subjunctive mood markers are placed under MoodP (Mood^0) (Tomić 2007).[39]

(28) ForceP>TopP>FocusP$_{\text{CONTRAST}}$>FinP>NegP>TP>*v*P (Rizzi 1997).

A similar approach is adopted by Alboiu, as the syntactician associated *phi*-features with Force (Force^0) and Tense features with Finiteness (T^0) in Romanian. The features [Finite] and [Mood] are assumed to play a critical role in explaining how modal markers emerge and, more importantly, how they mark finiteness in the structure. The cartographic model was designed to demonstrate the syntactic movement of the verb, the way the argument structure is built, and how theta-roles are checked in the *v*P. Under this account, the grammatical features of the subjunctive are checked in *Force* and Finiteness, 'să' moves to Finite position and then to Force (CP) (Alboiu 2010). Therefore, finiteness maps semantic modal and temporal features; the *irrealis* features are mapped on finiteness. The assumption is that children go through a phase when the *realis* features of the present tense are mapped as *irrealis* features by default resulting in non-adult structures.

The case of *'ca să'* is interpreted under finiteness, as it carries [Finite] and [Modal] features. Consequently, if we have two specific markers, each will check a particular feature, 'ca' will check [Finite], and *'să'* will check [Modal] as a semantic feature. As previously explained, if only one complementiser emerges, the modal marker *'să'*, it is assumed to check both features under finiteness. Therefore, the marker with its complement would be attracted by C, making mapping the verb's modal semantic and temporal features possible. In Romanian, there is a split infiniteness, dependent on the type of marker and the types of verbs in the matrix clause. Both the sentential verb and the complementiser become critical factors in attracting features for licencing derivation. As

[39] The Mood phrase proposal was adopted by Hill in describing the syntactic relations in the structure of Romanian Subjunctives in Standard Romanian.

such, 'să' is moved to the Finite position, and from there, it moves to Force (Alboiu 2010, Hill 2013). In conclusion, having the modal particle '*să*' as part of Force attracts the T features to CP.

The emergence of specific categories overlaps with the acquisition of other particular features, the competing forms adding extra burden to language processing. Such an interpretation could be associated with the [+/-person] feature. The use of specific verbs, such as 'a cânta' [sing], 'a desena' [draw], 'a pica' [fall], 'a se juca' [play], "a înota' [swim], and 'a mușca' [bite] reflect *phi*-feature mismatches, specific to the emergence of subjunctives during the EMWS. It is an indicator of complex syntactic computation in the case of particular features due to rich morphology manifested in the language. Suppose the present [+person] feature is used by *default* in L1A, an abstract [person] feature associated with the emergence of the modal marker. Additionally, competing forms can occur in the same sequence during advanced stages of acquisition. Some examples are provided below.

(29) CHI: T(r)eb(ui)e **să** ***lămân** leci.
must.PRES.3SG SBJV stay.1SG cold
'They must stay cold.'
MOM: Să rămân reci? Să rămână.
SBJV stay.1SG cold SBJV stay.3PL
CHI: **Să** **lămână** leci.
SBJV stay.3PL cold
'To saty cold' (T. 2;11)

(30) CHI: Și ***p(l)ec** jucăilele.
and go1SG toys.the
DAD: De ce?
'Why?'
CHI: **O** **să** ***pleacă** și a tale.
AUX SUBJ goPREZ.3PL and yours
'Today yours will go too.' (T. 2;11)

It is relevant to show that syncretism is a specific property of Standard Romanian. The first recorded inflected forms are present tense. Therefore, when syntactic objects move in derivation, with the emergence

of *'să'* as a modal marker, which also marks finiteness, *default* forms will be used at first in interpreting new abstract features. The child has the syntactic knowledge but still needs to map it at PF via *Transfer* correctly. After the merger of the head *'să'* with its complement, the newly labelled head moves the syntactic object via operation *Move* and the *phi*-features of T are checked in derivation. If *u*Fs are deleted before *Spell-Out* into PF and LF, it means that via *Agree*, a cost-free operation, all the relevant *phi*-features of the head were checked. The assumption is that the elements entering derivation were not licenced; the *u*F phi-feature cluster and the licenced structure have a low degree of acceptability.

The *default phi*-features are used due to the environment's frequency, which is reflected in the morphological mapping. Therefore, it can be posited that the economy plays an essential role in the phasal approach to derivation. One of the most common feature mismatches is recorded in the use of modal Indicative 3rd singular and plural instead of the specific modal Subjunctive features. The latter is set apart from the syncretic paradigm of the Indicative, and consequently, would require complex operations in checking *u*Fs at Edge before *Transfer* to PF and LF (examples in *Annex 3*).

Under a continuity approach to L1A, the assumption is that children first use the form correctly and then transition to non-adult like structures following specific milestones. Such structures were identified in the M-corpus (51), but there is no sufficient evidence to support such assumptions, as the structures could be formulaic. The examples from the O-corpus could be formulaic. The child was 'reading aloud' with picture support (no reading skills are developed yet, and it was a storytelling session). The child uses in the same sequence adult-like and non-adult like structures.

(31) MOM: Pampersu(l). Și ce facem cu el?
pampers.the and what do.PRES.1PL with CL.3SG.MNOM
'The pampers. What do we do with it?'
CHI: O să o să ***alunc.**
AUX SBJV AUX SBJV [CL.2SG.ACC.M] throw.1SG
'I will I will throw.' (M. 1;06)

(32) CHI: Am vrut **ca** **să** **mestec.**
AUX.1SG want.PAST PART COMP SBJV chew.1SG
'I wanted to chew.' (O. 2;10)

(33) CHI: Vrea ca să **bage** degetul în mămăligă.
want.PRES.3SG COMP SBJV stick.3SG finger.the in polenta
'She wants to stick the finger in polenta.' (O. 2;10)

(34) CHI: Vrea ca să ***bagă** singulă.
want.PRES.3SG COMP SBJV stick.3SG.IND by herself
'She wants to stick it by herself.' (O. 2;10)

One aspect that must be mentioned is that the child has excellent auditive memory and is passionate about 'read aloud activities' with the caregivers. As a result, she 'reads' books and manifests abilities that showcase minutia and the reproduction of whole sentences. In this sense, the structures produced are identified in stories read to the child by the caregivers. Still, it is fascinating to see verbs such as 'voind', (36), which have not been attested in child language during this stage. The child will follow the patterns attested in the other corpora, and mismatches will be visible as the sequences develop; moreover, the examples presented above support these suppositions.

(35) CHI: Țe a(lt)țeva pot **să** **facă**.
whatelse can.PRES.3PL SBJV do.3PL
'What else can they do in the morning?' (O. 2;06)

(36) CHI: Ea **voind** **să** **stie** st(r)ună.
CL.3SG.NOM want.GER SBJV know.3SG very well
'Her wanting to know very well' (O. 2;06)

Such structures mark a specific stage in the acquisition process of syntactic features, which, as it can be seen, require heavier computation. The examples reflect that the phi-features that enter derivation are highly specific uninterpretable on T, and interpretable on N. Children may face difficulties mapping abstract *phi*-features; they need more time to reach the desired level as more properties are encoded in the same *u*F. Feature

mismatches must be addressed in association with working memory mechanisms and theoretical models explaining morphological patterns and their acquisition. The following section presents an account that attempted to explain the cognitive processes involved, with a minimalist interpretation under a weak continuity hypothesis to L1A. The syncretic forms will gain an alternative explanation, from a biolinguistics perspective, under the *Dual Mechanism Model* (DMM) (Galasso 2016).

(37) CHI: începe **să** **se** ***duce** masina asta.
start.PRES.3SG SBJV CL.REFL.3SG go.3SG car.the this
'You will see how this car starts to go.' (T. 2;11)

(38) CHI: o să mă ***scote** ăstea doi.
AUX SBJV CL.1SG.ACC take.3SG this.3PL.F two.M
'Yes. These two I will take out.' (T. 2;11)

(39) CHI: Să se ***urcă** pe scară
SBJV CL.REFL.3SG climb3SG on ladder
MOM: Să se urce pe scară?
SBJV CL.REFL.3SG climb3SG on ladder
'To climb on the ladder?' (A. 3;07)

(40) CHI: T(r)ebuia să ***vie** pompielii.
have to.IMP.3SG SBJV come.3SG. fireman.PL.M.the
'The firemen had to come. (T. 2;11)

(41) MOM: Să nu vină doctorul?
SBJV NEG come.3SG doctor.the
'Shouldn't the doctor come?'
CHI: Să ***vine**.
SBJV COME.3SG.
'To come.' (B. 2;06)

(42) CHI: V(r)ea să se ***iuja(s)că.**
want.PRES3SG. SBJV CL.REFL.2SG.ACC put3SG.ESC(lipstick)
'She wants to put lipstick' (O. 2;05)

(43) CHI: Au fost să ***pocționeze**, (ș)tii?
AUX PART.PAST.3SG. SBJV nonsense.3PL know.PRES.2SG
'There were to poctionate, you know?' (T. 2;11)

The matrix verbs in Romanian are used in the matrix clause in obligatory contexts during the first stages of development, allowing for more independence regarding feature interpretability to given anaphoric referentiality. Given that syntactic mechanisms are the same in all languages, the differences result in morphological mappings, as is the case of the Romanian subjunctive. To be more specific, if such structures are distinguished in the corpora, they can be attributed to the merger in the CP to the left periphery. The '*să*' marker makes the movement to CP possible. As reflected in empirical data, the children generate such structures in obligatory contexts without specific semantic interpretation of the null subject surface in the forms. Going back to Farkas' interpretation for Standard Romanian, she proposed a *Maximum Visibility Principle (MVP)* in the interpretation of *'să'* at the left periphery in a C position, gaining visibility at interface levels. Such an interpretation is possible only for obligatory contexts, namely when we have a purpose clause. If we use such an assumption, we see that the main matrix verbs that emerged in child speech, in association with the complement clause, are desiderative, such as *wish* and *want, known* to express certainty. Moreover, children do not violate constraints and use the structures in obligatory contexts proving that they have the necessary syntactic knowledge (Farkas 1984).

(44) CHI: După aia, **că** **să** **aducă** mami lego.
after that COMP SBJV bring.3SG mommy lego
'After that, so that mommy can bring the lego' (T. 2;11)

(45) CHI: Da, **ca** **să** **se** **machieze**.
yes COMP SBJV CL.REFL.2SG.ACC put.3SG.EZ (makeup)
'Yes so that she can put makeup on.' (O. 2;05)

Most of the examples in this section require heavy computation attributed to complex morphological properties associated with paradigmatic syncretism. The Indicative mood 3rd plural forms and Subjunctive mood 3rd singular and plural feature mismatches were attested and explained by comparison to the Indicative paradigm. The

subjunctive forms in Romanian, with the specific *phi*-features, reveal that the non-adult structures observe similarities in the computation of particular features related to temporality and mood. As a result, default structures are being used. One assumption is that under the power of attraction of the operation *Agree*, features require checking, as a movement to higher positions is triggered (Chomsky 1995). In the case of the specific *phi*-features which temporally distinguish the moods (Indicative and Subjunctive in the case of adult Romanian), syntactic objects must *default* to what is available; therefore, agreement mixes and possible matches could be explained under the generative theoretical framework.

The next natural step in the developmental process is the mixed-use of adult-like and non-adult like structures. Such structures are sometimes visible in the same sequence, see (49) and (50), sometimes as the result of the adult intervention. Even so, negative feedback coming from the adults does not necessarily ensure the correct future use of the structure, as the child might need more exposure to positive evidence before internalising the information (see also *Annex 3* and *Annex 4* for more examples). The subjunctive mood is used with high frequency in adult speech; therefore, such aspects could influence child-directed speech. The modal particle is merged, and feature checking within the domain results from this operation. Since some structures bear a higher degree of complexity, the assumption is that different mechanisms are in place to correctly interpret the elements entering derivation and their mapping at PF. As such, the *phi*-features of T are expected to have a high or low degree of vulnerability when entering derivation. The examples in this section show that morphological features are essential in derivation. Any ambiguous interpretations, delays, and early semantic transfers due to insufficient syntactic data available at a specific moment can explain non-standard forms manifested in speech. Features with a higher degree of vulnerability will also need a more extended period in the acquisition process. The [+/- person] feature in the case of subjunctives is such an example, and similar patterns in *phi*-feature interpretation in the present

tense form build evidence favouring such an interpretation. Morphological hybridisation can have visible effects on the mapping at LF or PF during specific stages, such as the developmental stage attesting the emergence and development to adult-like forms in use of the modal features in child Romanian.[40]

(46) CHI: Ăsta de ce nu se poate să se ***apase**?
this why NEG CL.REFL.3SG can.3SG SBJV CL.REFL.3SG press.3SG
'Why this cannot be pushed.' (T. 2;11)

(47) CHI: Să ne ***audem** în lepoltofon.
SBJV CL.1PL hear.1PL in the recorder.
'To hear ourselves in the recorder' (T. 2;10)

(48) CHI: Le ducem la închisole, să ***fugeți** să ***fugeți**.
CL.3PL take.PRES.1PL to prison SBJV run.2SG SBJV run.2SG
'We take them to prison run, run.' (T. 2;11)

(49) CHI: Dacă fac cu unghia, dacă ***da** **jos do(a)le.**
if do.PRES.1SG with nail if take.INF down hurt.PRES.3SG
'If I do it with my nail, if I take down it hurts.' (T. 2;10)

(50) CHI: Am vrut să cad. **Să** ***fiu** atenți.
AUX PTCP.PAST SBJV fall.1SG SBJV be.1SG attentive.3PL.M
'I wanted to fall to pay attention.' (T. 3;05)

(51) CHI: Da. V(r)ea să se ***iuja(s)că**.
yes wantPRES.3SG SBJV CL.3SG put lipstick3SG. ESC
MOM: Să se **rujeze**?
SBJV CL.3SG put lipstick3SG. EZ
'To put lipstick on.' (O. 2;05)

[40] Under the *Dual Mechanism Model (DMM)* the inner mechanisms of the acquisition of specific forms could be explained overgeneralizations or over/under extensions, in this sense, elicited productions, via wug tests, attest such universal operations in LA and they received a minimalist perspective. Other computational aspects associated with rich inflectional systems and difficulties in interpretation and feature checking could find partial explanation under such proposals. We will briefly outline such perspectives in *Section 5.4.5.* insisting upon the strengths and weaknesses of the model.

(52) CHI: Ăsta de ce **nu** ***frână.**
this.SG.M why NEG hit break.PRES.3SG
'This one why doesn't hit the break.' (T. 2;11)

(53) CHI: Se ***rujece**.
CL.3SG put lipstickPRES.3SG. -esc
DAD: Se rujează. Așa-i?
CL.3SG put lipstickPRES.3SG. -esc right
'She is putting lipstick on. Right?' (O. 2;05)

(54) CHI: E impotant să **număli.**
be.PRES.3SG important SBJV count.2SG
'It is important to count.' (O. 2;05)

In conclusion, most empirical data is associated with the EMWS and LMWS. The 1st and 2nd singular and plural subjunctive forms are displayed in an adult-like manner in discourse and, more importantly, in obligatory contexts (see O-corpus, T-corpus and A-corpus). The intricacies of the process are far from being solved, with problematic interpretations of the *phi*-features for 3rd person singular and plural that are non-standard. The general assumption is that the *u*Fs, when checked against the higher position, is not deleted in derivation, and the *default* structures are selected. A natural syntactic force imposes the necessary conditions to conform with the laws of attraction required for operation Move. Under the new minimalist approach, the movement to the left periphery is associated with phonological, semantic, syntactic, and pragmatic/discourse elements (Chomsky 1995).

5.4.4. A weak continuity approach – The Dual Mechanism Model (DMM)

The section outlines experimental models that describe the syntactic behaviour of children. The experimental data testing syntactic knowledge in L1 English can be traced back to the *wug* test proposal in the empirical investigation, supporting the assumption of tacit knowledge in children (Beko 1958). The participants in the study ranged from 4;0 to 7;0. In the given context, they could apply the rules to new

lexical objects reflecting the use of syntax mechanisms naturally and creatively. Syntactic knowledge was demonstrated via elicited production tests on nonsense words. Using the limited data available in the PLD, children proved to use the knowledge accessible to them in representing structures. The outcomes supported the argumentation favouring unconscious understanding of the language in children. Such models were associated with different brain systems to explain inner language mechanisms. During an elicited production task, children were told that the word *pilk* translated into doing a headstand; when they saw a toy bear upending a pig, they said *the bear pilked him* (Pinker 1989). Similarly, empirical studies on language development reflected causative alternation during the early stages of language acquisition (Bowerman 1982).

(55) MOM: Maybe you'll see something wingèd.
CHI: Maybe we'll see something snakèd! (Pinker 1999, p. 41)

The speech data of the present study reflects how children can use sound computation on words not associated with any meaning in adult-like structures. According to the proposed models, such forms are associated with the *stems* of the verbs, reflecting that the level of syntactic computation and categorisation is more complex, especially if checked against target-like forms. It has also been observed that over-regularisation in adult and child speech manifests different linguistic behaviours. Children do not over-regularise in the same fashion adults do.

(56) CHI: Ponta *pontește.
Ponta.NOM nonsensePRES.3SG (T. 2;11)

The verbs are assumed to have the 'a ponti' and 'a pocționa' infinitive forms, given the *phi*-features and the affixation specific to these classes of verbs ('*-esc'* for verbs that end in '*-i'* and '*-ez'* for verbs that end in *-a* in the infinitive form). Such examples support general assumptions that adults and children do not use language creativity in the same

fashion. The *P&P framework* explained language specificity associated with invariant constraints and variable parameters, while cognitive science approaches attempted to explain computation mechanisms underlying the acquisition process and the specific stages towards a continuity approach to LA (Chomsky 1981b).

(57) CHI: V(r)ea să se ***iuja(s)că**.
want3SG SBJV CL.REFL.3SG put lipstick3SG.*ESC
'Wants to put lipstick on.'
MOM: Să se rujeze?
SBJV CL.REFL.3SG put lipstick3SG.EZ (O. 2;4)
'To put lipstick on?'

(58) CHI: Ăsta de ce **nu** ***frână.**
this.SG.M why NEG hit the break.PRES.3SG
'This one why doesn't hit the break.' (T. 2;11)

(59) CHI: Se ***rujece**.
CL.3SG put lipstickPRES.3SG. -esc
DAD: Se rujează. Așa-i?
CL.3SG put lipstickPRES.3SG. -esc right
'She is putting lipstick on. Right?' (O.2;05)

The *Dual Mechanism Model* (DMM) proposal released some tension at the representational level and attempted to explain the acquisition of tensed forms in English. It addressed the connective relations established between regular verbs and the acquisition by association, analogy, overextension, and over-regularisation of complex structures with the contribution of the associative memory system. The processing mechanisms were associated with memory patterning, particularly with blocking and retrieving specific features, as associative memory components helped in computation (Pinker 1991). The model is part of the foundation of a continuity hypothesis to LA.

As pointed out by the author, associative memory properties were witnessed in the speech productions of TD children in the way they generated similarities in association with the frequency patterns of the structures. The matrix patterning was also grounded on comparative studies of TD children and on children from the SLI spectrum to see what

differences could be observed during the process. The prediction was that TD children would end up acquiring the structures, as opposed to SLI children, although both groups would have had equal exposure to the PLD in terms of frequency. Overgeneralisation, over-regularisation, and overextension processes were pegged in languages with inflectional morphology, rich or reduced, and as supporting evidence, extensive studies were developed. The acquisition process was associated with complex patterns of acquisition in other domains, in a nativist sense, and addressed examples of over-regularised inflections observed in the corpora consisting of the speech productions of children (Bowerman 1982).

To further illustrate, chunking and the complex features of specific categories would lead to overextension. The paradigm acquisition of inflections (Bowerman 1982) was aligned to the *Unique Entry Principle* (UEP), which postulates that there should be one entry per cell in explaining finiteness and was associated with the blocking and retrieval mechanism (Pinker 1984). This model aimed to explain the acquisition of inflectional elements with their formal features in a principled way. Feature valuation was described in the linguistic behaviour of *cell paradigms*. Syncretism in paradigms was also associated with this model. The syntactic-morphological tension measured in highly inflected languages is visible also in the process of L1A. The syncretic forms can make understanding computation and semantic interpretation difficult and the phonological representation of the syntactic objects entering derivation at different stages of acquisition.

By categorically explaining the valuation of features carrying different degrees of specificity, *inflectional imperialism* (Slobin 1985) is invoked. The phonetic content and the means of syntactic and semantic representation of specific features could be rendered low or high, as natural languages have rare features requiring particular computation in relation to other developmental systems and associated factors under any model. The features are assumed to be unconscious; therefore, in highly syncretic languages, the information resides in the *properties of the stems*.

As such, further segmentation was recommended for computational and categorial purposes. For that reason, the Agreement was the operation that had to be further explored, and the specific information encoded *in FCs. Here we* could refer mainly to Tense and Aspect, with the associated *phi*-features and their computational role and linguistic behaviour (Pinker 1996).

(60) CHI: Ăsta de ce nu se poate să se ***apase**?
this why NEG CL.REFL.3SG can.3SG SBJV CL.REFL.3SG press.3SG
'Why this cannot be pushed' (T. 2;11)

(61) CHI: Să ne ***audem** în lepoltofon
SBJV CL.1PL hear.1PL in recorder.
'To hear ourselves in the recorder' (T. 2;10)

(62) CHI: Le ducem la închisole, să ***fugeți** să ***fugeți**.
CL.3PL take.PRES.1PL to prison SBJV run.2SG SBJV run.2SG
'We take them to prison run, run.' (T. 2;11)

(63) CHI: **Trebuie să *ară** șase ani sau patru ani sau zece ani.
must SBJV have3SG six year.PL or four year.PL or ten year.PL
'If he doesn't bite anymore, he must be six or four or ten years old.' (T. 3;04)

The matrix cell representation provides valuable feature availability, accessibility, and interpretability associated with working memory and other brain systems. The matrix paradigm has positions for cells that require unique features. Syncretism patterns observed in children have been related to specific properties of the underlying mechanisms of the FL, defined as inner properties of the brain. From a nativist perspective, children can generate mini-paradigms which would further develop into maximal inflectional paradigms (Pinker 1996). The period from the onset of *Stage 1* to *Stage 2* is short in L1A; children end up inflecting verbs for tense and can generalise from mini-paradigms to general paradigms by encoding inflections. When hypothesising a new paradigm structure by making contingency choices during the process, under the UEP, the constraints at the level of representation are assumed

to make the acquisition possible rather than the reinforcement coming from caregivers.

This model has its insufficiencies in explaining the hypothesised blocking and retrieval of features and the functionality of inner mechanisms associated with what is accessible and available in the input-output interaction and does not offer a satisfactory explanation of how and when over-regularisation mechanisms stop (Marcus et al. 1992). The retrieval of functional features from the lexicon was associated with memory by association and with similarities and frequency in the input of the specific features. Moreover, such a model aimed to explain why *default* features were retrieved when specific unconscious features were not retrievable. Over-regularization was also associated with low-frequency features instead of features with registered high frequency. The extension of morphological patterns has been evidenced in empirical studies, particularly in languages showcasing overgeneralisation, over-regularisation, and extension of inflections to new lexical items. The traditional accounts on language learning via memorisation and rote-like manifestations via repetitions do not provide a satisfactory account to the internalisation of language structures, mainly when similar stages of development are observed in children, irrespective of the language they acquire. Data-driven theoretical positions refute the existence of predetermined syntactic knowledge; however, the empirical results support the claim that children have such tacit knowledge during *Stage 1,* and this knowledge is accessible and available to the child. The problem is how children access this knowledge and which underlying inner mechanisms are involved.

5.4.5. A minimalist interpretation of the DMM

The DMM has been adopted in weak continuity approaches to L1A and developed and improved under the MP (Galasso 2015). The first proposal of the model (Pinker 1998 and Clashen 1999) was extended under the minimalist framework and associated with the phases of

development. The interpretation was directly associated with the two operations, Merge and Move, aiming to explain the emergence of elements joined via short-distance adjacency rule (Merge) and the long-distance mapping (Move). One of the differences in interpretation between continuity approaches to LA, strong or weak, is the parser the child has available during the early stages. One of the questions that remain to be adequately addressed is if the movement can be activated from the onset or not, as operation Move is associated with the emergence of FCs. The interpretation of syntax is associated via the DMM with the functionality on the Wernicke and Broca areas (phonological and semantic vs syntactic). Merge is the first step towards binary branching and is believed to be the first step in explaining how long-short distance operations occur. Movement is associated with feature checking of the resulting syntactic objects attracted to higher positions from lower domains. From a biolinguistics perspective, the lateralisation of the shift to Broca's area is an asymmetry associated with syntactic model proposals meant to support such claims. Therefore, any processing forms rooted in learning mechanisms were predicted to evolve from analogies, over-generalisations and overextensions to syntactic processing (Galasso 2015).

In trying to explain the syntactic and lexical knowledge encoded in a child's brain, one of the preliminary inquiries is how a child can distinguish between lexical and categorial items and how are such mechanisms mapped and represented in the LF. Morphology is a complex and intricate element, especially in the case of highly inflected languages. One must ask how much morphological knowledge is predetermined as *a priori* knowledge. Any linguistic inquiry must establish the onset of the development of feature acquisition. According to this model, the morpho-syntactic information must be searched for in the stem and then associated with other brain systems and mechanisms. Such tools explain the means of processing syntactically with the available knowledge of specific structures. The model was associated with a radical approach to L1A, assuming the existence of a pre-functional stage described by the lack of FCs. Under the radical

maturational account, if there is a separation between lexical and functional processing in the brain, specific asymmetries and stages of language development would be explained, suggesting that the knowledge children are endowed with develops gradually (Radford 1990). The DMM postulates a pre-functional stage when FCs lack entirely and foster language optionality (Galasso 2015). The approach differs from the OI stage or any analogue form in particular languages (Wexler 1994, Wexler 1998)). A radical approach becomes problematic in the case of highly inflected languages, and it is challenging to posit that FCs are not accessible from the onset. In the case of Romanian, empirical studies on the emergence of forms specific to an OI stage (Avram and Coene 2011) adopt a strong continuity approach to L1A (Wexler 1994).

5.5. Conclusions

The innate syntactic mechanisms associated with sound and meaning, the S-M and C-I interface systems, can generate discretely to infinity via recursion with limited input. In the emergence and acquisition of FCs during the early stages, derivation, from a developmental perspective, must be short and efficient. Therefore, the number of operations activated must be minimal and strictly necessary to converge. Going back to the concept of narrow syntax and its impact on the stages of L1A, it can be observed in the economy of representation. Simplicity in interpretation requires an economy of representation of the semantic and phonological levels in syntactic processing. The processes are combinatorial; the child has to select items and categorise them. These items have specific features which must be identified and checked. For such operations to be satisfactory, the child must have abstract knowledge of the properties of the items selected. In derivation, *i*Fs and *u*Fs have specific roles, and the child manages to reach full competence quite rapidly. One of the most challenging facets is to explain how TD children manage to process and satisfy feature checking during the

intermediate phases based on the evidence from empirical data and how the inner mechanisms work for the child to reach full linguistic competence. The children prove that they have syntactic knowledge and can encode syntactic and lexical information as reflected by the scientific inquiries in the form of longitudinal or cross-sectional studies corroborated with modern advanced techniques on brain imaging. The significant findings from psychology, biology, physics, and neurosciences contributed to the results registered. The empirical results of the present study argue in favour of a continuity hypothesis of L1A in early child grammar, particularly in child Romanian.

Chapter 6 – Case asymmetries. Evidence from the empirical data

This chapter focuses on the specific stages of acquisition associated with the syntactic manifestations of Case features during *the early multi-word stage* (EMWS) *and the later multi-word stage* (LMWS) of L1A. Overall, there is uniformity in the way children acquire specific properties; moreover, Case theory within the framework of L1A depicts asymmetries and underlying hierarchies within distinct morphological paradigms. The speech productions selected for interpretation offer empirical support; the qualitative investigation identified specific patterns in the speech productions, supporting predictions made regarding the acquisition of the case. In light of this view, salient examples explain how morphological features contribute to determining the degree of variability in L1A and the length of the stages of development in child Romanian, in particular. The extensive analysis on the acquisition of Case features in L1A is scaled down to examples relevant for child Romanian and set against theories of L1A to support the predictions made. The keywords are *Case theory, structural vs non-structural case, inherent case, vP argument structure, theta-roles, Case hierarchy, asymmetries.*

6.1. The acquisition of case features. Asymmetries and hierarchies

As proposed in the case theory account (Chomsky 1981b, 1986a), a brief presentation of Case theory focuses on the syntactic and semantic elements in L1A and the case of child Romanian (Coene and Avram 2012).[41] The first distinction is structural and non-structural or inherent.

[41] It refers to the specific case of the asymmetries and hierarchical acquisition of ACC clitics.

It continues with the specific linguistic behaviour of the distinctive features attributed to ACC and DAT Case features in Romanian. Starting with a Case Theory account (Chomsky 1981b, 1986a), highly abstract and formalised cases, such as NOM and ACC, are set apart from DAT, a topic associated with argument structures in the *v*P (Chomsky 1995) and carrying relevant force in valuing theta-roles.[42] As seen below, there are traceable asymmetries in the selected speech productions. The first examples, supporting a hierarchy in Case acquisition in L1 child Romanian, were analysed in *Chapter 2*, see (64), and *Annex 5*. Children react to PLD and do not respond to corrective feedback from caregivers and use what is available syntactically, semantically, and at the discourse level to acquire language. Example (64) supports the assumptions attributed to the input and the output and signals visible asymmetries in the acquisition of clitics.

(64) CHI: Da eu, da* la mine *mă p(l)ace sucul.
yes, I but to$_{CL.}$ *$_{ACC1SGCL.}$ *$_{ACC1SG}$ like.$_{3SG}$ juice.the
'Yes I, me me like juice.
MOM: Mie îmi place sucul
CL.DAT.1SG CL.DAT.1SG like.3SG juice.the
'I like juice.
CHI: Mie *mă p(l)ace sucul.
CL.DAT.1SG CL.ACC1SG like.3SG juice.the
'I me like juice.'
MOM: Nu mie *mă place, ci mie îmi place.
NEG me$_{CL.DAT.1SG}$ CL .me$_{ACC1SG}$ like.3SG but me$_{CL.DAT.1SG}$ me$_{CL.DAT.1SG}$ like.3SG
'Not me like, but I like.'
CHI: Mie *mă- mi p(l)ace.
me$_{CL.DAT.1SG}$ me$_{CL.}$*$_{ACC1SG}$ me$_{CL.DAT.1SG}$ like.3SG
'I me I like.'
MOM: No bine. Uşor, ce se întâmplă aicea mie nu-mi place.
'Well. Easy, I don't like what is going on here.

[42] Another relevant aspect should be mentioned here, namely that there are attested lexical cases as well, see the Icelandic quirky case are associated with individual lexical items (LI).

CHI:	De ce	ai	spus	mie	nu	*mă	p(l)ace.	
	why	did you	say	me$_{DAT.1SG,}$	not	me*$_{ACC.1SG}$	like.	
	'Why did you say I me don't like?'							
MOM:	Nu	mie	*mă	place,	mie	nu-	mi	plac.
	'$_{NEG}$	me$_{DAT.1SG}$	me*$_{ACC.1SG}$	like	me.	not	me$_{DAT.1SG}$	like.'
	'Not I me like, I don't like.'							(T. 2;11)

NOM and ACC cases are structural cases and are associated with specific *phi*-features. First, the syntactic structure of the *v*P and the licencing of the derivation aim to explain what happens with clitics in child Romanian. The licensing of the case in the derivation is in [Spec] position; as such, the showcased examples intend to explain Case features licensing in the *v*P. To continue, one must take a closer look at the argument structure of the *light* verb. Then, in line with the minimalist proposal, *v*P derivation as a phase must be observed (Chomsky 2000a), and the operation at hand is Merge. The resulting syntactic objects, which evolved from pairs to sets at this stage, must be licensed; in addition, the specific intermediary steps gain visibility via the empirical data supplied in this section. In the structural/non-structural asymmetry, the case is a determining factor with implications to the domain of L1A. As mentioned, the empirical data selected from the corpora signal specific stages in the acquisition of Cass, of the particular features in [Spec-Head] positions, and the means of licensing arguments. Furthermore, *Probe-Goal* relations are associated with *v*P members to represent the licensing of internal arguments in the *v*P structure. This structure and its mechanisms attest to particular milestones during the EMWS and cast light onto possible hierarchies that gain universal value.

In addition, Case features, in a syntactic and semantic context, are *u*Fs that need to be checked against heads; moreover, they are attracted by the force of the head and assumed to be driven, in turn, by greed. Under a phased approach to derivation, abstract *u*F Case features must be checked and all copies deleted before *Spell-Out*. The position being filled, a Spec position goes under an activation/deactivation cyclic process due to phasal *Transfer* at *Spell-Out* (Chomsky 2000a). In like

manner, DAT being an inherent case, particular theta-roles are selected in derivation under the MP framework. Case (DAT) valuation must occur via operation Merge before *Spell-Out* (Chomsky 1995). In light of such an interpretation at the syntactic level, anything that would be transferred in a rush, without the needed delay, via *Procrastinate* or *Last Resort*, could result in nonstandard structures. At the same time, *phi*-features (*u*Fs) are bundles or clusters with a high degree of complexity and the [person] feature, as an *u*F, carries extreme relevance in Case valuation. The case is not associated with T or *v*, under the latest minimalist accounts, but to Probe, and [+/- person], as an *u*F, is assigned a key role in differentiating cases and, implicitly, in the acquisition of features in L1 (Chomsky 2008).

Clitics in child Romanian have a specific behaviour reflecting several asymmetries. Extensive research on the acquisition of ACC clitics in child Romanian revealed an apparent asymmetry between the acquisition of 1st and 2nd person ACC, 3rd person reflexive clitics, and 3rd person ACC clitics. The prediction was that 3rd person clitics patterned differently, resulting in asymmetries between 1st and 2nd person and 3rd person clitics. One conclusion was that 1st and 2nd person clitics are strong, as opposed to the 3rd person clitics which are weaker. In accordance, the syntactic behaviour of the heads (clitics) would explain possible hierarchies. The doubling of clitics also contributes to their strength, and the *u*Fs (person) become the driving force of agreement in derivation (Coene and Avram 2012).

Thus, features can get to Spec-positions for checking and matching purposes as movement is possible. With clitics as heads that Merge and the necessary conditions in the *v*P determined by the C-I interface must occur before *Spell-Out* at the LF level of representation. This phase is under the *PIC* condition (Chomsky 2000a), and the last copies are deleted, taking some of the workloads of the involved memory mechanisms (Rizzi 1990). The heads, which are the clitics, must have *u*Fs for the case and *u*Fs for *phi*-features. The distinction between the possible ways of probing in a case hierarchy must be made. Correspondingly, *phi*-features probe different phases; therefore, a bottom-up approach describes how *phi*-

features of the *light* verb probe in this particular context (the DAT case) and any surfacing non-adult structures. If nonstandard forms surface, possible explanations must be provided to such outcomes. In a phase theory, the syntactic behaviour of the NOM case in the structure, with its inherent EPP or OCC feature, must be mentioned (Chomsky 2007a, Chomsky 2008).[43]

The syntactic mechanisms in the *v*P, in the acquisition of Case features, must be set against the inherent case structure for DAT in Romanian. The empirical data reflects that the children use ACC forms instead of NOM and DAT forms during the EMWS. The inflected ACC case features are possibly checked in derivation as the first available *default* forms and surface at PF. Several assumptions can be made according to the stages of development. The structures could be formulaic given the settings and the age of the child, or, as illustrated in (65) and (66), the default use of ACC is recorded instead of NOM with a transition and a possible contextual interpretation of the ACC structure with clitic omission in (65). Several other contexts would be necessary to build upon the attested results, but a possible asymmetry could be envisioned and further investigated. In addition, the use of NOM clitics seems to be formulaic, as it surfaces only when the parent uses them, at least in the speech productions available for the investigation.

(65) MOM: Ce spui, M.?
'What are you saying, M.?'
CHI: *__Mine.__
me.ACC.1SG
'Me.'
MOM: Ce să facă mama?
'What should mom do?'
CHI: *__Aiut.__
help.PRES.1SG??
'Help.'
MOM: Să te ajut? Cu ce te pot ajuta, M.? Spune-mi, cu ce te pot ajuta
'Help you? How can I help you, M?' Tell me, how can I help you?

[43] Reference to Chomsky's *Feature Inheritance Model.*

CHI: * **(S)caun**.
'Chair.'
MOM: La scaun? Cum te pot ajuta cu scaunul?
'At the chair? How can I help you with the chair?'
CHI: ***Mine.**
me.ACC.1SG
'Me.'
MOM: Mă ajuți, M.? Mă ajuți?
Are you helping me, M.? Are you helping me?
CHI: ***Mine.**
me.ACC.1SG
'Me.' (M. 1;05)

(66) MOM: *Biscuite. Așază-te M., M.!
'Cracker. Sit M, M!
CHI: Aiut. Nu, ***mine, *mine.**
help.PRES.1SG?/3SG? [CL.1SG.ACC?] NEG CL.1SG.ACC CL.1SG.ACC
MOM: Te ajut și eu.
'I will help you as well.'
CHI: Și ***ioi**. Și **eu**. (formulaic?)
and CL.1SG.NOM and CL.1SG.NOM
'And I. And I.' (M. 1;06)

Another argument supports the claim that corrective feedback is inefficient, whether used sporadically or constantly. The use of ACC forms instead of DAT forms surfaces early on, and 3rd person forms are used by children who address themselves by using their proper names (Coene and Avram 2012). Parents tend to adopt such forms in communication instead of correcting them. Even if attempts to adjust them are attested (see B-corpus examples), the data reflect that the children do not respond to such adjustments. Even if they correct their structures in a particular sequence, they continue to produce 3rd person structures in future speech productions.

(67) MOM: Bea., da. Spune eu.
Bea. yes say.PRES.3SG CL.1SG.NOM
'Bea. yes. Say I.
CHI: **Eu.**
CL.1SG.NOM
'I.' (B. 2;04)

Given these results, one must take a closer look at how ACC/DAT case mismatches occur during the EMWS. One of the predictions regarding *the LF interpretation and the PF mapping* is that, under an MP account, the derivation in the *v*P structure would follow the natural, expected steps with the associated phases. In this process, Merge is licensed, from the bottom-up, by the *light* verb (*little v*), via valuation of features associated with the given inherent arguments (Chomsky 1995). The Case *u*Fs must be valued DAT when checked against the head (clitic) in Spec position before *Spell-Out*. At the same time, the syntactic information is sent to the two levels of representation, phonetic and semantic, via transfer. The *u*Fs such as the case and the *phi*-feature bundle must be checked in the *v*P for licencing purposes. The minimalist approach is assumed in delimiting phases and the valuation of NOM in a higher Spec position as obligatory *u*F checking before *Spell-Out*, with the visible or silent realisations in the PF.[44]

In light of the description above, the syntactic objects resulting from the *v*P structure should license derivation. The syntax is sound if the LF and PF *interpretation* is as described. However, children produce forms that do not resemble adult structures, and naturally, the question that arises is whether the syntax is flawed in children. Under a continuity approach to L1A in licencing Case features in derivation, children have the predetermined syntactic mechanisms, but they use the limited arrays available to them during specific stages; therefore, they tend to select *default* structures and use them in the semantic and syntactic interpretation. Such structures decrease in frequency, and in the end, the child can reach complete competence in L1. Attaining full competence is a process. In what follows, some of the obligatory contexts are presented. The most used verbs for *v*P arguments are 'a da' [give] and 'a-i plăcea' [like], but other obligatory contexts are also represented in the empirical data, examples (68)-(74) (for more, see *Annex 5*).

[44] As a result of the preserving the EPP feature from previous syntactic models.

(68) CHI: ***M-** a adus tati.
CL.1SG.ACC AUX.3SG bring.PAST.PART daddy
'Daddy has brought me'
MOM: Ți-a adus tati? Bine. Îți face mami o codiță.
'Daddy has brought you? Fine. Mommy will make you a ponytail.'
CHI: Cu ioz. **Mie** ***mă** p(l)ace ioz.
With pink CL.1SG.DAT CL.1SG.ACC like.PRES.3SG pink
'With pink. I me like pink.' (O. 2;4)

(69) CHI: ***P(l)ace** bomboanele. Foate mult ***p(l)ace**.
[CL.1SG.DAT] like.PRES.3SG candy.the very much [CL.1SG.DAT] like.PRES.3SG
MOM: Foarte mult îți **plac**?
'you like.PRES.3PL them very much?
CHI: Da. (E. 3;01)

(70) CHI: ***Mă** **p(l)ace** pe(r)na asta.
CL.1SG.ACC like.PRES.3SG pillow.this
MOM: Îți place? De ce?
'You like it? Why?'
CHI: ***P(l)ace.**
[CL.1SGDAT] like.PRES.3SG
MOM: De ce?
'Why?'
CHI: Mami, **mie** ***pace** așa.
mommy, CL.1SGDAT [CL.1SGDAT] like.PRES.3SG
'Mommy, I like like this.'
MOM: Dar de ce îți place?
'But why do you like it?' (E. 3,02)

(71) CHI: Cap. Două aici dă- ***mă.**
Head two here give.IMP.2SG-CL.1SG.ACC
'Head. Give me two here.'
MOM: Două pansamente? Ce e ăsta? B., ce e?
'Two bandages? What is this? B., what is it?' (B. 2;05)

(72) CHI: ***Dă mie** ca(r)tea.
MOM: Cartea? Care carte.
CHI: ***Noi.**
MOM: Cărțile noi?
CHI: Da. (B. 2;06)

(73) CHI: Tati, ***mă** **dai** gheață.
daddy CL.1SG.ACC give.PRES.2SG ice
'Daddy, can you give ***me** ice. Cand you give ***me** ice.'(A. 3;05)

(74) CHI: Mami, ***mă** ***cumpăli** și mie?
mommy CL.1SG.ACC buy.PRES.2SG and CL.1SGDAT
'Mommy, can you buy me too? I also want.' (A. 3;05)

Children can move DAT structures to higher positions in derivation; such an example can be observed in the movement of the phrase 'la mine' [to me] to a higher place. Under Rizzi's cartographic approach to movement, 1st and 2nd person clitics are very strong and move to higher positions to check their features (Rizzi 1997).[45] Children can dislocate to the left, (75) and in (76); as such, 'la' [at] has the necessary force and carries the needed emphasis. The case is selected by a functional preposition here, 'la' selects DAT, although an ACC clitic is used in place, the assumption being that the members are in a Spec-Head relationship.

(75) CHI: *La mine *mă p(l)ace polumbul.
to CL.1SG.ACC CL.1SG.ACC like.3SG corn.the
'I like corn' (T. 2;11)

(76) CHI: La mine nu *mă somn.
to CL.1SG.ACC NEG CL.1SG.ACC sleep
'I am nor sleepy.' (T. 2;10)

The feature mismatches are associated with Case features and with *phi*-features via Agreement. The prediction is that the *u*Fs are not deleted before *Spell-Out*. Notably, nonstandard structures result at the PF level. The syntax is working in children, and feature interpretability at specific stages is attributed to complexity in computation and the means of checking and matching features with limited resources. In these cases, the abstract components give more complexity to computation, as seen

[45] Clitics would check their Topic feature in this case under Rizzi's cartographic proposal.

with a *phi*-feature agreement in Tense. Data reflect that ACC/DAT mismatches are still manifested at a high rate. At the same time, structures with emerged Mood markers and the Conditionals (see examples 78 and 83) are used in a target-like fashion. Given the evidence that the child still selects ACC as *u*F instead of DAT and maps it at PF, it reflects that in the sequencing of the FCs, the acquisition of DAT *u*F for case requires complex computation. Additionally, the morphological paradigm matched complex structures.

Children use ACC case features in all obligatory contexts where inherent DAT *u*Fs would be required, followed by a period of mixed-use of the forms when both adult and non-adult structures are attested in a speech before achieving full competence. Examples for particular stages prove that children have syntactic knowledge and can use the mismatched forms in obligatory contexts. In addition, due to the high degree of variation from one child to another in the acquisition process, the examples range from the omission of clitics (the merger is not yet mapped at PF) to the use of ACC instead of DAT forms in specific contexts (for additional data see *Annex 5*).

(77) CHI: V(r)eau apă ***sete**.
want.PRES.1SG water [CL.1SG.DAT be.PRES.3SG] thirsty
'I want water [I am] thirsty.' (B. 2;06)

(78) CHI: T(r)eb(ui)e să beau mai mult când ***mă** **mai e sete.**
have to.PRES.3SG SBJV drink.PRES.3SG ADV more when CL.1SG.ACC ADV be.3SG thirsty.
'I have to drink more when I am thirsty again.' (T. 2;11)

(79) CHI: Tot ***mă** **face** gheață. Tot ***mă** **face** gheață.
INT CL.1SG.ACC make.PRES.3SG sick INT CL.1SG.ACC make.PRES.3SG sick
'It keeps make me sick. It keeps make me sick.'
MOM: Ce? Ce anume?
'What? What exactly?'
CHI: Tot ***mă** **face** gheață.
INT CL.1SG.ACC make.PRES.3SG sick
'It keeps make me sick.'

MOM: Îți face gheață?
'It makes you sick?'
CHI: ***Mă face** gheață și vomit din gulă.
CL.1SG.ACC make.PRES.3SG sick and I throw up from mouth.
'Yes. To throw up. It makes me sick, and I throw up out of mouth.'
(A. 3;05)

(80) CHI: **Să nu *te fie flică.**
SBJV NEG CL.2SG.ACC be.3SG scared
'And that I start. Don't be afraid.' (O. 2;50)

The acquisition process is sequenced and progresses towards standard use, alternating adult and non-adult structures before reaching full competence. Examples (81) and (82) reflect how the child uses both forms in the same recording session; similar examples have been provided in *Chapter 5* to acquire Tense features, supporting the arguments in favour of uniformity among participants.

(81) CHI: Mami, ***mă- l găseci *ăla**? Trompeta.
mommy CL.1SG.ACC CL.3SG.ACC find.2SG that trumpet
'Mommy, can you find that?' (T. 2;11)
(82) CHI: **Îmi găseci** tompeta mea.
CL.1SG.DAT find.2SG trumpet my
'Can you find my trumpet?' (T. 2;11)

At this stage, the possible tension between morphology and syntax can be seen in the asymmetry observable in the acquisition of NOM, ACC, and DAT clitics in child Romanian. Although Case features are interpreted at LF, after *Spell-Out*, the child uses the available structural case ACC form. The syntactic knowledge is there, and by using the default form in obligatory contexts, the constituents move for feature checking and matching. The use of *default* structures can be explained as structural abstract ACC features are very strong and precede NOM and DAT case features. They are used as default structures, formulaic or not, even at 1;05, as attested by the data selected from the M-corpus. In light of such results, the prediction is that case, and the acquisition of Case features in L1 child Romanian is asymmetric and imposes a hierarchic

order in the acquisition, according to the visibility conditions at PF. Although *v*P licencing occurs before probing abstract Case features against CP or (TP), the default forms used are ACC. They are available at this stage, as opposed to DAT features, which are assumed to not be available for PF mapping at first. One way of explaining it would be by gradual emergence, illustrated in the examples below. Based on the empirical data results, stages are not equal in L1A; some structures are recurrent even at 3;05 and 3;10 (see the T-corpus and A-corpus) and are attested even after the emergence of conditional Mood. Conclusively, a possible interpretation would be that case, and *phi*-features require heavier computation, and the morphological component is essential at the interface level.

(83) CHI: **La mine** **nu** **m-** **ar** **p(l)ăcea** sub pat.
CL.1SG.ACC NEG CL.1SG.ACC AUX like.3SG under bed
'Me wouldn't like it under the bed.' (T. 2;11)

(84) CHI: **Ne-a** **tlecut** și ***la mine** ***înecătula** și ***la tine**
CL.1PL.ACC AUX PART.PAST and to CL.1SG.ACC choking.the and to CL.2SG.ACC
'Both your choking and mine passed.' (T. 2;10)

Several examples have been identified for using 2nd person and 1st and 2nd person mismatches, which could be associated with overgeneralisation at this point.

(85) CHI: Uite că ***te** dau alea cu P.
look CONJ CL.2SG.ACC give.PRES.1SG this.F.PL with P.
'Look, I will give those with P.'
MOM: Nu cred că mai sunt acțipilde acolo.
'I don't think there are stickers there.' (O. 2;4)

(86) CHI: ***Te** **da** ție.
CL.2SG.ACC give.INF CL.2SG.DAT
'To give you.'
MOM: Mi-l dai mie? Mulțumesc.
'You're giving it to me? Thank you.' (O. 2;4)

(87) CHI**:** ***Te aduc** o mașină.
CL.2SG.ACC bring.1SG car.a
'I will bring you a car' (T. 2;10)

(88) CHI: Da **pot** **să** ***te** **uit** ce la mână.
yes can.1SG SBJV CL.2SG look.1SG what [have.PRES.2SG] at hand.
'But can I look at your hand?'
MOM: La mână poți.
at hand can.PRES.2SG
'At my hand you can.' (T. 2;11)

Syntactically, the derivation is sound, but the morphological complexity is not visible and transferred at PF. By taking a closer look at the data, one can see that children operate with complex structures, (89) and (90), present evidence of standard forms. Still, they use ACC default structures in licensing derivation, while in other cases, and structures used in a target-like manner, reflecting a high degree of variability among children acquiring Romanian as L1.

(89) CHI: ***S-** **o** **levenit**.
CL.REFL.2SG.ACC AUX workPART.PAST
'It got to work again.'
MOM: Și- o revenit? Ce s- o revenit?
CL.REFL.2SG.DAT AUX PART.PAST what CL.REFL.2SG.DAT AUX PART.PAST
'It got to work again? What got to work again?' (T. 2;11)

(90) CHI: Că să te fac pe tine **să ți** **se** **ducă**.
CONJ SBJV CL.2SG.ACC make.1SG PE CL.2SG.ACC SBJV CL.2SG.DAT CL.2SG.ACC go.3SG
'That I make you so that it goes away.' (O. 2;04)

The use of 1st person clitics proves to have an extensive range, from the first surfacing structures in the M-corpus (1;06) until the LMWS in the T-corpus at 3;05 in the A-corpus at 3,10. Based on the results registered, one prediction is that case asymmetries are supported by the developmental stages marked in children. The children don't *Spell-Out* the DAT features at the phonological level (Halle, M. & A. Marantz, 1993).[46]

[46] After licensing derivation at syntactic level, the morphological elements with their specific phonetic manifestation become visible.

The functional aspect of case licensing in the case of hierarchies plays an important role, as the case has been represented hierarchically with syntactic and morphological argumentation. Pavel Caha's proposal of a universal, highly functional, and abstract case hierarchy is relevant to associate theoretical premises to the empirical data registered. Such an approach to cases, case syncretism, and the relationship between syntax and morphology aim to explain all the possible rankings in particular languages. In light of such a view, the author proposed a linear approach to the case with its specificity at the morphological level (see syncretism in languages, Romanian being a highly inflected language with syncretic forms as reflected in *Chapter 5*). The generalisation proposed by Caha presupposes an underlying functional sequence NOM<ACC<GEN<DAT<INS<COM, continuing in the line suggested by Kayne's linearity (Kayne 1994) and Chomsky's derivation (Chomsky 1995) with differences in manifestation from one language to another (Caha 2009). Each Case feature is merged to the specific case in binary derivation. As a result of the functional merger of the case with its general feature assigned, we see the resulting asymmetries in the hierarchy of Cases. Such asymmetries in the hierarchy are seen as universal and contiguous and could explain the stages of acquisition in child Romanian.

Moreover, Romanian has a DAT-GEN syncretism which could be further investigated, and a possible explanation to the use of ACC forms at specific stages could be explained this way. The author hypothesised a highly functional case syncretism and associated syncretic case features with syntactic structures, identifying morphology with syntax from an operating point of view. In establishing hierarchies and looking at cases as sets with specific Case features, each entry in the derivation is associated with the *Elsewhere Condition* (Halle, Marantz 1993)[47] and the distributed morphology proposal (Kiparsky 1973). The author assumes that features are syncretic in the case of neighbours, which would explain, from a universal perspective, the functional character of GEN-DAT

[47] Subset principles and distributed morphology.

syncretism in Romanian. The branching of cases is influenced structurally by the neighbours. It is reflected at the morphological level in derivation, explaining case hierarchy, syntactic complexity, and possibly why the child uses default structures to represent case features. The core structural cases are the NOM and ACC, while GEN and DAT are associated with syncretic morphological features which set them apart. Pavel Caha proposed a recipe for Universal Contiguity, which, following an MP proposal of a Probe-Goal relation (Chomsky 1995), associates cases with their "atomic" features via Merge. As a result of the merger, the transition of the syntactic object from ordered pairs to asymmetric ordered sets or sub-sets are sequenced hierarchically in a functional manner, and more importantly, at transfer to *Spell-Out*, *Elsewhere Condition* must be contained or included (Caha 2009). To sum up, stages of acquisition could be associated with hierarchies and asymmetries in the functional sequencing of cases, and one such proposal was presented in this section.

6.2. Causative alternations in child Romanian

In what follows, the analysis shifts towards the tendency in children to use specific patterns and overgeneralise. One such case is the use of causatives in child speech, as attested in EMWS. The alternations selected from the empirical data support previously made claims in the literature. The semantic representations and the valuation of theta roles in building the argument structures of the verbs play an essential role in interpreting causatives in child Romanian. It is accepted that such alternations are deeply rooted in the child's ability to build arguments at the structural level. Such structures must be interpreted at PF and LF and licenced in the *v*P, the *light* verb phase. The elements that enter derivation must check their syntactic features against the heads that attract them. As mentioned in *Section 6.1,* acquiring argument structures in the *v*P is not that easy for children as complex operations are involved. The alleged errors or the

non-adult forms children generate in these specific contexts are associated with theta-roles and syntactic feature checking (Chomsky 1995). In parsing, children gain knowledge of the argument structures and the syntactic operations in *v* due to specific brain mechanisms and patterning (Chomsky 1995). In line with such generalisations and (over)extensions at particular stages, after reaching full competence in using transitive verbs in speech, children tend to overgeneralise by selecting CAUSE and applying it to intransitive verbs. For a short period, it becomes a feature explaining transitivity and intransitivity in derivation, and the thematic feature of the verb is checked internally or externally. In conclusion, in the acquisition of transitivity, with its alternations, such stages are attested in languages. Supported by arguments mentioned in previous sections, computation is sound, but children tend to overgeneralise in applying the syntactic rules.

Going back to the theoretical roots of such mechanisms, in the acquisition of argument structures in L1, two interpretations are mentioned, the first, proposing semantic bootstrapping, assumed that semantics supersedes syntax (Pinker 1984), while the second posited that syntax should be the priority in representation (Borer 2004).[48] The examples section present how semantic interpretation works in children and are associated with a specific class of verbs, the event or state class of verbs, which associate meaning with CAUSE (Bowerman 1974, Pinker 1984). In particular, one such verb is *kill* 'cause die', which is selected in the present analysis. As evidenced by the data, there are lexical entries 'a *omorî*' [kill] and 'a *muri*' [die]. In English, as shown during the early stages, children use both transitive causatives and intransitive non-causatives. Similar patterns are observed in child Romanian, but limited evidence should further investigate the phenomenon. Examples (118) and (119) point out how the child uses the verbs in the case of transitive causative semantic contexts, overgeneralising instead of using them in

[48] Syntactic bootstrapping would argue in favour of semantic meaning inferred from the syntactic contexts generated, her approach was extremely limited and deterministic and did not get the needed support by the empirical data analysis.

intransitive, inchoative contexts. The members selected to express the same meaning associated with Cause. According to the authors, the explanation could be that meaning can be defined in a specific way by using transitive verbs and by acknowledging such rules in derivation. As such, by using an intransitive verb in a transitive form, the child automatically adds CAUSE to the lexical entry proving representational ability at the syntactic and semantic level.

The qualitative samples for child Romanian contribute to a cross-linguistic approach to causative alternations. The assumption is that at specific stages in the acquisition process, the children tend to produce non-target structures, which need an explanation at the representational level in the LF, with predicted intermediary stages before reaching the adequate PF representation. The spontaneous data gathered from the corpora is somewhat restrictive, and the onset of such forms is assumed to be occurring during the EMWS. Pinker's approach to causative alternations focused on the tendency to overgeneralise paradigm structures and cell split at different representational levels to explain how such constraints would work on causative alternations. It is difficult to say why and how these overgeneralisations stop. The theoretical model explains causative alternation in terms of overgeneralisation and overextension. A relevant example we collected from the empirical data is the verb *'a muri'* [die] used in transitive contexts instead of 'a *omorî'* [kill]. In addition, the use of the alternate form as an innovative approach was associated with the "uniqueness rule" (Wexler, Culicover 1980). However, such explanations do not satisfy all the contexts since there are verbs without an alternate lexical entry. This account brings strong arguments towards a nativist approach to acquiring causative alternations. The empiricist proposals cannot explain how children can reach target-like structures without constant feedback from caregivers.

(91) CHI: He's going to die you, David. The tiger will come and eat David, and then he will be died, and I won't have a little brother anymore.
(92) CHI: Always sweats me. (makes me sweat)
(93) CHI: This is aching my legs. (makes my legs ache)

(94) CHI: Enough to wish me one of those beds. (to make me wish for)
(Bowerman 1982, *apud* Goodluck 1991, p. 53)

(95) GRA: Am murit.
AUX.1SG die.PAST.PART
'I have died.'
CHI 1: Ai murit-o.
AUX.2SG die.PAST.PART-CL.3SG.F.ACC
'You have died her.'
CHI 2: Ba n- am omorât- o, doar nu mai am gloanțe.
NEG NEG- AUX.1SG kill.PAST.PART CL.3SG.F.ACC, as NEG INT have.PRES.1SG bullets.
I didn't kill her, for I don't have any bullets left. (T. 2;11)

(96) CHI: Mami, mami, a murit- o pe furnică!
mommy mommy AUX.3SG die.PAST.PART CL.3SG.F.ACC. PE ant.
'Mommy, mommy, he has died the ant.' (T. 2;11)

The verb 'a muri' [die] was used as causative and consequently adopted the behaviour of a transitive verb, semantically and syntactically. In this sense, the roles are Agent or Cause and Theme. Hence, operation Move is complex and challenging to explain representations in the LF and PF with the elements that enter derivation. Moreover, target languages have the role of control, but early grammars provide great insight into the general underpinning mechanisms which make possible language-specific structures. A strong nativist approach to causatives and their acquisition was proposed (Pinker 2007).[49] The use of causative alternation is a mere stage, and children reach target-like structures without the need for corrective feedback from caregivers. It is argued that such forms could not be learned via positive evidence (see *Chapter 2*).

[49] The examples provided in this section are examples of causative alternations in LA as Bauerman observed her daughters and some other children involved in her studies, however, her theoretical approach has shortcomings for it does not bring adequate explanation to the specific constraints at syntactic and semantic level that would shed more light onto the acquisition of causative alternations. She did propose some solutions for the tension between the semantic and the syntactic features in order to explain cause in relation with intransitivity.

To add valuable information to the present analysis, the behaviour of clitics becomes relevant in the case of Romance languages and some Slavic languages in explaining causatives and supporting the transfer from transitive to intransitive structures. The problem with establishing a unifying account is found in the conceptualisation of the lexical entries, as the meaning can be different in languages. In the acquisition process, the first signs of such alternations in languages were associated with overextension of Causative patterns to intransitive. In the corpora, only limited data were attested on intransitive verbs supporting overgeneralisation claims during the early stages of acquisition (Braine et al., 1990).[50] Causatives have been associated with passive structures, and hybrid forms surfaced early in speech productions.

(97) CHI: Aicea e ***E**. ***dormită**.
here be.PRES.3SG E. sleep.PAST.PART.F.SG
'Here is E, slept.' (E.3;0)

(98) CHI: ***M-** **am** **picat** casa. E ră(s)tunată.
NEG. CL.1SG.ACC AUX.1SG fallPART.PAST house.DEF. bePRES.3SG tilted
Not you. I fell my house. Is tilted up-side down.' (T.2;11)

(99) MOM: Ai plâns?
'You have cried?
CHI: Am p(l)âns.
AUX.1SG cry.PAST.PART
MOM: Tare?
'Hard?
CHI: Taie, taie. ***A** **p(l)âns** taie taie ***pe** **ujică**.
'hard, hard. AUX cry.PAST.PART hard hard PE nettle.'
'Hard, hard. I cried hard on the nettle.
MOM: Pe urzică. Te mai doare mânuța?
'On the nettle. Your hand still hurts?' (B. 2;06)

(100) CHI: De ce nu ***te-** **ai** **mels**?
why NEG CL.2SG.ACC AUX.2SG go.PART.PAST
'Why you didn't go? (T. 2;11)

[50] He ran elicited production tests to see how children overgeneralized and used causative alternations in using verbs transitively and reached the conclusion that a third of his subjects overgeneralized the transitive verbs in new contexts.

With the examples above, a developmental connection is assumed between the surfacing of clitics in the PF and the manifestation of causative alternations in speech productions in child Romanian. It might be associated with the specificity of the surfacing copies in derivation. The following section presents the syntactic accounts that could better understand the sequencing in acquisition related to complex operations and specific structures requiring heavier computation.

6.2.1. Empirical data, Copy Theory, and the Inclusiveness Condition

The *Inclusiveness Condition (IC)* imposes that during the minimalist phases of derivation, the lexical items selected via Numeration enter derivation with their specific features checked, without altering effects or additions in derivation. Under the derivational economy proposal, the structure starts with a particular numeration, which is limited and must converge; moreover, the structure crashes if the conditions are not met (Chomsky 1995). This condition eliminates unwanted problems generated by traces in previous accounts compared with previous syntactic models. Therefore, the architecture of the underlying mechanisms is simplified and offers valuable and elegant instruments in explaining language mechanisms at the two levels of representation. Under the MP account, traces are replaced by copies deleted in derivation, helping avoid a memory workload. Given the examples of clitics surfacing in child Romanian, the assumption is that the semantic interpretation and the phonetic manifestation do not necessarily have to coincide position-wise in the structure. Only one copy is realised in the deletion process at the PF level, and empirical data will reflect which copy is mapped at the interface representational level.

The copy movement became a key MP component associated with deletion under an economic principle from a minimalist perspective. The elements move to higher positions in the syntactic structures but leave a copy behind; the theory of copy in the movement (Chomsky 1933) was meant to confer simplicity in the derivation process. Notably, copies are

deleted during movement to license a structure, and the interpretation is yielded at the semantic level. Under the new account, movement cannot violate the necessary conditions and optimality is reached at the computational level. Under the copy theory, only one copy will be spelt out at the phonological level, fostering, this way, optimisation of processing at the structural level. However, multiple copies could be left behind and deleted, satisfying the interface conditions. As mentioned in *Chapter 4* and *Chapter 5*, Chomsky proposed a phase level to language processing (Nissenbaum 2000, Chomsky 2008) and explained overt or covert movement in terms of precedence of movement to interface *Transfer*. To continue, if the merger occurs before the *transfer* to the interface level, it is overt. Still, if the operation Merge occurs after interface level *Transfer*, the movement is covert (Chomsky 2005b).[51] Copies are distributed hierarchically; if interpretation in the LF occurs at different levels of representation, in the PF, only the copy that reaches the highest position after being checked against heads is realised. The syntactic representations and the role of the copies in the internal structure of the language have been addressed. In some languages, lower copies in the structure can have phonetic realisation in the PF, associating the interpretation in the interpretation LF with the one at the PF level. As such, the spell-out will be at lower copy with covert movement, while there is a delay with overt movement. Based on general principles and conditions, Operation Move offers more insight into how language is generated and how specific features are mapped in the case of particular language systems (Bošković 2001, Nunes 2001).

Such stipulations are relevant to our research, especially in the case of clitics and their interpretation at the PF and LF levels. They support the idea that the phonetic component pertains to phonology rather than syntax and the interpretation of data goes beyond trace theory. The empirical data supported the association of the interpretative process in

[51] The author posits that such minimal exceptions do not affect the optimality of the system.

the PF with the LF, as lower copies can be realised in the PF. Not necessarily the highest copy in the structure would be mapped, and Romanian provides examples supporting the assumptions. It is relevant for the present research that the new minimalist approach to language processing already registers results both at the LF and PF levels of representation. Romanian causative alternations and other minimalist implications such as the *Pronounce Lower Copy* (PLC) of the minimalist *Copy Theory* of movement and its underpinnings at representational levels are relevant in finding a unifying account (Corver and Nunes 2007, Bošković 2002).[52] Of importance in building our argument in associating syntactic complexity with stages of acquisition is the assumption regarding the role of clitics in syntax (Bošković 2001, Bošković 2002, Nunes 1999, Nunes 2004). As a general rule, clitics in Romanian undergo a weakening or contraction process when placed before the auxiliary, but not before the main verb. In acquiring L1 Romanian, children use these weakened clitics correctly, and there is no evidence of them using forms that would not undergo syllabic contraction.

To continue, children would never use such forms in spoken utterances, and this is another syntactic argument supporting a continuity theory of L1A. As reflected in the early acquisition of clitics, the accusative clitics singular feminine 'o' has specific behaviour in Romanian. The analysis of spontaneous speech productions determined any asymmetries in acquiring 3rd person singular clitics in child Romanian. The assumption was that the clitic 'o' in Romanian lacks the function of other clitics when placed proclitically. As such, the mechanism was explained via copy theory. Therefore, in derivation, PF's legitimacy can be attested with the lower copy of 'o' in the auxiliary-participle constructions (Ticio and Avram 2015).

[52] The way copy theory moved from trace with its realizations in the LF but chiefly in PF in different languages was analysed we selected our examples from this book. One of the aspects addressed in the case of Romanian was syntactic and phonological analysis on PLC coming from *wh*-fronting in Romanian and the representations in the PF.

As such, the deleted member will be the one in the head position, while a lower member in the structure survives deletion. Hence, there is a need for clitic weakening, but such a position is not accepted in the case of the ACC clitic. As a result, the copy placed in the highest position is deleted, while the lower copy survives deletion. The copy theory contributed significantly to interpreting empirical data following economy, simplicity, and elegance. It offered significant evidence cross-linguistically to licensing possibilities at the PF level in the case of inner processes. One such process in Romanian is the clitic weakening, which allows for lower copies to be realised at PF level and, consequently, survives the deletion process. To sum up, such mechanisms have complex mappings at different developmental stages in L1 Romanian.

6.3. Conclusions

To sum up, the chapter started with a brief description of Case Theory in Chomsky's terms (Chomsky 1981a). It continued with analysing the acquisition of Case features in child Romanian. The purpose was to illustrate how children transition from *default* ACC forms in derivation to target-like DAT forms. The empirical data support the theoretical accounts, and the interpretation was minimalist, insisting upon the role played by the *v*P phase in derivation. It continued with the presentation of asymmetries and case hierarchies coming from the domain of nanosyntax. The new theoretical developments paired with the ever-increasing database of particular languages have shown endless potential for the investigative field. Conceptual infrastructure is a condition for linguistic development in languages. Specific phenomena drew the attention of researchers in L1A, such as the recurrent patterns of causatives in English and other languages. Under universal contiguity conditions, the analysis continued with case hierarchy and asymmetries in a minimalist interpretation. The *Elsewhere Condition* (Kiparsky 1973) and the functional sequencing of cases support the assumption of the

stages observed in the analysis of the empirical data, as children select case syntactically and map it morphologically at PF, adopting a right to left movement in functional derivation. The chapter ended with some theoretical remarks on aspect and temporality as propellers towards future investigations.

Conclusions

The general purpose of the present research paper was to present some of the challenges and the key-research questions associated with the acquisition of FCs in L1. It summarised the main empirical findings registered in past and present researches in the domain of L1A in monolingual Romanian children (*Section I*), to support the empirical results and project future aspects and phenomena to be investigated longitudinally and cross-sectionally (*Section II*). In addition, the proposed corpora support the analysis, offer linguistic insight, and propel future research topics in the domain of LA (*Section III*). The most substantial arguments supporting a continuity approach to L1A were outlined in the inquiry.

The theoretical and empirical quest adopted an analytical, methodological framework based on existing qualitative and quantitative studies to support the theoretical arguments posited in *Section 1*. The results reflected the predictions. Moreover, new research opportunities emerged after a closer look at the speech productions provided by the corpora analysis. Common specific patterns were observed, explaining and describing how children acquire categorial features. Previous research findings were probed, grounding the case study analysis into the solid theoretical framework proposed by nativist generative accounts. Due to the high degree of variability from one participant to another, the qualitative research supported milestones in acquiring FCs during EMWS (Tense features in Chapter 5 and Case features in Chapter 6) and the OI/RI analogue stage in child Romanian.

The selection of qualitative data from the corpora was meant to provide a unifying account, focusing on acquiring Tense and Case features, insisting upon the relationship between syntax, semantics, and

discourse. The predictions were validated to a great extent. In addition, due to visible *intra-* and *inter-stage* variation in development, the study provided valuable data. The aim of the present research paper was clearly stated, and methodologically, the analytical approach shed light on the EMWS in L1A. The approach was, on the one hand, analytical and gradual in presenting critical models from the empiricist and nativist spectrum to get into a deeper analysis of the nativist models and their evolution and development under different generative accounts, all the way to the latest approaches proposed by the *MP* (Chomsky 1995). On the other hand, synthetic in concentrating the main arguments in favour of adopting the latest theoretical framework and arguing for economy, simplicity, and elegance in explaining syntactic mechanisms during these stages. The reasoning behind the approach stemmed from the need to compare and contrast models, focus on strengths and weaknesses, and distinguish approaches in terms of validity and feasibility in L1A.

A summary of what has been addressed in this paper is necessary to understand better the general aim from a theoretical and empirical point of view. The layout of the paper is threefold. Therefore, *Section I* is entitled *Theoretical Approaches to L1 acquisition. A descriptive framework* presents some of the main directions in LL and LA. As such, in *Chapter 1,* a comparative presentation of the main theoretical orientations is presented to emphasise the paradigmatic shift towards a new definition and description of FL from a nativist and evolutionary perspective, rather than empiricist and constructivist. The new vision is supported throughout the presentation by arguments favouring a generativist approach to L1A, as outlined in *Chapter 2*. It continued with the main syntactic models of L1A in *Chapter 3*. *Chapter 4* offered a critical and inquisitive account of the evolution of generativist models from the first models associated with GB (Chomsky 1981a) to the latest minimalist proposals (Chomsky 1993, Chomsky 1995). The approach justified the framework chosen for the analysis; the emphasis is on the impact of the syntactic models on the domain of L1A. In light of what has been stated in the beginning, *Section II,* entitled *The Analysis of the empirical data,*

proposed an analytical and critical approach in disseminating the main results provided by the qualitative empirical data. It began with a focus on acquiring Tense features in *Chapter 5* and continued with Case feature interpretability in *Chapter 6*. Last, *Section III* contains the corpora that served the empirical analysis needs, the recorded files.

It started with a general assessment of the main directions in linguistics during the 50s with implications to the domain of L1A. The most relevant directions starting with behaviourism, social-interactionism, and continuing with the cognitivist theoretical approaches, lead the main concepts associated with the nativist approach to LA; the theoretical framework adopted for the research and aligned to a minimalist inquiry into L1A. The key syntactic models correspond to data-driven structuralist and behaviourist research directions to highlight the shortcomings and the insufficiency of such models in explaining and describing the input-output relations. As showcased in *Chapter 1*, a contrastive approach makes the direction adopted and the justification of the generativist theoretical framework objective and unbiased, with strong arguments favouring nativism. In comparing and contrasting the main arguments favouring LL or LA, the core elements and the strengths and weaknesses of each model are highlighted. The input-output relation is presented in each model, the position adopted concerning *competence* and *performance*, the learning mechanisms associated with the models, the position in connection with innateness of FL, and the definition of modules, among many other aspects. The preliminary remarks trace the differences between rationalist-empiricist, social-interactionist, and nativist accounts. The purpose of the research was to support with evidence a continuity approach to L1A validated by the empirical data set against studies that adopt nativist assumptions.

In illustrating the paradigm shift, the erroneous premises in defining the input are based on imitation, reinforcement, data-driven learning, or algorithmic processes. The behaviourist and structuralist theories are deficient since there is evidence that children can generate beyond experience and the limited primary linguistic data. To better

build a strong nativist argument, some key social-interactionist, constructivist, and emergentist syntactic models were presented. Arguments were brought in favour of Piaget's contribution and legacy, both to cognitive theories and to the domain of LA, with the proposal of four stages of development associated with mental representations and conceptualisation with gradual emergence in children. To better assess, Piaget took into consideration the nature of FL as a core in nurturing language, establishing, in a way, the premises of a new theoretical approach to language. In the analysis of modularity in light of cognitive approaches to development with the proposal of theories of other minds, the elements that contributed to a clear definition of modules in generative terms were selected, taking stock of theoretical assumptions which contributed to a better description, although positioned differently from a theoretical perspective.

Chapter 2 outlines the theoretical implications and the empirical results in reflecting the innate characteristic of FL under a UG framework, stating, once more, that children do not acquire language via imitation and that the structures are generated beyond such assumptions, the *PoS* argument being the strongest so far. Moreover, adjacent arguments such as the evolution in the study of brain functions and the specific areas associated with memory, syntax, and morphology support such claims in tandem with the role critical periods play in acquisition processes, FL being a system in its own right, equipped with universal operators. From a minimalist point of view, the biological features associated with FL characterise language in optimal terms in satisfying the necessary conditions and define it as an association of sound and meaning. Such conditions are found at the interface level associated with phonetic and semantic properties of the sensory-motor (SM) system and the conceptual-intentional system (C-I) (Chosmky 1995). In distinguishing between the broad and narrow approach to FL, key elements were selected, the recursive ability to discretely generate to infinity, the autonomy of language in relation with other systems, the universal role of the operators activated in derivation, and the I-language properties, to

name a few. An important aspect associated with convergence and proper licensing in derivation during specific stages of development in L1A is that operation Merge is assumed to be the result of genetic mutation, a core property of narrow syntax, placing FL on the evolutionary spectrum together with other cognitive capacities. One relevant aspect presented in this chapter and supported by strong examples from our empirical data is associated with corrective feedback, its frequency in caregiver practices and its effect on the acquisition process. One of the closing arguments of this chapter is that, whether UG is assumed partially or entirely, with interpretations of principles and constraints and their maturation, what is generally acknowledged is that children mark specific milestones before reaching complete competence in L1, reflecting that the acquisition process is autonomous and biologically predetermined.

In *Chapter 3*, a strong continuity approach to L1A was adopted. It presented the main syntactic models designed to explain the acquisition of FCs at different stages of development to bridge the gap between the lexicon, syntax, semantics, pragmatics, and discourse properties. It is generally accepted that with the new minimalist approach, syntactic representation is understood in terms of a string concatenation, in an algebraic sense, and valuation specificity assigned to arguments. Notably, natural languages have combinatorial power, are endowed with binary operators, and this force allows for the generation of strings or sequences. In terms of succession, the derivation is understood as a finite set of sequences with predetermined sets of transformational rules. *Chapter 3* and *Chapter 4* aim to define and present the relationship between syntax and semantics from a critical perspective. FCs have received different interpretations, from complete lack of FCs during *Stage 1* and gradual emergence during *Stage 2* under weak continuity accounts, to full availability from onset under strong continuity accounts to the absence of FCs and violation of UG principles under discontinuity hypotheses to L1A. The last chapter in *Section I* makes the gradual transition into the presentation of the adopted theoretical model by

critically assessing the evolution of syntactic models in generative grammar, focusing on the aspects that became relevant for the domain of LA in terms of conceptualisation and key changes in defining FCs and LCs from an evolutionary perspective. The syntactic apparatus's core theoretical functions and instruments are described. The FCs became the computational driving force in licensing derivation. It was also posited that children are endowed with an internal language design and inner knowledge represented syntactically and semantically with mappings at interface levels as part of pre-existent developmental and biological functions. Structure building was based on recursive patterns, irrespective of how rich or poor the input is. The empirical data support such assumptions under given necessary conditions based on the stages of development, with the assumed boundaries testifying in this sense.

FL is a biological system with language-specific and general properties attributed to other systems. With a minimalist proposal of an economy-based framework, the alleged syntactic-semantic tension, which increased drastically under the *Principles & Parameters framework* of inquiry into L1A, was eased (Chomsky 1981b). As illustrated in *Chapter 4*, the problem encountered with this specific UG framework revolved around the triggers during the early stages attempting to provide a proper explanation as to why such triggers were not available or how they were delayed, accounting for availability or possible delays in processing associated with maturation at the cognitive and linguistic levels. If a satisfactory account could be developed, unifying explanatory linguistic theory. The association of particular properties with other systems became a challenge. On a positive note, the latest minimalist accounts stemmed from previous generativist models; changes proved necessary and advantageous in designing a theoretical framework under optimal conditions. Consequently, although some conceptual interpretations were dropped and others emerged, the new developments, nonetheless, proved to be germane in building a new design and revisiting the architectural foundations for the new syntactic models to work and satisfy all the necessary conditions properly.

Some of the critical transitional arguments from a *P&P* model (Chomsky 1981b) to an *MP* model (Chomsky 1995) were enumerated. Namely, parametrisation was not omitted but conceptually and formally redefined in terms of how constraints would be interpreted. The semantic-syntactic interface was redesigned and narrowed down from a representational point of view and pragmatic discursive factors, among other elements, became relevant in the new model. The syntactic operations were reduced and assumed to be activated by the feature values associated with heads, the model being scrutinised to meet the economy and optimality conditions. Feature interpretability was understood in terms of checking and matching driven by the forces of attraction via movement to higher positions. The architectural design proposed phases and cycles obeying SMT (Chomsky 2005b) and PIC (Chomsky 2001a). To sum up, the new and improved program contributed to redesigning FL from an evolutionary perspective, in a broad sense and narrow sense. It readdressed its role among other human systems, generally speaking, with innate manifestations within, in the form of S-M and C-I, with the two core-elements, phonetic and logical (Chomsky 1995).

Following in the line of the theoretical aspects presented in Chapter 4, the minimalist principles, such as economy, simplicity, and elegance, reflected how they impact the processes of L1A in describing specific stages based on the productions of monolingual Romanian children. As such, the proposal of limited computation with cost-efficient free of charge operations obeying economy conditions, interpretation at the interface level should be satisfactory. If children operate only under necessary conditions with the instruments available at specific stages of development, many problems associated with interface level vulnerabilities could be solved. As such, the child is assumed to be equipped, in a principled way, with the ability to delay or procrastinate. From an evolutionary point of view, movement as an innate operator is activated as a *Last Resort* during the early stages of development. Children address locality according to the new phase approach to

derivation and economise by deleting unnecessary copies under minimality conditions (Chomsky 2008). *Section II* presents the latest theoretical accounts and contributions made to the domain of L1A. After processing the limitations of each theoretical model, a better understanding of the learning mechanisms available to the child was reached and the evolution in interpretation throughout the developmental stages, starting with the onset of acquisition. The case studies presented in *Section II, Chapter 5* and *Chapter 6* were concentrated on key empirical data analysed in a minimalist key, but with a critical approach in interpretation.

A briefing on the main research questions regarding the emergence and the specificity of L1A in child Romanian was paired with some of the key research findings to delineate a satisfactory theoretical and empirical account. The empirical data analysed and the critical conclusions selected in *Section II* are valued and relevant to the research domain. The implications have multiple facets. On one side, examples supporting previous assumptions were provided, regarding the stages of development in child Romanian, chiefly the accounts regarding an *OI*/*RI* analogue stage. On the other side, evidence favouring possible orders of acquisition of functional features was proposed. By observing similar patterns in the participants, the activated syntactic and semantic mechanisms could be explained from the perspective of a continuity hypothesis to L1A. Consequently, the contribution makes a difference and will propel future inquiries into this challenging and rewarding research domain.

To be more specific, the investigative process led to some salient conclusions, which led to proposing specific means of hierarchical ordering and sequencing determined by the observed asymmetries, with the necessary theoretical and empirical support. The research findings recorded in *Chapter 5* and *Chapter 6* attest to milestones children mark and specific sequences registered in the participants after the emergence of particular functions, such as mood markers, when merger and movement meet the necessary conditions in licensing derivation. As a result, the

child uses default structures to solve licensing problems. The most revelatory examples are associated with feature interpretability and the complexity of computation in mapping at the interface level, *u*F such as /+/- person/ after the emergence of the subjunctive Mood marker, as well as the associative patterning in Tense features, *realis* and *irrealis,* visibility at PF via *Transfer* being conditioned by how abstract are some of these features.

In addition, in *Chapter 6*, hierarchies and asymmetries were signalled by the empirical data, with uniformity in terms of manifestation in participants and following the proposals coming from the domain of nanosyntax, the universality of Cases in languages was explained functionally, in a binary asymmetric ordering, with the underlying features triggering hierarchic assumptions and receiving explanation and optimal description at morphological level, we refer here to paradigm specificity and Case syncretism. As a result, the outcomes of this investigative process were critical and revelatory at the same time, as they shed light on the predictions made, offered material for future research endeavours, and supported previous claims made in the literature. The empirical results illustrated in *Section II* support a minimalist theoretical account and a continuity hypothesis to L1A.

To conclude, the approach was critical and inquisitive in backwards designing the theoretical model as it could be observed, in the end, the data provided beyond the predictions made. The research findings bring quality to the domain, which is highly relevant, and support the initial predictions; thus, future endeavours could be pursued to build upon existing accounts. The empirical data selected and analysed in this thesis are relevant and satisfactory. The adopted approach was analytical and was supported by valuable examples selected from the corpora. There were unexpected insights, which contributed to generalising and confer universal character to some of the research findings.

Annexes

Annex 1

Abbreviations

1	first person
2	second person
3	third person
ADJ	adjective
ADV	adverbial
ART	article
AUX	auxiliary
CAUS	causative
COMP	complementizer
COND	conditional
REFL	reflexive
CL	pronominal clitic
SBJV	subjunctive
INF	infinitive
IMPERF	imperfect
PL	plural
SG	singular
NOM	Nominative case
ACC	Accusative case
DAT	Dative case
GEN	Genitive case
M	masculine
F	feminine
N	neuter
PART	participle
PAST	past
PE	prepositiom for ACC/DO
PRES	present
IMP	imperative
NEG	negation, negative
PST	past
PTCP	participle
TR	transitive
INTR	intransitive

Annex 2

Negative feedback – arguments towards a nativist approach

- CHI: Nu, eu pun. ***Mă dai*** două poltocale după ce io când beau tot?
  'No, I put it. Can you **give me*** ACC.1SG two oranges after I when I drink everything?'
  MOM: **Îmi** dai două portocale.
  'Can you give **me**ACC.1SG'
  CHI: Da.
  'Yes.'
  MOM: Zi și tu. Îmi dai două portocale.
  'Say. Can you give me DAT.1SG two oranges.'
  CHI: ***Mă dai** două poltocale.
  me* ACC.1SG **give.** PRES.2SG two oranges.
  MOM: Îmi dai două portocale.
  'Can you give me two oranges.'
  CHI: ***Mă dai** două poltocale.
  me* ACC.1SG **give** two oranges.
  MOM: Îmi dai două portocale.
  'Can you give me two oranges.'
  CHI: ***Mă dai** două poltocale.
  me* ACC.1SG **give** two oranges.
  MOM: Îmi dai.
  'Can you give me.'
  CHI: *__Mă dai__ două poltocale.
  'me* ACC.1SG **give** me două portocale.'
  MOM: Zi îmi.
  Say me.DAT.1SG.
  CHI: **Îmi**
  meDAT.1SG
  MOM: Acuma zi îmi dai.
  'Now say me DAT.1SG give.
  CHI**:** **Îmi** dai.
  give me DAT.1SG.
  MOM: Și acum zi îmi dai dou portocale.
  'And now say give me DAT.1SG two oranges.'
  CHI: ***Mă** dai două poltocale.
  'Me. *ACC.1SG give two oranges.'
  MOM: Nu mă dai două portocale, T.! Îmi dai două portocale
  'Not give me*ACC.1SG more oranges, T. Give me DAT.1SG two oranges.'
  CHI**:** ***Mă** dai două poltocale.

'me.*ACC.1SG give two oranges.'
MOM: **Îmi** dai.
'Give **me**DAT.1SG.'
CHI: Nu, vleau multe poltocale.
'No, I want many oranges.'
MOM: Vrei multe portocale? Bine. Nu te mai stresez. Bea suc.
'Do you want many oranges? Fine. I won't stress you. Drink juice.'
(T. 2;11)

- CHI: Da eu, **da** ***la mine** ***mă** p(l)ace sucul.
yes I but to CL.*ACC1SG CL.*ACC1SG like.3SG juice.the
'Yes I, me me like juice.'
MOM: Mie îmi place sucul
CL.DAT.1SG CL.DAT.1SG like.3SG juice.the
'I like juice.'
CHI: **Mie** ***mă** p(l)ace sucul.
CL.DAT.1SG CL.ACC1SG like.3SG juice.the
'I me like juice.'
MOM: Nu mie *mă place, ci mie îmi place.
NEG meCL.DAT.1SG CL .meACC1SG like.3SG but meCL.DAT.1SG meCL.DAT.1SG like.3SG
'Not me like, but I like.'
CHI: **Mie** ***mă-** **mi** p(l)ace.
meCL.DAT.1SG meCL. *ACC1SG meCL.DAT.1SG like.3SG
'I me I like.'
MOM: No bine. Ușor, ce se întâmplă aicea mie nu-mi place.
'Well. Easy, I don't like what is going on here.'
CHI: De ce ai spus **mie** **nu *mă** p(l)ace.
Why did you say meDAT.1SG not me*ACC.1SG like3SG.'
'Why did you say I me don't like?'
MOM: Nu mie *mă place, mie nu- mi plac.
'NEG meDAT.1SG me*ACC.1SG like, meDAT.1SG not meDAT.1SG like.'
'Not I me like, I don't like.' (T. 2;11)

- CHI: ***Mă** **dai** apă?
CL.1SG. *ACC give.PRES.2SG water
'Can you give meACC water?'
MOT: Nu mă dai apă, T, îmi dai apă!
NEG CL.1SG. *ACC give.PRES.2SG water T. CL.1SG.DAT give.PRES.2SG water
'Not can you give meACC water, T., can you give meDAT water!'
CHI: ***La mine** ***mă** dai apă!
to CL.1SG. *ACC.CL.1SG. *ACC give.PRES.2SG water
'To meACC give meACC water!'

MOT: *La mine! *La mine! Mie îmi dai apă?
to CL.1SG.*ACC to CL.1SG.*ACC CL.1SG.DAT CL.1SG.DAT give.PRES.2SG water
To me*ACC! To me*ACC! Give (meDAT) water to meDAT?
CHI: ***La mine** ***mă** dai apă?
to CL.1SG.*ACC CL.1SG. *ACC give.PRES.2SG water
'To meACC give meACC water?'
MOT: Nu *la mine *mă dai apă.
NEG to CL.1SG. *ACC.CL.1SG. give.PRES.2SG water
'Not to meACC give meACC water.'
Mie, zi mie, numai cuvântul, mie, încearcă,
CL.1SG.DAT say CL.1SG.DAT only the word CL.1SG.DAT try
'MeDAT, say meDAT, only the word meDAT, try.'
CHI: Miau.
'Meow.'
MOT: Nu, miau, mie, îmi dai apă?
not meow, CL.1SG.DAT CL.1SG.DAT give.PRES.2SG water
'Not meow, meDAT, give (meDAT) water to meDAT?'
CHI: Miau! Uau, uau!
'Meow! Wow! Wow!'
MOT: Bine, cum vrei tu. Cum zici îmi dai apă?
ok as you wish how do you say CL.1SG.DAT give.PRES.2SG water
'OK, as you wish. How do you say give meDAT water?'
CHI: ***Mă** **dai** suc.
CL.1SG. *ACC give.PRES.2SG juice
'Give meACC juice.' (T. 2;11)

- CHI: Tai lemnele cu ***ștuba.**
'I cut the wood with ***tainsaw.the'**
MOM: Cu drujba.
'With the chainsaw.'
CHI: **Cu *ștuba.**
'With ***shainsaw.the**.'
MOM: Nu, drujba, drujba.
'No. With the chainsaw.'
CHI: ***Gujba.**
'***Sainsaw.the'**
MOM: Drujba.
'Chainsaw.'
CHI: ***Ștuba, *șuba** să ***tau** lemnele.
'***Shainsaw.the**, shainsaw.the **to *cut** wood.the.'
MOM: Ce face tata, M.?
'What is daddy doing with M.?'

CHI: M., v(r)eau o ***stubă** mai male ca și tati. Înțeles, mami?
'M., I want a bigger shainsaw like dady. [AUX] **understand.**PAST.PART mommy?'
MOM: Înțeleg măi băiatule.
'I undestarnd, boy.'
CHI: Eu cu ***ștubă**. Eu am o ***ștubă** mai mică, vezi xxx. **La *ștuba** mea te taie.
'I with a ***shainsaw.** I have a smaller ***shainsaw,** see xxx. To my ***shainsaw** cuts you.' (A. 3;06)

Annex 3

T-CORPUS

- Poate el să se joace.
  can.PRES.3SG CL.3SG.M.NOM SUBJV CL.REFL.3SG.ACC play.3SG
  'He can play.' (T. 3;5)

- **O să *cânt** la mulți ani oamenii.
  AUX SUBJV sing*1SG to many years people.the
  'The people will sing happy birthday.' (T. 3;5)

- Acuma se rupe acolo, trebuie **să *stă** în față.
  now CL.REFL.3SG.ACC break3SG there must.3SG SUBJV sit*3SG in front
  'Noe it breaks there, he must sit in front.' (T. 3;5)

- Care-s cumințI ***intru** pe (s)cenă aici și **cânt.**
  who-be3SG nice3PL.M enter*PRES1SG on stage here and singPRES1SG
  'The nice ones enter the stage and sing.' (T. 3;5)

- Am vrut să cad. **Să *fiu** atenți.
  AUX PAST.PART SBJV fall.1SG SBJV be*1SG attentive.3PL.M
  'I wanted to fall to pay attention.' (T. 3;5)

- **o să le*** **duc** la nenea **să le *ia.**
  AUX SBJV CL.3PL.DAT.F take*1SG to mister SBJV CL.3PL.F take.3SG
  'I will take them afterwards to that mister to take them.' (T. 3;5)

- (S)cooby Doo **nu vlea să *lămâne** acolo.
  (S)cooby Doo.NOM NEG want.PRES.3SG SBJV stay*3SG there
  'Scooby Doo doesn't want to stay there' (T. 2;11)

- Să vezi ce începe **să se *duce** masina asta.
  SBJV see.2SG what start.PRES.3SG SBJV CL.REFL.3SG go*3SG car.the this.
  'You will see how this car starts to go' (T. 2;11)

- Pe acolo **o să *merg** mașinile.
  on there AUX SBJV go*1SG car.PL.the
  'The cars will go that way.' (T. 2;11)

- Dacă fac cu unghia, dacă ***da jos** **do(a)le**
  if do.PRES.1SG with nail if take*INF down hurt.PRES.3SG
  'If I do it with my nail, if I take down it hurts' (T. 2;10)

- Dacă sunt eu mic **o să aducă** mami lego.
  if be.1SG CL.1SG.NOM small.1SG.M AUX SBJV bring.3SG mommy lego.
  'If I am small mommy will bring lego' (T. 2;11)

- După aia **că să aducă** mami lego.
  afterwards COMP SBJV bring.3SG mommy lego
  'Afterwards mommy has to bring lego.' (T.2;11)

- Numai doi Gummo au fost **să** ***pocționeze**, (ș)tii?
  only two Gummo.NOM AUX PART.PAST.3SG. SBJV nonsense.3PL know*PRES.2SG
  'Only two Gummos left to poctionate, you know?' (T. 2;11)

- Da. **Ea să ascute *la mami** și tati și T.
  yes. CL.3SG.F SBJV listen.3SG *to mom and dad and T.
  'Yes. She has to listen to mom and dad and T.' (T. 2;11)

- Da. Să **o să mă *scote** ăstea doi.
  yes. SBJV AUX SBJV CL.1SG.ACC take*3SG this.3PL.F two.M
  'Yes. These two I will take out.' (T. 2;11)

- **Tebuia să *vie** pompielii.
  have to.IMP.3SG SBJV come*3SG. fireman.PL.M.the
  'The firemen had to come.' (T. 2;11)

- Da(r) **eu v(r)eau să *st(r)ică** cineva lego.
  but CL.1SG.NOM want.PRES.1SG SBJV break*3SG someone lego
  'But I want someone to break the lego.' (T. 2;11)

- O țin **ca să nu *lămâne** (l)a mine acasă.
  CL.3SG.F hold.PRES.1SG COMP SBJV NEG leave*3SG at CL.1SG.ACC home.
  'I hold it not to leave it at my house.' (T. 2;11)

- CHI: T(r)eb(ui)e **să *lămân** leci.
  must.PRES.3SG SBJV stay*1SG cold
  'They must stay cold.'
  MOM: Să *rămân reci? Să rămână.
  SBJV stay*1SG cold SBJV stay.3PL
  CHI: **Să lămână** leci.
  SBJV stay.3PL
  'To stay cold.' (T. 2;11)

- Dacă nu mai mușcă, **trebuie să *ară** șase ani.
  if NEG INT bite.PRES3SG. must.PRES.3SG SBJV have*3SG six year.PL
  'If he doesn't bite anymore he must be six years old.' (T.3;04)

- **Trebuie să *stă** în față.
  must.PRES.3SG SBJV stand*3SG.IND in front
  'Now it breaks there he must stand in front.' (T. 3;05)

- Și t(r)ebuia să ***melg** cu mine acasă.
  And have.IMP.3SG. SBJV go*1SG with CL.1SGACC home.
  'And he had to go with me home' (T. 2;11)

- Așa tebuia să cânt **ca să a(s)cu(l)te** mama
  so have to.IMP.3SG. SBJV sing.1SG COMP SBJV listen.3SG mom.the
  'That's how I had to sing for mom to listen to what it is.' (T. 2;11)

- O țin ca **să nu *lămâne** în buzulan.
  CL.3SG.F hold.1SG COMP SBJV NEG leave*3SG in pocket.
  'I hold in do I won't leave it in the pocket.' (T. 2;11)

- Cum **o să *merge** tu.
  how AUX SBJV go*3SG CL.2SG.NOM
  'How will you go' (T. 2;11)

- Dar trebuia **să *vine** apa.
  but have to.IMP.3SG. SBJV come*3SG water
  'But the water had to come' (T.2;10)

- **Vrea să palcheze** în față.
  want.3SG SBJV park.3SG in front.
  'He doesn't want to park in front.' (T.2;10)

- ***Nu să vină.** **Nu vleau să vină** unchiu Goghi.
  NEG SBJV come 3SG. NEG want1SG SBJV come3SG uncle Goghi.
  'He shouldn't come. I don't want him to come.' (T. 2;11)

- Așa t(r)ebuia să cânt **ca să a(s)cut(l)e** mama ce e.
  ADV have to.IMP.3SG SBJV sing.1SG COMP SBJV listen.3SG mom what be.3SG
  'That is how I had to sing so that mom can listen.' (T. 2;11)

- Ăsta de ce nu se poate **să se *apase**?
  this why NEG CL.REFL.3SG can.3SG SBJV CL.REFL.3SG press.3SG
  'Why this cannot be pushed' (T. 2;11)

- CHI: (Ș)tii de ce sunt leci ***suculele**?
  know.2SG why be.1SG cold.PL juice.PL.N.the
  'Do you know why the juices are cold?'
  MOM: Poftim? Cum zici?
  'What. What do you say?'
  CHI: Știi de ce sunt leci?
  know.PRES.2SG why be.PRES.3PL cold.PL.N
  MOM: De ce?
  Why?
  CHI: Ca **să se** ***fac** copii mai bine.
  COMP SBJV CL.REFL.3SG make*1SG child.PL INT good.
  'So that children can ger better.' (T. 2;11)

- Nu că vreau ***apală** mingile
  NEG CONJ want.PRES.1SG catch*3SG ball.PL.the (T. 2;11)

- Să nu **nu** ***didică** să vezi și să te (s)pe(r)ii.
  SBJV NEG NEG lift*3SG SBJV see.2SG and SBJV CL.2SG.ACC scare.2SG
  'Yes. Don't get up to see and to get scared.' (T. 2;11)

- Le ducem la închisole, **să** ***fugeți, să** ***fugeți**.
  CL.3PL take.PRES.1PL to prison SBJV run*2SG SBJV run*2SG
  'We take them to prison run, run.' (T. 2;11)

- Cum o să *merge tu.
  how AUX SBJV go*3SG CL.2SG
  'How will you go.' (T. 2;11)

- Și **o *să (s)pun la mama**, mami pot să ia (r)potofonu(l)?
  and AUX SBJV say.1SG to mom mommy can.1SG SBJV take.3SG recorder.the
  'And I will tell my mom, mommy can I take the recorder?' (T. 2;10)

- **Să ne *audem** în lepoltofon.
  SBJV CL.1PL hear.1PL in recorder.
  'To hear ourselves in the recorder.' (T. 2;10)

- MOM: Trebuie să ai.
  must.PRES.3SG SBJV. have2SG
  'You must have.'
  CHI: **Tebuia** ***ai**.
  must.IMP.3SG [SBJV]. have.2SG
  'You have.' (T. 2;10)

- CHI: **Să ne *audem** în lepoltofon.
  SBJV CL.1PL.ACC hear*ACC.1PL. in recorder
  MOM: Să ne auzim.
  SBJV CL.1PL.ACC hearPRES.1PL
  CHI: Să nu ne auzim. Nu putem.
  SBJV NEG CL.1PL.ACC hearPRES.1PL NEG can.PRES.1PL
  MOM: Ce nu putem?
  what NEG can.PRES.1PL
  CHI: Să ne auzim.
  SBJV CL.1PL.ACC hearPRES.1PL
  MOM: Să ne auzim.
  SBJV CL.1PL.ACC hearPRES.1PL
  'To listen to ourselves.' (T. 2;11)

- **Să *mă pui** numa doi polumbi (ș)tii ca **să**
  SBJV CL*SG.ACC put.2SG only two corn.PL know.PRES.2SG COMP SBJV
  ***mă *p(l)ac polumbu(l).**
  CL*1SG.ACC like*3PL corn.SG.DEF
  'Put only two corn for me you know so that I like corn.' (T. 2;11)

- Le ducem la închisole, **să *fugeți, să *fugeți.**
  CL.3PL.ACC take.PRES.1PL to jail SBJV run*2PL SBJV run*2PL
  'We take them to jail you must run you must run.' (T. 2;11)

O-CORPUS

- CHI: Ea voind **să știe.** st(r)ună. (formulaic)
  CL.3SG.NOM wanting SBJV know.3SG very well.
  'Wanting to know very well.' (O. 2;4)

  CHI: **Să af(l)e** fix. (formulaic)
  SBJV find.PRES.3SG exactly
  'To find out exactly.' (O. 2;4)

- CHI: *Ia muți ani! Cine **să t(r)ăiață(c)ă**? (formulaic)
  Happy birthday! Who SBJV live.3SG
  'Happy birthday! Who should live?' (O. 2;4)

- CHI: Țe ațeva pot **să facă** în zi de zoi? (formulaic)
  what else can.PRES.3PL SBJV do.3SG in the morning
  'What else can they do on a Thursday?' (O. 2;4)

- MOM: Nu cred că mai sunt acțipilde acolo.
  NEG think.PRES.1SG that INT be.PRES.3SG stickers there
  'I don't think there are stickers there.'

- CHI: V(r)eau **să** ***mă** **văd**.
  want.PRES.1SG SBJV CL*1SG.ACC see.1SG
  'I want to see.' (O. 2;4)

  CHI: Hai **să** **-ți** **alăt** unde ***m-** o făcut.
  come SBJV CL.2SG.DAT show.1SG where CL.1SG.ACC- AUX.3SG do.PAST.PART
  'Let me show you were he has done it.' (O. 2;4)

- CHI: Bebe, ce **v(r)ei** **să** **ai**? Înghețată? Vrei înghețată?
  baby what want.PRES.2SG SBJV have.2SG ice cream want.2SG ice crea
  'Baby, what do you want to have? Ice cream? Do you want ice cream?'
  (O. 2;4)

- CHI: Da, da mă țineam **ca să nu mă (z)gâ(r)i**e.
  yes, yes CL.1SG.ACC hold.IMP.1SG COMP SBJV NEG CL.1SG.ACC scratch.3SG
  'Yes, yes I was protecting myself so she won't scratch me.'
  MOM: Te țineai **ca să nu te zgârie.**
  CL.2SG.ACC hold.IMP.2SG COMP SBJV NEG CL.2SG.ACC scratch.3SG
  'You were protecting yourself so that she won't scratch you.' (O. 2;06)

- CHI: Ca **să** ***mă** **asoiteze** rochița.
  COMP SBJV CL.1SG.ACC match.3SG dress.the
  'To match my dress' (O. 2;06)

- CHI: Ca **să** **doa(r)mă.**
  COMP SBJV sleep.3SG
  'For her to sleep.' (O. 2;4)

- DAD: Ia, uite ce cameră mare i- am făcut.
  look, look what room big CL.3SG.DAT AUX make.PAST.PART
  'Look, look what a big room I made for her.'
  CHI: Aici o **să** **țea** **Minnie**. Mai pune pătuț acolo.
  here AUX SBJV sit.3SG Minnie INT put.3SG bed.little there.
  'Minnie will stay here. Put another little bed there.' (O. 2;4)

- CHI: Da. Un(d)e aici e (s)cena și **dansează** ei.
  Yes. Where here be.PRES.3SG stage.the and dance.PRES.3SG CL.3PL.NO
  'Yes. Where the stage is here and they dance.' (O. 2;06)

- CHI: V(r)ea să se ***iuja(s)că.**
  want.PRES3SG. SBJV CL.REFL.2SG.ACC put3SG.ESC(lipstick)
  'She wants to put lipstick'
  MOM: Să se rujeze?
  SBJV CL.REFL.2SG.ACC put3SG.EZ(lipstick)
  'To put lipstick on?' (O. 2;4)

- DAD: I- ai dat jos fustița?
  CL.3SG.DAT- AUX.2SG take.PAST.PART down skirt.little.the
  'Did you take her little skirt off?'
  CHI: Da, **ca să se machieze.**
  yes COMP SBJV CL.REFL.2SG.ACC put.3SG.EZ (makeup)
  'Yes so that she can put makeup on.' (O. 2;4)

- CHI: Uite, e fetiță. **Se machează** si ea.
  Look be.PRES.3SG girl.little CL.REFL.2SG.ACC put.3SG (makeup) and CL.3SG.F.NOM
  'Look, she is a girl. She lso puts makeup on.' (O. 2;06)

- CHI: O chemat- p(r)ințu(l) **ca să vină** la bal.
  AUX ask.PAST.PART-CL.3SG.F.ACC prince.the COMP SBJV come.3SG to ball.
  'The prince asked her to go to the ball.'

  DAD: O invitat- o ca să vină cu el la bal.
  AUX invite.PAST.PART- CL.2SG.ACC COMP SBJV come.3SG with CL.3SG.NOM to ball
  'He invited her with him to the ball, right?' (O. 2;4)

- CHI: Dacă vrea **să mai stea(r)gă**.
  if want.PRES.3SG. SBJV INT wipe.3SG
  'If she wants to wipe some of it.' (O. 2;04)

- CHI: Și aia îi polnesc. Să **nu *te fie** flică.
  and that CL.3SG.DAT start.1SG SBJV NEG CL.2SG*ACC be.3SG scared.
  'And I start them that. Don't be afraid.' (O. 2;4)

- CHI: să îi pun pe spate ca **să se limpezească**
  SBJV CL.3SG.M.ACC put.PRES.3PL PE back COMP SBJV CL.REFL.2SG rinse.3Sg.ESC
  'I will put him on the back' (O. 2;4)

- CHI: **Să mă lase** și pe mine.
  SBJV CL.1SG.ACC leave.3SG and PE CL.1SG.ACC
  He should let me too. Let me.' (O. 2;4)

- CHI: **Să se ducă**, așa **ca să se ducă**.
  SBJV CL.REFL.3SG.ACC go.PAST.PART like this COMP SBJV CL.REFL.2ACC go.3SG
  'To go away, like this to go away.'
  MOM: Să mi se ducă, mami.
  SBJV CL.1SG.DAT CL.REFL.2SG.ACC take.3SG mommy.
  'To make it go away, mommy.' (O. 2;4)

- MOM: Mami, ce o să mi se hidrateze mâinile.
  mommy what AUX SBJV CL.1SG.DAT CL.REFL.2SG.ACC hidrate.3SG.EZ hand.PL.the
  'Mommy, my hands will hidrate.'
  CHI: **Eu te fac** cu chemă.
  CL.1SG.NOM CL.2SG.ACC make.PRES.1SG with cream
  'I make you with cream.' (O. 2;4)

- CHI: **Nu, nu o să se uite**.
  NEG NEG AUX SBJV CL.REFL.2SG.ACC look.3SG
  'They won't look.' (O. 2;4)

- MOM: Bine. Du -te alege. Alege- o
  ok go.2SG.IMP- CL.2SG.ACC choose.2SG.IMP choose.2SG.IMP CL.3SG.F.AC
  'Ok, go and choose. Choose it.'
  CHI: Aia cu învață **să numere.**
  that with learn.PRES.3SG SBJV count.3SG
  'The one with he learns to count.' (O. 2;4)

- MOM: Bravo! Dar voia cu orice preț?
  Bravo! But want.IMP.3SG at any price
  'But was wanting at any price?'
  CHI: **Să stie** câți pui sunt.
  SBJV know.3SG how many chick.PL be.PRES.3SG
  'To know how many chicks are there.' (O. 2;4)

- CHI: Se dist(r)ează **să meaigă** la un loc de joacă.
  CL.REFL.2SG.ACC enjoy.PRES.3SG.EZ SBJV go.3SG at a playground
  'She is enjoying herself to go to a playground.' (O. 2;8)

- CHI: Iângă. Da. **Ca să doa(r)mă.**
  near yes COMP SBJV sleep.3SG
  'Near. Yes to sleep.' (O. 2;4)

- CHI: E impotant **să număli.**
  be.PRES.3SG important SBJV count.2SG
  'It is important to count.' (O. 2;4)

- CHI: **S- o ții pe înghețată.**
  SBJV CL.2SG.F.ACC keep.2SG PE ice cream.
  'To keep the ice cream.' (O. 2;7)

E-CORPUS

- CHI: ***Am** bultă vleau.
  [SBJV] have.1SG belly want.1SG
  'I have belly I want.'

  MOM: Vrei să ai burtă mare?
  want.PRES.2SG SBJV have.2SG belly big
  'Do you want to have a big belly?' (E. 2;9)

- MOM: Să nu -l vadă oamenii.
  SBJV NEG CL.3SG.M.ACC see.3SG people.the
  CHI: ***Nu vadă** oamenii.
  [SBJV] NEG see.3SG people.the
  'For people not to see.' (E. 2;09)

- CHO: A(l)tă piză cumpălați. Tati tu.
  other outlet buy.3SG.PL daddy CL.2SG.NOM
  'You buy another outlet. You daddy.' (E. 2;09)

- CHI: Acuma pun aicea ***culce**.
  now [CL.3PL.ACC] put.PRES.3PL here [SBJV CL.REFL.2SG.SCC] sleep3SG
  'Now I put [him] here [to] sleep.' (E. 3;01)

- CHI: ***Cuc** Mașăl.
  [CL.3SG.M.ACC] sleep.PRES.1SG [PE] Mașăl.
  'I put Mașăl to sleep.'

  MOM: Vrei să -l culci pe Marshal?
  want.PRES.2SG. SBJV CL.2SG.M.ACC sleep.2SG PE Mașăl.
  'So you want to put Mașăl to sleep?' (E. 3;01)

- CHI: Vițelul. Nimic. Nu lasă Laula ***jucăm.**
  calf.the nothing NEG [CL.1PL.ACC] leave.PRES.3SG Laula [SBJV] *play.PRES.1PL
  'The calf. Nothing. Laula [did] not let [us] play.'
  MOM: Nu vă lasă să vă jucați?
  NEG CL.2PL.ACC leave.PRES.3SG SBJV CL.2PL.ACC play.2PL
  'Doesn't let you play?' (E. 3;01)

- MOM: La doctor? Da(r) de ce?
  'To the doctor? But why?
  CHI: ***Daie** jecție.
  [SBJV] *give.PRES.3SG shot
  'To give a shot.'
  MOM: Să le facă vaccin?
  SBJV CL.3PL give.3SG shot
  'To give them a shot.' (E. 3;01)

- CHI: Și eu vleau ***chesc** male pun aia.
  and CL.1SG.NOM want.1SG [SBJV] *grow.1SG big put.PRES.1SG that
  'I also want to grow big and put that.' (E. 3;02)

- CHI: Mami, eu ***uit.**
  Mommy CL.1SG.NOM [CL.REFL.1SG.ACC] *look.PRES.1SG
  'Mommy, I look.'
  MOM: Vrei să te uiți la imagine?
  want.PRES.2SG SBJV CL.REFL.2SG.ACC look.2SG at image
  'Do you want to look at the image?'
  CHI: Da.
  Yes. (E. 3;02)

- CHI: Nu v(r)eau ***fac** baie
  NEG want.1SG [SBJV] *take bath
  'I don't want to take a bath.'
  MOM: Păi, de ce are nevoie de injecție?
  well, why have.PRES.3SG need of shot
  'Well, why does he need a shot?' (E. 3;02)

- CHI: *Nu mai p(l)ângă.
  [COMP SBJV] *NEG INT cry.3SG
  'Not to cry anymore.'
  MOM: Să nu mai plângă?
  SBJV NEG NT cry.3SG
  'Not to cry anymore?' (E. 3;02)

- CHI: O, T. Eu v(r)eau puțin ***uit.**
  oh, T. CL.1SG.NOM want.1SG little *look.1SG
  'Oh, T.. I want to look a little.' (E. 3;02)

- MOM: Uită -te cât vrei, iubita.
  look IMP.2SG-CL.REFL.2SG.ACC how much want.PRES.2SG honey.
  'Look as much as you want, honey.'
  CHI: Mami, veau ***văd** A.
  mommy want.1SG [SBJV] [CL.3SG.F.ACC] *see.PRES.1SG A.
  'Mommy, I want to see A.' (E. 3;02)

- CHI: Și eu veau ***dolm** singulă.
  and CL.1SG.NOM want.PRES.1SG [SBJV] *sleep.PRES.1SG alone.
  'I also want to sleep by myself.' (E. 3;02)

- CHI: Eu v(r)eau ***fac** unghiile.
  CL.1SG.NOM want.PRES.1SG [SBJV] do.1SG nails.the
  'I want to do nails.' (E. 3;02)

- CHI: Și eu aștept ***melg** la male.
  and CL.1SG.NOM wait.PRES.1SG [SBJV] go.1SG to sea
  'I am also waiting to go to the sea.' (E. 3;02)

- CHI 1: Veau eu ***duc.**
  want.PRES.1SG CL.1SG.NOM [SBJV] bring.1SG
  'I want [to] bring.' (E. 3;02)

- CHI: Mami, acuma dolm el.
  mommy now want.PRES.2SG SBJV sleep.PRES.1SG CL.3SG.M.NO
  'Mommy now [I want to] sleep [with] him'
  MOM: Vrei să dormi cu el?
  want.PRES.2SG SBJV sleep.2SG with CL.2SG.ACC
  'You want to sleep with him?'
  CHI: Da.
  Yes.
  CHI: Da. Pun ***doa(r)me**. Si, si. (bebelușii)
  yes put.PRES.1SG SBJV sleep.3SGand, and [babies]
  'Yes I put sleep. And, and babies.' (E. 3;01)

A-CORPUS

- CHI: *__Culăț__ un pic. Să culăț.
  [SBJV] clean.1SG little.a SBJV clean.1SG
  'To clean a little. To clean.' (A. 3;06)

- CHI: Nu -mi place. __Să schimbăm__ can(al)ul
  NEG CL.1SG.DAT like.3SG SBJV change.1PL channel.the
  'I don't like it. Let's change the channel.' (A. 3;05)

- CHI: Atunci *__laci__ pe mine__să văd__
  then [CL.1SG.ACC] let.PRES.2SG PE CL.1SG.ACC SBJV see.1SG
  'Then let me see.' (A. 3;05)

- CHI: M. *__să fie__ lușine.
  M. SBJV be.3SG shame
  'M. you should be ashamed.' (A. 3;05)

- CHI: Tati, tre(buie) să *__mă__ cumpeli din ăla așa.
  daddy, must.PRES.3SG SBJV CL.1SG.ACC buy.2SG from that like.
  'Daddy. You have to buy me one of that.' (A. 3;06)

- CHI: Și el v(r)ea să mea(r)gă.
  and CL.3SG.M.ACC want.PRES.3SG SBJV go.3SG
  'He also wants to go.' (A. 3;06)

- CHI: *__Să aduce__ lapte de la văcuțe și de la oi.
  SBJV bring.3SG milk from cows.little and from sheep.
  'To eat food, to bring milk from little cows and from sheep.' (A. 3;06)

- CHI: __Să plângă__ și *__să se aruncă__ pe jos.
  SBJV cry.3SG and SBJV throw.3SG PE floor
  'To cry and to throw himself on the floor.' (A. 3;06)

  CHI: __Să se__ *__urcă__ pe scară.
  SBJV CL.REFL.2SG climb.3SG PE ladder.
  'To climb on ladder.'
  MOM: Să se urce pe scară?
  SBJV CL.REFL.2SG climb.3SG PE ladder.
  'To climb on the ladder?' (A. 3;06)

- CHI: **Să se *trânțește** de pământ.
  SBJV CL.REFL.2SG.ACC throw.3SG on ground.
  'To throw himself on the ground' (A. 3;06)

- CHI: Și **să bea** lapte de la văcuță.
  and SBJV drink.3SG milk from cow.little
  'And to drink milk from little cow.' (A. 3;06)

B-CORPUS

- CHI: Magie, B. ***fie.**
  magic B. [SBJV] be.3.SG
  'Magic B to be.'
- MOM: Mama să fie!
  Mom SBJV be.3.SG
  'Mom should be'
- CHI: ***Fie** o Minnie.
  [SBJV] be.3.SG. a Minnie
  'It should be a Minnie.' (B. 2;04)

- MOM: Întreabă -l, Țupi ce ai vrea să mănânci?
  ask.PRES.2SG CL.2SG.M.ACC, Țupi what AUX.2SG.COND want.3SG SBJV eat.2SG
  'Ask him, Țupi what would you like to eat?'
  CHI: * **(Ma)nânci.**
  [SBJV] eat.2SG (B. 2;04)

- MOM: Vrei să ne jucăm cu măgărușul, B.?
  want.PRES.2SG SBJV CL.1PL.ACC play.1PL with donkey.little.the B
  'Do you want to play with the little donkey, B?'
  CHI: **(Prega)tim, (prega)tim.**
  [SBJV] prepare.3PL [SBJV] prepare.3PL
  'We prepare. We prepare.'
  MOM: Poftim? Să -i pregătim?
  What SBJV CL.3PL.ACC prepare.3PL
  What? Should we prepare them?
  CHI: Da.
  'Yes.' (B. 2;04)

- MOM: Să nu vină doctorul? (the first attested *să* marker 3sg)
  SBJV NEG come.3SG doctor.the
  'Shouldn't the doctor come?'

CHI: **Să *vine.**
SBJV COME.3SG
'He should come.'
MOM: Să vină pompierii?
SBJV COME.3SG firemen.the
'Should the firemen come?
CHI: Popoieii.
Firemen.the
'The firemen.' (B. 2;04)

- CHI: ***Defacem**.
SBJV open.PRES.1PL
'Open.
MOM: Să -l desfacem?
SBJV CL.3SG.M.ACC. open.1PL
'Should we open it?' (B. 2;05)

- CHI: Nu carte. ***M(ănân)âc.**
NEG book SBJV eat.PRES.1SG
MOM: Poftim?
What?
CHI: ***M(ănân)âc.**
eat.PRES.1SG
'I eat.'
MOM: Mergem să mâncăm
eat.PRES.1SG SBJV eat.1PL
'Do we go and eat?
CHI: Da.
Yes. (B. 2;05)

- CHI: Nu. ***Facem.**
NEG [SBJV] do.1PL
'No. We [must] open.'
MOM: Ce să facem? Să desfacem?
what SBJV do.1PL SBJV open.1PL
'What to do? To open?'
CHI: ***(des)facem**. Pasteilina.
[SBJV] open.1PL playdough.thE
'We open. Playdough.'
MOM: Să desfacem plastelina? Toată?
SBJV open.1PL playdough.the all.SG.

'Open the playdough? All?'
CHI: Toată.
all.SG.F
'All.' (B. 2;05)

- CHI: Haide. ***jucăm*** un pic.
come.2SG.IMP. [SBJV] play.1PL a little
'Let's play a little.'
MOM: Haide.
come.2SG.IMP.
CHI: Hai, ***ne*** ***jucăm***. Haide.
come.2SG.IMP. CL.1PL.ACC [SBJV] play.1PL come.2SG.IMP.
'Come, let us play. Come.' (B. 2;05)

- CHI: ***Face,*** ***face*** duș.
Take.PRES.3SG take.PRES.3SG shower
'Take, take shower.'
MOM: Vrei să faci duș?
want.PRES.2SG SBJV take.2SG shower
'You want to take a shower?'
CHI: Da.
Yes.
CHI: **Fac** duș și eu.
[want.PRES.1SG SBJV] take.PRES.1SG shower and CL.1SG.NOM
'I [want to] take a shower.'
DAD: Și tu vrei să faci duș?
and CL.2SG.NOM want.PRES.2SG SBJV take.2SG shower
'You also want to take a shower?'
MOM: Mama, tu ai făcut aseară puiule.
mom CL.2SG.NOM AUX do.PAST.PART last night chick.
'Mom, you took last night chick.the, you already did. '
CHI: V(r)eau **fac** duș.
want.PRES.1SG [SBJV] take.1SG shower.
'I want take shower.' (B. 2;05)

Annex 4

T-CORPUS

- Dacă *e **jucării** sau da sau nu
  if be.PRES.3SG toy.PL or yes or no.
  'If there are toys or yes or no.' (T. 2;10)

- Pică, pică și *te **pici.**
  fall.IMP.3SG fall.IMP.3SG and CL.2SG.ACC. fall.PRES.2SG
  'Fall, fall and you fall.' (T. 2;10)

- CHI: *Mânca**t** tot! Rucia!
  [AUX.1SG] eat.PART.PAST INT Rucia.
  '[I had] eaten everything, Rucia.' (T. 2;11)

- MOM: Ce fac copiii la grădiniță?
  what do.PRES.3PL children at kindergarten.
  'What are the children doing in kindergarten?'
  CHI: *Desenez.
  draw.PRES.1SG
  'They draw.'
  MOM: Desenează. Ce mai fac?
  draw.PRES.3SG what INT do.PRES.3PL
  'They draw. What else are they doing?'
  CHI: *Se joc.
  CL.REFL.SG.ACC playPRES.1SG
  'They play'
  MOM: Ce fac la locul de joacă?
  what do.PRES.3PL at playground?
  'What are they doing at the playground?'
  CHI: *Se joc.
  CL.REFL.SG.ACC play.PRES.1SG
  'They play.' (T. 2;11)

- CHI: Ăsta de ce **nu** *frână?
  this.SG.M why NEG hit break.PRES.3SG
  'Why doesn't this one hit the break?' (T. 2;11)

- MOM: Ce fac aici copiii?
  what do.PRES.3PL here child.PL.the
  'What are the children doing?'

CHI: ***Desenez.**
draw.PRES.1SG
'I draw.'
MOM: Desenează. Ce mai fac?
draw.PRES.3SG what INT do.PRES.3PL
'They draw. What else are they doing?'
CHI: **Și se *joc.**
and CL.REFL.SG.ACC play.PRES.1SG
'They play'

MOM: Se joacă. Da. Altceva?
CL.REFL.3SG.ACC play.PRES.3SG yes anything else'
'They play. Yes. Anything else'
CHI: **Dolm.**
sleep.PRES.3PL
MOM: Dorm.
sleep.PRES.3PL
'They sleep.' (T. 2;11)

- CHI: Acolo nu ***pic** înăuntru.
There NEG fall.PRES.1SG inside.
'There they don't fall inside.
CHI: Aicea plin găulele ătea ***pic**.
here through hole.PLthe this. PL.F fall.PRES1SG
Here they fall through the holes.' (T. 2;11)

- DAD: Hai să vedem, bonvantule.
let SBJV see.1PL, sick.the
'Let's see sick (boy).'
CHI: Bonvantule? Să vedem cum merge Mangaiu. Ălea tot ***pic.**
sick.the SBJV see.1PL how go.3SG Mangaiu That.PL.F INT fall.PRES.1SG
'Sick boy? Let's see how the Mangai works. Those keep on falling.'
(T. 2;10)

- CHI: Nu cu (z)gâietula mea și ***p(l)ec** jucăilele.
NEG with scratch.the my.SG.F and go.1SG toy.PL.the
'Not with my scratch and all the toys leave.' (T. 2;10)

- CHI: **Duce-**o de aici.
take. IMP.3SG-CL.3SG.F.ACC from here.
'Take it from here.' (T. 2;11)

- CHI: Nu ***cântă**. Bagă mă!
  NEG sing.PRES.3SG. put.IMP.2SG CL.1SG.ACC
  'Don't sing. Put me!' (T. 2;10)

O-CORPUS

- CHI: **Se** **machează** si ea.
  CL.REFL.2SG put(makeup).PRES.3SG and CL.1SG.MOM

- CHI: O chemat -o p(r)ințu (l) ca să vină la bal.
  AUX.3SG call.PAST.PART CL.3SG.F.ACC prince.the COMP SBJV come.3SG at the ball.
  (O. 2;4)

- MOM: Și ce fac ele?
  and what do.PRES.3SG CL.3SG.NOM.F
  'And what are they doing?'
  CHI: Tot ***cânt** Bu-hu-hu.
  INT sing.PRES.1SG bu-hu-hu.
  'Keep singing Bu-hu-hu.'
  MOM: Tot cântă bu-hu-hu.
  INT sing.PRES.3SG bu-hu-hu.
  'It keeps singing Bu-hu-hu.' (O. 2;4)

- MOM: Înotau în apă?
  swim.IMPERF.3SG in water
  'They were swimming in the water?'
  CHI: Da. **Înot**. Tot așa, tot așa.
  yes swim.PRES.1SG INT this INT this
  'Yes. I swim in the water like this.' (O. 2;4)

- CHI: **Se** ***iujece.**
  CL.REFL.2SG put(lipstick).PRES.3SG.*ESC
  'She puts lipstick on.'
  DAD: Se rujează. Așa -i?
  CL.REFL.2SG.ACC put(lipstick).3SG INT be.PRES.3SG
  'She puts lipstick on. It's true.' (O. 2;05)

- CHI: **Face** **-te** dacă vrei.
  make.IMP.3SG CL.2SG.ACC. if want.PRES.2SG
  'Make yourself if you want.' (O. 2;4)

- CHI: *__Intat__ în casă.
  [AUX] enter.PAST.PART in house
  'Entered the house.' (O. 2;5)

- CHI: S -o __*rujit.__
  CL.REFL.3SG.ACC AUX put(lipstick).PAST.PART
  'She put lipstick on.'
  MOM: S -o rujat, da.
  CL.REFL.3SG.ACC AUX put(lipstick).PAST.PART yes
  'She put lipstick on, yes.

- CHI: __S -o făcut__ pe unghii.
  CL.REFL.3SG.ACC AUX did on nails.
  'She did her nails.' (O. 2;6)

E-CORPUS

- CHI: Ă, nu am pat?
  a NEG have.PRES.1SG bed
  'A, I not have bed.'
  MOM: Nu ai pat.
  'You don't have a bed?'
  CHI: *__Sticat.__ Da.
  [be.PRES.3SG] broke.PAST.PART yes
  'Broken.Yes.'
  MOM: E stricat?
  be.PRES.3SG broke.PAST.PART
  MOM: O căzut în pat.
  AUX fall.PAST.PART in bed
  'It had fallen in bed.'
  CHI: *__(că)zut__ pat
  [AUX.3SG] fall.PAST.PART be
  'Fallen bed.' (E. 3;0)

- CHI: Da. Nimeni *__jucat.__
  yes nobody [CL.1SG.ACC?? AUX] play.PAST.PART
  'Yes. Nobody played.'
  MOM: Cu nimeni nu te- ai jucat?
  with nobody NEG CL.2SG.ACC AUX.2SG play.PAST.PART
  'You haven't played with anyone? (E. 3;01)

- CHI 2: Ce vrei? Povestea cu piticul?
  what want.PRES.2SG story.the with dwarf.the
  'What do you want? The story with the dwarf?'

  CHI: Da. Adut. Am adus. Gata.
  yes bring.PAST.PART AUX.1SG bring.PAST.PART. ready
  'Yes. Brought. I have brought. Ready.' (E. 3;01)

- MOM: Uite, citim,
  'Look, we are reading.'
  CHI: ***Venit** T.
  [AUX.3SG] come.PAST.PART T.
  'T [had] come.' (E. 3;02)

- CHI: Poneii ***am** **văzut.**
  Pony.PL AUX.1SG see.PAST.PART
  'The ponies I have seen.' (E. 3;0)

- CHI: Da și ***mie** am foa(r)te male.
  yes and CL.1SG.DAT AUX.1SG very big
  'Yes and me have very big.' (E. 3;01)

- CHI: **Nu** ***voie** ***(fe)tițe mici.**
  NEG [be.PRES.3SG] allow girl.PL.little small.PL.
  'Not allowed little girsl.'
  MOM: Nu -i voie. Nu e pentru fetițe mici
  NEG -be.PRES.3SG allow NEG be.PRES.3SG for girl.PL little
  'It's not allowed.It's not for little girls.' (E. 3;01)

- CHI: ***Stat** fund unu.
  [AUX.3SG] stat.PAST.PART bottom one.
  'One sat on his bottom.'
  MOM: Unu stă în fund, așa-i?
  'One sits on his bottom, right?' (E. 3;0)

- Chi: Aicea baiat bebelus.
  here [be.PRES.3SG] boy baby.
  'Here [is baby boy].' (E. 2;09)

- CHI: Nu vleau. (Tele)fonul meu
  NEG want.PRES.1SG phone.the my.
  'I don't want. [is] my phone.'
  MOM: E telefonul tău?
  be.PRES.3SG phone.the CL.2SG.GEN
  'It is your phone?' (E. 2;09)

- CHI: Ha, ha, ha. ***Fig,** ***fig**.
  ha, ha, ha [is] cold [is] cold.
  'Ha, ha, ha. Cold, cold.'
  MOM: Ți- e frig?
  CL.2SG.DAT be.PRES.3SG cold
  'Are you cold?'
  CHI: Și. ***bebelușul** *fig.
  and baby.the.NOM [be.PRES.SG] cold.
  'And the baby [is] cold.' (E. 3;01)

- CHI: Nu. ***Mi** fig, ***mi** fig
  NEG CL.1SG.DAT- [be.PRES.3SG] cold CL.1SG.DAT-[be.PRES.3SG] cold
  'No. I [am] cold, I [am] cold. (E. 3;02)

- CHI: Hei, ***nu eu** băiat.
  Hey NEG CL.1SG.NOM [be.PRES.1SG] boy.
  'Hey, not I boy.'

  CHI: Zice A ***eu** **băiat.**
  say.PRES.3SG A CL.1SG.NOM [be.PRES.1SG] boy
  'Says A. I [am] boy.'(E. 3;01)

- CHI: Nu. **Udă.**
  NEG [be.PRES.3SG] wet
  'No. It [is] wet.
  MOM: E udă Minie?
  'It is wet Minnie?' (E. 3;01)

- CHI: Ă(s)tia **lupi**.
  this.PL.M [be.PREs.1PL] wolf.PL
  'These [are] wolves'
  MOM: Lupi.
  'Wolves.' (E. 3;0)

- MOM: Haide, Ecaterina! Vino aicea!
  come Ecaterina come.IMP.2SG here
  'Come, Ecaterina! Come here!'
  CHI: ***Vine** acuma.
  come.PRES.3SG now.
  'Come now.' (E. 2;09)

- CHI: E. male ***(lu)chez** ***lepot.**
  E. big work.PRES.1SG *latop.
  'E. big I work laptop.'
  MOM: Ce faci?
  'What are you doing?'
  CHI: (**Lu)chez** ***lepot.**
  work.PRES.1SG latop.
  'I work laptop.'
  MOM: Lucrezi pe laptop?
  'You work on the laptop?'
  CHI: Da.
  'Yes.' (E. 2;09)

- CHI 1: Ă(s)ta ***mugălă**.
  this XXX.PRES.3SG
  'This *counts.'
  MOM: Ce face? Numără?
  what do.PRES.3SG count.PRES.3SG
  What does it do? It counts? (E. 2;06)

- CHI: ***Doale** (u)lechile.
  hurt.PRES.3SG ear.PL.the
  'Hurts ears.'
  MOM: Te dor urechile?
  'Your ears hurt?' (E. 2;09)

- CHI: Pom. ***Fac** nuci ***mine.**
  tree make.PRES.1SG walnuts CL.1SG.ACC
  'Tree make walnuts me.'
  MOM: Pentru tine. Îți plac nucile?
  'For you? Do you like walnuts?
  CHI: Da.
  Yes. (E. 3;0)

- MOM: Mănânci tot spanacul, așai?
  'You eat all the spinach, right?'
  CHI: *Mân(ân)c tot bananele.
  eat.PRES.1SG INT.SG. bananas.the.F
  'I eat all bananas.'
  Oul *mân(ân)c tot.
  egg.the eat.PRES.1SG INT.SG
  'The egg I eat it all.'
  Papala *mân(ân)c tot. (S)panacul mân(ân)c tot.
  Omlette.the.F eat.PRES.1SG INT.SG Spinach eat.PRES.1SG INT.SG
  'The omlette I eat all. The spinach I eat all.' (E. 3;01)

- MOM: Ce face Baghera?
  'What does Baghera?'
  CHI: **P(l)e(a)că.**
  Leave.PRES.3SG
  MOM: Pleacă.
  'Leaves.'
  CHI: **P(l)e(a)că**, da.
  leave.PRES.3SG. yes.
  'Leaves, yes.' (E. 3;01)

- CHI: *T(r)ece lupii aicea.
  cross.PRES.3SG wolf.PL.the here
  'The wolves cross here.'
  MOM: Când trec lupii, acolo te ascunzi?
  'When the wolves cross you hide there?'
  CHI: Da. *Vine lupii.
  yes come.PRES.3SG wolf.PL.the
  'Yes the wolves comes.' (E. 3;02)

- CHI: *Cade dinții.
  fall.PRES.3SG teeth.the
  'Falls the teeth.' (E. 3;02)

- CHI: Da. *Cânt puișolul.
  yes sing.PRES.1SG chick.the
  'Yes. Sing the chick.
  MOM: Da, cântă așa, cântă.
  'Yes, it sings like this, it sings.' (E. 3;02)

- CHI: ***Îi** **foa(r)te** **iece** afală.
  be.PRES.3SG very cold outside.
  'Is very cold outside.

- CHI: Mai **v(r)eau** înghețată.
  INT want.PRES.1SG ice cream.
  'I want more ice cream.' (E. 3;02)

- CHI: **Fac** mâncare.
  make.PRES.1SG food
  'I make food' (E. 3;02)

- CHI: **Facem** împeiună papa.
  make.PRES.1PL together papa.the
  'We make together papa (the food).' (E. 3;02)

- CHI: M**ănânc** singulă, mu(l)țume(s)c.
  eat.PRES.1SG alone thank you.
  'I eat alone, thank you.' (E. 3;02)

- CHI: Noi ***mănâncem** singule.
  CL.1PL.NOM eat.PRES.1PL alone.F.PL
  'We *eat alone.' (E. 3;02)

- CHI: Aicea e E. ***dormită**. (PASSIVE- Intransitive)
  Here be.PRES.3SG E. sleep.PAST.PART.F (E. 3;02)

- MOM: Ce fac șoriceii acolo?
  'What are the mioce doing there?'
  CHI: ***Face.**
  do.PRES.3SG
  'Is doing.'
  MOM: Ce fac oare?
  'What are they doing?'
  CHI: **Fac** ăla?
  'They are doing that.'
  MOM: Desfac sacul de grâu?
  'They are opening the sack of wheat?'
  CHI: Da.
  'Yes.' (E. 3;0)

- CHI: **(s)t(r)âng** eu ăța.
  clean.PRES.1SG CL.1SG.NOM this
  MOM: Ce strângi?
  'What are you cleaning?'
  CHI: Ăța.
  'This.' (E. 3;0)

- CHI: **C(it)ece,** **(s)pală** dinții.
  read.PRES.3SG wash.PRES.3SG tooth.PL.the
  'Read. Wash the teeth.'
  MOM: Scoate dinții și îi repară, sigur.
  'Pulls the teeth and fixes the alone.' (E. 3;02)

B-CORPUS

- CHI: Și eu *(**fe)tiță**.
  and CL.1SG.NOM [be.PRES.1SG] girl.
  'I also [am] girl.'
  MOM: Și tu ești fetiță?
  'You are a girl?'
  CHI: Da.
  'Yes.' (B. 2;05)

- CHI: ***Mic, mic**.
  [be.PRES.3SG] small small
  '[Is] small, small.'
  MOM: E mic, mic, Lulu? A crescut acum. E o pisică mare.
  'It is small, small, Lulu? It has grown now. It is a big cat.' (B. 2;05)

- CHI: T(r)enu nu (ș)tie. Mai e(s)te. Mai e(s)te.
  train NEG know.PRES.3SG INT be.PRES.3SG INT be.PRES.3SG
  'The train doesn't know. There's more. There's more.'
  MOM: Ce mai este? Șină pentru tren?
  'What else? Track for the train.'
  CHI: U(n)de e ***bulina Mini**? ***Bulina Mini**? ***Bulina Mini**.
  Where is dot.the [of] Minie? dot.the [of] Minie dot.the [of] Minie.(B. 2;05)

- CHI: N **voie**!
  NEG [be.PRES.3SG] allow
  'You are not allowed.' (B. 2;05)

- CHI: Ia și tanti ia.
  bad and lady [be.PRES.3SG] bad.
  'Bad and the lasy [is] bad.'
  MOM: Și tanti e rea?
  'And the lady is bad?'
  CHI: Și copiii ***rea.**
  and child.PL.the bad.F.SG
  'and the children bad'
  MOM: Erau surorile vitrege.
  'They were the step sisters.'
  CHI: Tata bun.
  Daddy [be.PRES.SG] good. (B. 2;06)

- CHI: Și ***B.** e iegină.
  'And B is queen.' (B. 2;06)

- MOM: Unde e tata acum?
  'Where is dad now?'
  CHI: Acum. ***Pecat.**
  now [AUX.3SG] leave. PAST.PART.
  'Now. Left.' (B. 2;04)

- CHI: A cap ***(con)su(l)tat** B. buni.
  at head [AUX] consult.PAST.PART B. granny
  MOM: A consultat B. pe buni. Și i-ai dat medicament?
  'B. has consulted granny. And you gave her medicine?' (B. 2;05)

- CHI: **A (că)jut.** Poc.
  'It has fallen. Poc'
  MOM: A căzut?
  'It has fallen' (B. 2;05)

- CHI: **A picat** buni.
  'Granny has fallen.'
  MOM: Buni a picat, a căzut? Și unde s-a lovit?
  'Granny has fallen, has fallen? And where did she hit herself?'
  CHI: Aici.
  'Here.' (B. 2;05)

- CHI: Foiumb. ***(Gă)sit** foiumb
  corn. [AUX] find.PART corn.
  'Corn. Found corn.'

MOM: Ai găsit?
'Have you found?'
CHI: Uite!
'Look!' (B. 2;05)

- MOM: Am spart la al mingea
'I have broken the ball.'
CHI: **A spart** mingea ala.
AUX.3SG break.PAST.PART ball.the that.'
'It has broken that ball.' (B. 2;05)

- CHI: Ce **a făcut** pisica? Ce **a mâncat** pisica, tata?
'What had the cat done? What has the cat eaten, dad?' (B 2; 06)

- CHI: **A mâncat** (prăji)tu(r)ă pisica.
'The cat has eaten cake.' (B. 2;06)

- CHI: Dă - ***m** bani.
give.IMP.2SG [CL.1SG.ACC??] money
'Give [me] money. '
MOM: Să -ți dau bani? Cât costă?
SBJV CL.2SG.ACC give.1SG money how cost.PRES.3SG
'Give you money? How much it costs?'
CHI: Do(i) iei.
'Two lei.' (B. 2;04)

- CHI: **Pun** bani.
Put.PRES.1SG money.

MOM: Pui bani? Bine, mulțumnesc.
put.PRES.2SG money good thank you
'You put money? Ok, thank you.' (B. 2;04)

- CHI: Da. Și **fufă** lupu căsuța.
yes and blow.PRES.3SG wolf.the house.the
'Yes. And the wolf blows the house.' (B. 2;05)

- CHI: **Vine *șa(r)pe.**
come.PRES.3SG snake
'The snake comes.'

- MOM: Unde -l pui?
  where CL.3SG.M.ACC put.PRES.2SG
  'Where are you putting it?'

  CHI: ***Pui** (cup)tol.
  put.PRES.2SG oven
  'Put oven' (B. 2;04)

- MOM: Ce pui în căniță? Cafea sau suc?
  what put.PRES.2SG in much.little coffee or juice
  'What do you put in the little much. Coffee or juice?'
  CHI: Cafea. Suc. Apă. Aici apă. ***Pune** apă aici.
  Coffee juice water here water put.PRES.3SG water here
  'Coffee. Water. Juice. Here water. Put water here.' (B. 2;04)

- CHI: ***Vlea** **loș,** ***vlea** **loș**.
  want.PRES.3SG red want.PRES.3SG. red
  'She want red she want red.'
  MOM: Ce să facă mama cu lacul?
  what SBJV do.3SG mom with polish
  'What should mom do with the polish?'
  CHI: ***Loș**, **fac** ***loș.** O, o!
  red [CL.3SG.ACC.F??] make.PRES.1SG red o o
  'Red, make red. O, o!' (B. 2;04)

- CHI: **Iasă** că mâncaie. **Fac** mâncaie, mami.
  leave.IMP.2SG that food make.PRES.1SG food mommy
  'Leave because food. I make food, mommy.'

  MOM: Faci mâncare?
  make.PRES.2SG food.
  'Do you make food?' (B. 2;04)

- CHI: Mami și ***face** t(r)en.
  mommy and make.PRES.3SG train
  'Mommy and make.'
  MOM: Uite ce croco mare.
  'Look what a big crock.'

  CHI: Nu, ***mic.**
  NEG [be.PRES.3SG] small
  'No, small.'

MOM: E mic?
be.PRES.3SG small
'It is small?' (B. 2;05)

- CHI: **Aiucă** a mână.
throw.PRES.3SG to hand.
'Throw at hand.' (B. 2;05)

- CHI: Nu merge. ***(re)pală** ***(re)pală**.
NEG work.PRES.3SG fix.PRES.2SG fix.PRES.2SG
'It doesn't work. Fix. Fix.' (B. 2;05)

- CHI: Tenu(l). ***Vrea** tenu(l), mami.
train.the want.PRES.3SG train.the mommy
'The train want the train mommy' (B. 2;05)

- MOM: Vrei **să** **facem** un romb?
want.PRES.2SG SBJV make.1PL diamond.
'Want to make a diamond?'
CHI: Tot. ***Face** tot.
INT make.PRES.3SG INT.
'All [I???] make it all.' (B. 2;05)

- CHI: **Aiu(n)c** țaunu(l).
throw.PRES.1SG chair.the
'I throw the chair.' (B. 2;05)

- MOM: Ce spălăm?
What wash.PRES.1PL
'What do we ash?'
CHI: (**S)pălam** dinții.
wash.PRES.1PL teeth.the
'We wash the teeth.' (B. 2;05)

- CHI: Mai (ci)tim ***un povete**. Și. Și.
INT read.PRES.1PL story.a.M and and
'We read a story. And. And.' (B. 2;05)

- CHI: Și (tele)fonu(l) **doa(r)me**.
and phone.the sleep.PRES.3SG
'And the phone sleeps.'
MOM: Și telefonul doarme.
and phone.the sleep.PRES.3SG
'And the phone sleeps.' (B. 2;06)

- CHI: Nu. *__Spune__ mama o poveste.
  NEG tell.PRES.3SG mom.the story.a.F
  'No. Mom tells a story' (B.2;06)

- CHI: Cine *__(v)o(r)bește__ așa.
  who speak.PRES.3SG like this
  'Who speaks like this?' (B.2;06)

- CHI: *__(În)tide__ gu(r)a!
  close.PRES.SG mouth.the
  'Close the mouth!'
  MOM: Aaaa! Mă doare gâtul.
  aaaa! CL.1SG.ACC hurt.PRES.3SG throat.the
  'Aaa! My throat hurts.'
  CHI: *__(În)tide__ gu(r)a!
  close.IMP.2SG mouth.the
  'Close the mouth.'
  MOM: Aaaa! (B. 2;05)

- CHI: *__Opece__! *__Opece__!
  stop.IMP.2SG. stop.IMP.2SG
  MOM: Săracu tren.
  'Poor train.' (B. 2; 05)

- CHI: *__Înceoace__, *__înceoace__, mami!
  turn.IMP.2SG turn.IMP.2SG mommy
  'Turn, turn, mommy!'

  MOM: Să mă întorc? Întoarce -te ai spus?
  SBJV CL.1SG.PL turn.1SG turn.IMP.2SG CL.2SG AUX.2SG say.PAST.PART
  'Should I turn? Turn you said?' (B. 2;05)

- MOM: Uite. Una pentru mine.
  'Look. One for me.
  CHI: Și **B.**
  'And B.'
  MOM: Și una pentru B.
  'And one for B' (B. 2;05)

- CHI: ***Face** ouă. ***Face** ouă, mami!
  make.PRES.3SG eggs make.PRES.3SG eggs moomy
  'Makes eggs. Makes eggs, mommy!'
  MOM: Să facem ouă?
  SBJV make.1PL eggs
  'Should we make eggs.'
  MOM: Să batem ouă?
  SBJV beat.1PL eggs
  'Should we beat eggs?
  CHI: ***Bate** ouă.
  beat.PRES.3SG eggs.
  'Beat eggs.' (B. 2;05)

- MOM: Ce faci?
  what do.PRES.2SG
  'What are you doing?
  CHI: ***Face** duș. ***Face** duș.
  take.PRES.3SG shower take.PRES.3SG show (B. 2;06)

Annex 5

T-CORPUS

- Hei, ***m-** **am** **găsit** roțile de la asta.
  hey, CL.1SG.ACC AUX.1SG find.PART.PAST wheel.PL.the from this.F.SG.
  'Hey, I found the wheels for this.' (T. 3;05)

- ***M-** **o** **pui** tu înapoi?
  CL.1SG.ACC CL.3SG.F.ACC put.2SG. CL.2SG.NOM back
  'Are you putting it back for me?' (T. 3;05)

- Tati, *mai *mă -l faci?
  daddy, INT CL.1SG.ACC CL.SG.M.ACC make.PRES.2SG
  'Daddy can you make it for me one more?' (T. 2;10)

- Acum altă mașină, ***m-** **o** **dai**?
  now other car CL.1SG.ACC CL.3SG.F.ACC give.PRES.2SG
  'Can you give me now another car?' (T. 2;11)

- ***Mă** **mai** **dai** o mașină de acolo?
  CL.1SG.ACC. INT. give.PRES.2SG car.a from there.
  'Can you give me another car from there?' (T. 2;11)

- Tati, poți ***să** **mai** **faci** înapoi?
  daddy, can.PRES.2SG SBJV INT make.2SG back?
  'Daddy, can you make it back?' (T. 2;10)

- Da. ***M-** **am** **luat** silopul. Ha, ha.
  yes CL.1SG.ACC.AUX.1SG take.PAST.PART syroup.the ha ha
  'Yes. I had taken my medicine. Ha, ha.' (T. 2;10)

- Poți să **mă** **dai**. O tlimiți la mine?
  can. 2SG SBJV CL.1SG.ACC. give.2SG. CL.3SG.F. send.PRES.2SG to CL.1SG.ACC
  'Can you give it to me. Can you send it to me?' (T. 2;10)

- Cine ***mă** face pista?
  who.NOMCL.1SG.ACC. make.PRES.3SG rink.the
  'Who makes the rink for me?' (T. 2;10)

- Poți **să** **mă** **dai** sfoala?
  can.PRES.2SG SBJV CL.1SG.ACC give.PRES.1SG rope.the
  'Can you give me the rope?' (T. 2;10)

- **Eu vleau să *mă cumpăl** o mașină.
  CL.1SG.NOM want.1SG. SBJV CL.1SG.ACC. buy.PRES.1SG car.a
  'I want to buy a car for myself.' (T. 2;11)

- **Poți să *mă volbești** și la mine?
  can.2SG SBJV CL.1SG.ACC. speak.2SG and to CL.1SG.ACC
  'Can you talk to me too?' (T. 2;11)

- **Vlei să *mă o citești** ata?
  want.2SG SBJV CL.1SG.ACC. CL.3SG.F read.PRES.2SG this
  'Do you want to read this to me?' (T. 2;11)

- **Poți să *mă dai** suc de potocale?
  can.2SG SBJV CL.1SG.ACC give.PRES.2SG juice of orange
  'Can you give me orange juice?' (T. 2;11)

- Din loșii **să *mă faci** poltocalele.
  from red SBJV CL.1SG.ACC make.2SG orange.PL.the
  'Make me from red oranges' (T. 2;11)

- Da**. Poți să *mă faci?**
  yes can.2SG SBJV CL.1SG.ACC make.2SG
  'Yes. Can you make it for me?' (T. 2;11)

- Da ***la mine *mă pace** să fac box.
  yes to CL.1SG.ACC CL.1SG.ACC like.3SG box SBJV do.1SG box
  'Yes I like to box.' (T. 2;10)

- Poți **să *mă dai** pianul?
  can.2SG SBJV CL.1SG.ACC give.2SG piano.
  'Can you give me the piano?' (T. 2;11)

- Eu țin mâna **ca să nu *mă pice**.
  CL.SG.NOM hold.PRES 1SG hand.SG.DEF. COMP SBJV NEG CL.1SG.ACC fall.3SG
  'I hold the hand so that it won't fall.' (T. 2;11)

- Pe o să ăla mic ***m- o dai *la mine.**
  PE AUX SBJV that small.SG.M CL.1SG.ACC CL.3SG.F give.2SG to CL.1SG.ACC
  'The small one give to me' (T. 2;10)

- După aia, **să *mă dai *la mine** că sunt male.
  after that SBJV CL.1SG.ACC give.2SG to CL.1SG.ACC CONJ be.PRES.1SG big.SG.M
  'Give it to me after that because I am big.' (T. 2;10)

- ***Mă- l dai *la mine?**
  CL.1SG.ACC CL.3SG.M give.2SG to CL.1SG.ACC
  'Can you give it to me?' (T. 2;10)

- *M- am desenat ceva să *mă aducă.
  CL.1SG.ACC AUX.1SG draw.PAST.PART something SBJV CL.1SG.ACC bring.3SG
  'I drew something for him to bring me.' (T. 2;11)

- Am desenat o mașină de spălat **să *mă aducă** alta Moșu(l).
  AUX.1SG draw.PAST.PART car.a of wash SBJV CL.1SG.ACC bring.3SG another Santa.
  'I drew a washing machine for Santa to bring me.' (T. 2;11)

- [...] Moșu(l) ca **să *mă aducă** mașină male de culse.
  Santa COMP SBJV CL.1SG.ACC bring.3SG car big for race.
  'Mommy I will call Santa to bring me a big race car.' (T. 2;11)

- Tebe **să *mă schiu** ceva de la Moțu(l).
  must SBJV CL.1SG.ACC write.1SG something from Santa
  'I have to write something for me from Santa.' (T. 2;11)

- **Să *mă aducă** o jucălie, o jucălie de paianjen
  SBJV CL.1SG.ACC bring.3SG toy.a toy.a of spider.the
  'To bring me a toy, a spider toy.' (T. 2;11)

- Mami, t(r)eb(ui)e **să -mi aducă** Moșul.
  mommymust SBJV CL.1SG.DAT bring.3SG Santa.
  'Mommy, Santa must bring me a toy baloon' (T. 2;11)

- Să ***mă mai dai** din a(s)ta cu apă.
  SBJV CL.1SG.ACC INT give.2SG from this with water.
  'Give me another one of this with water' (T. 2;11)

- Și **spune -mi *la mine**.
  and say.PREZ.3SG CL.1SG.DAT to CL.1SG.ACC
  'And tell me.' (T. 2;10)

- **Spune -mi *la mine** Fulger McQueen.
  say.PREZ.3SG CL.1SG.DAT to CL.1SG.ACC Lightning McQueen
  'Call me Fulger McQueen.' (T. 2;10)

- Tati ***m -o dat** cinci.
  daddy CL.1SG.ACC AUX.3SG give.PART.PAST five.
  'Daddy gave me five' (T. 2;10)

- De ce ***m -o băgat**?
  why CL.1SG.ACC AUX.3SG put.PART.PAST
  'Why did she put it?' (T. 2;10)

- Tati, mami ***m- o băgat** ceva în fund.
  daddy mommy CL.1SG.ACC AUX.3SG put.PART.PAST something in but.
  'Daddy, mommy put something in my but.' (T. 2;10)

- Poți **să *mă volbești** și ***la mine?**
  can.2SG SBJV CL.1SG.ACC speak.2SG and at CL.1SG.ACC
  'Can you speak with me?' (T. 2;11)

- Vlei să ***mă o citești** ata?
  want.2SG SBJV CL.1SG.ACC CL.3SG.ACC.F read.2SG this
  'Do you want to read this to me?' (T. 2;11)

- Cine ***m- o citește** cartea?
  who CL.1SG.ACC CL.3SG.ACC.F read.3SG book.the
  'Who is reading the book?' (T. 2;11)

- ***M- o căzut** pizza.
  CL.1SG.ACC AUX.3SG fall.PAST.PART pizza.the
  'My pizza had fallen.' (T. 2;11)

- De când ***m- o cumpălat- o** unchiu Goghi.
  from when CL.1SG.ACC AUX PART.PAST CL.3SG.F uncle Goghi.
  'from when uncle Goghi bought it for me.' (T. 2;11)

- ***La mine *mă p(l)ace** polumbul
  to CL.1SG.ACC CL.1SG.ACC like.3SG corn.th
  'I like corn' (T. 2;11)

- Da. Dar eu pălinții mei ***au pus.**
  yes but CL.1SG.NOM parent.PL.the CL.PL.M.GEN AUX.3PL put.PAST.PART
  'Yes. But my parents have said.' (T. 2;10)

- ***M- o pus** că am multe jucălii.
  CL.1SG.ACC AUX put.PAST.PART CONJ have.PRES.1SG many toy.PL.the know.PRES.2SG
  'They told me that I have many toys.' (T. 2;10)

- Da. Io, ***la mine *m- o picat un dinte**.
  yes. CL.1SG.NOM to CL.1SG.ACC CL.1SG.ACC AUX.3SG PART.PAST tooth.a
  'Yes. But my tooth fell.' (T. 2;10)

- La mine **nu *mă somn.**
  to CL.1SG.ACC NEG CL.1SG.ACC sleep.a
  'I am not sleepy.' (T. 2;10)

- ***La mine *mă p(l)ace muci.**
  to CL.1SG.ACC CL.1SG.ACC like.3SG bugger.PL.
  'I like buggers.' (T. 2;11)

- ***La tine *te p(l)ace mucii.**
  to CL.2SG.ACC CL.2SG.ACC like.3SG bugger.PL.
  Dou you like buggers? (T. 2;11)

- ***Mă- l iei?**
  CL.1SG.ACC CL.3SG.M.ACC take.PRES.2SG
  'Can you take it?' (T. 2;11)

- Nasu(l). ***Mă- l iei?**
  nose.the CL.1SG.ACC CL.3SG.M.ACC pick.2SG
  'The nose. Can you pick it?' (T. 2;11)

- Vei **să facem** box ***cu mine.**
  want.pres.2SG SBJV do.1PL box with CL.1SG.ACC
  'Do you want us to box with me?' (T. 2;11)

- Da ***la mine *mă pace** să fac box.
  yes to CL.1SG.ACC CL.1SG.ACC like.3SG SBJV do.1SG box
  'Yes I like to box.' (T. 2;11)

- ***Mă dai aici.**
  CL.1SG.ACC give.1SG here.
  'Can you give it to me here.' (T. 2;11)

- Ce fac dacă ***mă închid** degetele?
  what do.1SG if CL.1SG.ACC close.PRES.1SG finger.PL.the
  'What do I do if I close my fingers?' (T. 2;11)

- Eu ține mâna ca **să nu * mă pice**.
  CL.1SG.NOM hold.PRES.1SG hand COMPL SBJV NEG CL.1SG.ACC fall.3SG.
  'I hold my hands so that it won't fall.' (T. 2;11)

- Mami, ***mă- l găseci** ăla? Tompeta mea?
  mommy, CL.1SG.ACC CL.3SG.ACC find.2SG that. Trompet my
  'Mommy, cam you find my trumpet?' (T. 2;11)

- **Îmi găseci** tompeta mea.
  CL.1SG.DAT find.2SG trumpet my.
  'Can you find my trumpet?' (T. 2;11)

- **O picat** pe degete.
  CL.3SG.F fall.PRES.3SG on finger.PL
  'It fell on my fingers.' (T. 2;11)

- ***M- o picat** pe degete.
  CL.1SG.ACC AUX fall PART.PAST on finger.PL
  'It fell on my fingers.' (T. 2;11)

- Când am mâncat ***m- a fo(s)t rău**.
  when AUX.1SG eat.PART.PAST CL.1SG.ACC AUX.3SG be.PART.PAST sick.
  'When I ate, I was sick.' (T. 2;11)

- ***Mă pică** as(t)a de pe mine?
  CL.1SG.ACC fall.PRES.3SG this off on CL.1SG.ACC
  'This falls off of me.' (T. 2;11)

- T(r)ebuia **să *mă pui** apă ca să ud și eu
  have.PAST SBJV CL.1SG.ACC put.2SG water COMP SBJV wet.1SG and CL.1SG.NOM
  'You had to put water so that I can water too.' (T. 2;11)

- ***Mă pui** apă?
  CL.1SG.ACC put.PRES.2SG water.
  'Can you put water for me?' (T. 2;11)

- **Nu *mă (s)pune** haide aicea.
  NEG CL.1SG.ACC tell.3SG come.IMP here.
  'Don't tell me come here' (T. 2;11)

- După ce **m- a dat** mami.
  after what CL.1SG.ACC AUX.3SG give.PART.PAST mommy
  'After mommy gave me.' (T. 2;11)

- E lego meu, ***m- o adus** Moșul.
  be.3SG lego my CL.1SG.ACC AUX.3SG bringPART.PAST Santa.
  'It's my lego. Sata brought it to me.' (T. 2;11)

- Mami, **eu *mai *mă dai** înc-o poltocală?
  mommy, CL.1SG.NOM INT CL.1SG.ACC give.3SG more orange.a
  'Mommy, acan you give me more chocolate?' (T. 2;11)

- ***M- am picat** casa. E ră(s)tunată. (causative alternation)
  CL.1SG.ACCAUX.1SG fallPART.PAST house.the Is tilted
  'Not you. I fell my house. Is tilted up-side down.' (T. 2;11)

- ***Mă pace** mingile.
  CL.1SG.ACC like.3SG ball.PL.the
  'I like the balls.' (T. 2;11)

- Cine e aici? Cine ***mă aruncă** mingi?
  who be.3SG here who CL.1SG.ACC throw.3SG ball.PL.
  'Who is here? Who is throeing balls?' (T. 2;11)

- Eu ***m- am ulat** p(l)icu ăta.
  CL.1SG CL.1SG.ACC AUX take.PRES.3SG envelope this.
  'I took this envelope.' (T. 2;11)

- ***Mă pui** în cană apă?
  CL.1SG.ACCgive.2SG in mug water.
  'Can you put water in mug for me?' (T. 2;11)

- ***Mă- l dai** la mine?
  CL.1SG.ACCCL.3SG.M give.PRES.3SG. to CL.1SG.ACC
  'Can you give it to me, I am big.' (T. 2;10)

- Ferma? ***Mă faci fermă?**
  Farm.the CL.1SG.ACCmake.PRES3SG farm
  'The farm? Can you make me a farm?' (T. 2;10)

- ***Mă- l cânzești** și pe al meu?
  CL.1SG.ACCCL.3SG.M warm.PRES.3SG and PE GEN my.SG.M
  'Can you warm mine too' (T. 2;11)

- T(r)eb(ui)e să beau mai mult când ***mă mai e sete**
  have to.PRES.3SG SBJV drink.PRES.3SG ADV more when CL.1SG.ACC ADV be.3SG thirsty.
  'I have to drink more when I am thirsty again.' (T. 2;11)

- Nu. Alt copil bea sucul ***lui cineva.**
  NEG other.SG.M. child.SG drink.3SG. juice he.GEN.SG somebody.
  'No. Another child somebody drinks his juice.' (T. 2;11)

- Tebuie **să *mă (a)duc** scaunul (a)cela.
  have to.PRES.3SG SBJV CL.1SG.ACC bring.1SG chair that.
  'He has to bring me that chair' (T. 2;11)

- ***M- am desenat** ceva să mă aducă.
  CL.1SG.ACC AUX drawPART.PAST something SBJV CL.1SG.ACC bring.PRES.3SG
  'I drew myself something for him to bring me.' (T. 2;11)

- Am desenat o mașină de spălat **să *mă aducă** alta Moșu
  AUX drawPART.PAST machine.a to wash SBJV CL.1SG.ACC bringPRES.3SG other Santa
  'I drew a washing machine for Santa to bring me another' (T. 2;11)

- T(r)eb(ui)e **să *mă schiu** ceva de la Moțu.
  have to.PRES.3SG SBJV CL.1SG.ACC write.3SG something from Santa.
  'I have to write something from Santa.' (T. 2;11)

- ***M- am schis,** ***m- am schis** pentu Moșu.
  CL.1SG.ACC AUX writePART.PAST CL.1SG.ACC AUX writePART.PAST for Santa
  'I wrote to santa, I wrote to Santa.' (T. 2;11)

- Mami, t(r)eb(ui)e **să- mi aducă moșul** și jucălie
  mommyhave to.PRES.3SG SBJV CL.1SG.DAT bring.3SG Santa and toy
  'Mommy, Santa has to bring me a toy.' (T. 2;11)

- Da ***mă- l dai**, vleau.
  yes CL.1SG.ACC CL.3SG.M give.3SG want.1SG
  'Yes, can you give it to me, I want it.' (T. 2;10)

- Eu **îl sun** pe Moșu ca să vină.
  CL.1SG.NOM CL.3SG.M call.PRES.1SG PE Santa COMP SBJV come.3SG
  'I want this. I will call Santa to come.' (T. 2;11)

- Ca să ***mă pună** mașină male de culse.
  COMP SBJV CL.1SG.ACC put.3SG car.F big.SG.F for race.PL
  'To put a big car race for me I will go.' (T. 2;11)

- ***La mine nu *m- ar p(l)ăcea** sub pat.
  to CL.1SG.ACC NEG CL.1SG.ACC NEG, AUX like.3SG under bed
  'I wouldn't like it under the bed.' (T. 2;11)

- **Și îl *ascu(l)te** pe mine și pe mami și pe tati.
  and CL.3SG.M.ACC listen.3SG PE CL.1SG.ACC and PE mom and PE dad.
  'And he listens to mom and dad.' (T. 2;11)

- Tebuie **ne dați nouă** ciocolată.
  have to.3SG [SBJV] CL.1PL.ACC give.2PL CL.1PL chocolate
  'You have to give us chocolate.' (T. 2;11)

- Acuma p(l)eci **ca să *te cumperi** o mașină sau da sau nu?
  now go.PRES.2SG COMP SBJV CL.2SG buy.2SG car.a or yes or no.
  'Now you go to buy a car or yes or no?' (T. 2;11)

- Acum ***te dau** imediat un pește.
  now CL.2SG.ACC give.1SG soon fish.a
  'Now I will give you soon a fish.' (T. 2;11)

- Să dechid? **Să *te arăt.**
  SBJV open.1SG SBJV CL.2SG.ACC show.1SG
  'Should I open? Shoul I show you' (T. 2;11)

- ***Te aduc** o mașină.
  CL.2SG.ACC bring.1SG car.a
  'I will bring you a car' (T. 2;11)

- ***Te didici capu(l).**
  CL.2SG.ACC lift.2SG head.the
  'Can you lift your head' (T. 2;10)

- **Să nu *te p(r)inzi** mâna că ești mică, mică.
  SBJV NEG CL.2SG.ACC catch.2SG CONJ be.2SG small.SG.F small.SG.F
  'Don't catch your hand because you are small, small' (T. 2;11)

- **Să *te arăt! Să *te alăt!**
  SBJV CL.2SG.ACC show.1SG SBJV CL.2SG.ACC show.1SG
  'Let me show you! Let me show you!' (T. 2;11)

- ***Te fac.**
  CL.2SG.ACCmake.1SG
  'I will make it for you' (T. 2;11)

- Mulțumesc. Tu, **alege- *te** o mașină.
  thank you. CL.2.SG.NOM chose.IMP.2SG CL.2SG.ACC car.a
  'Choose a car for yourself an I will play with you.' (T. 2;11)

- Să iei jucălii de aicea. ***Te- am făcut** loc.
  SBJV take.2SG toy.PL from here. CL.2SG.ACC AUX doPART.PAST place.
  'Take toys from here. I made room.' (T. 2;11)

- CHI: Da' **pot să *te uit** ce la mână.
  But can.1SG SBJV CL.2SG look.1SG what at hand.
  'But can I look at your hand?'
  DAD: Să n- o scapi.
  SBJV NEG CL.SG.F.ACC drop.2SG
  'Don't drop it'
  CHI: ***Te- am dus- o.**
  CL.2SG.ACC AUX takePART.PAST CL.2SG.F.ACC
  'I brought it to you' (T. 2;11)

- MOM: Câți ai acolo? Ia spune-mi.
  how.M.PL have.PRES.2SG there? well tell.IMP.2SG-CL.1SG.DAT
  'How much do you have there. Tell me.'
  CHI: Stai că o **să *le iau** în buzunal. (bani)
  stay.PRES.2SG CONJ AUX SBJV CL.2PL.F.ACC take.1SG in pocket.
  'Wait because I will take it in my pocket' (T. 2;11)

- CHI**:** **L-** am st(r)icat ***pe** suc.
  CL.3SG.M AUX breakPART.PAST PE juice.
  'I broke the juice.' (T. 2;11)

- Pisică cu cățel **să *le duc afală. Să *le duc afală**.
  cat with doggie SBJV CL.2PL.ACC take.1SG outside SBJV CL.2PL.ACC take.1SG outside
  'Cat with doggie to take them outside. To take them outside' (T. 2;11)

O-CORPUS

- CHI: Ca să pot să ***mă** fac ps, ps, ps.
  COMP SBJV can.1SG SBJV CL.1SG.ACC do.1SG ps, ps, ps.
  'So I can do ps, ps, ps.' (O. 2;04)

- CHI: Stai un pic așa ca să ***mă** scot banii.
  wait.IMP.2SG little.a INT COMPSBJV CL.1SG.ACC take.1SG money.the
  'Wait a little like me to take out the money.'

- CHI: Veau să ***m** văd.
  want.1SG SBJV CL.1SG.ACC see.1SG
  'I want to see me.' (O. 2;04)

- CHI: Da. Fimează **-mă.**
  yes film.IMP.2SG CL.1SG.ACC
  'Film me.' (O. 2;04)

- CHI: ***M-** a adus tati.
  CL.1SG.ACC AUX bring.PAST.PART daddy
  'Daddy has brought me.'
  MOM: Ți-a adus tati? Bine. Îți face mami o codiță.
  'Daddy has brought it? Ok. Mommy will make you a pony tail.'
  CHI: Cu ioz. Mie ***mă** p(l)ace ioz.
  with pink CL.1SG.DAT CL.1SG.ACC like.3SG pink.
  'With pink. I like pink.' (O. 2;04)

- CHI: Da, că mie ***mă** p(l)ace mov.
  yes CONJ CL.1SG.DAT CL.1SG.ACC like.3SG purple
  'Yes, because I like purple.' (O. 2;04)

- CHI: ***Mă** p(l)ace.
  CL.1SG.ACC like.3SG
  'Me like.' (O. 2;04)

- CHI: Nu ***m-** a ieșit bine, bine, bine.
  NEG CL.1SG.ACC AUX turn.PAST.PART well well well
  'It didn't turn out well me.' (O. 2;04)

- CHI 2: ***M-**a pins șoiăpelu(l).
  CL.1SG.ACC. AUX catch.PAST.PART sock.the
  'Me ghave caught the sock.' (O. 2;04)

- CHI 2: Mami, ***m-** a dat.
  mommy CL.1SG.ACC. AUX give.PAST.PART
  'Mommy gave me.' (O. 2;04)

- CHI: Pomelo și ***m-** a făcut așa.
  pomelo and CL.1SG.ACC. AUX do.PAST PART INT
  MOM: Pomelo, și ți le-ai pus la burtică?
  'Pomelo and you have put them in your tummy?' (O. 2;04)

- CHI: Șterge- mă că ***m- o** venit în ochi.
  wipe.IMP.2SG CL.1SG.ACC CONJ CL.1SG.ACC AUX come.PAST.PART in eye.PL
  'Wipe me because it came into me eye. Give me a towel.' (O. 2;05)

- MOM: Să-ți desfac părul?
  'Should I undo your hair?'
  CHI: Ca să pot să ***mă** fac ps, ps, ps.
  COMP SBJV can.1SG SBJV CL.1SG do.1SG ps ps ps
  'To be able to do me ps, ps, ps.' (O. 2;07)

- CHI: ***M-** o venit în ochi.
  CL.1SG.ACC AUX come.PAST.PART in eye.PL
  'It came into my eye.'
  MOM: Ți-o venit în ochi?
  'It came into your eye?' (O. 2;07)

- CHI: ***M-** a venit în ochi.
  CL.1SG.ACC AUX come.PAST.PART in eye.PL
  'It came into me eye.'
  MOM: Ți-a venit iarăși în ochi?
  'It came into your eye again?' (O. 2;07)

- CHI: Stai un pic așa ca să ***mă** scot banii.
  wait.IMP.2SG. little.a. INT COMP SBJV CL.1SG.ACC take.1SG money.the
  'Wait a little like this for me to take me money.' (O. 2;07)

- CHI: Și eu ***mă** aduc înghețata.
  and CL.1SG.NOM CL.1SG.ACC. bring.1SG icecream
  'And me bring the icecream.' (O. 2;07)

- CHI: Uite că ***te** dau alea cu Pupo
  look CONJ CL.2SG.ACC. give.1SG those with P.
  'Look I give you those with P. because you know that one.'

MOM: Nu cred că mai sunt acțipilde acolo.
I don't think there are stickers there. (O. 2;4)

- CHI: *__Te__ *__da__ ție.
CL.2SG.ACC. give.INF CL.2SG.
'Me give you.'
MOM: Mi-l dai mie? Mulțumesc.
'You give it to me? Thank you.' (O. 2;4)

- CHI: Și *__aia îi__ polnesc. Să nu *__te__ fie flică.
and that CL.3PL start.PRES.1SG SBJV NEG CL.2SG.ACC be.3SG scare.
'And that I start them. Don't be you afraid.' (O. 2;5)

- CHI: T(r)e(buie) *__să dau__ la mami. Ai uitat?
have to.PRES.3SG SBJV [CL.3SG.DAT] give.1SG to mommy AUX forget.PAST.PART
'I have to give to mommy. Have you forgotten?' (O. 2;4)

- MOM: Cum să-i punem numele?
'What should we name him?'
CHI: Cum *__să punem__? V(r)ei *__să punem__ E.?
how SBJV [CL.3SG] give.1PL name. want.2SG SBJV [CL.3SG] give.1PL E.
'What should we name [her]? Want to name [her] E.? (O. 2;4)

- CHI: O cu(l)că pe fetiță. *__Dă (s)cutec__ la fetiță.
CL.3SG.F sleep.PRES.3SG PE girl.little give.PRES.3SG diaper to girl.
'They put the girl for a nap. Give diaper to girl.'
DAD: __Îi dă__ scutec la fetiță?
CL.3SG.F give.PRES.3SG diaper to girl.
'It gives diaper to the girl. (O. 2;5)

- CHI: *__La bebe__ îi p(l)ace așa.
to baby CL.3SG.M like.PRES.3SG INT
'The baby likes it like this.' (O. 2;05)

- CHI: Stai un pic. Bebe *__aici__ jos să- i dau.
wait little.a baby here down SBJV CL.3SG.DAT give.1SG
'Wait a little. Baby here down to give him.'
CHI: Și mie *__dă.__
and CL.2SG.DAT. give.PRES.3SG
'And to me give.' (O. 2;07)

- MOM: De care vreți, de ciocolată sau de portocale?
  'What kind do you want chocolate or orange?'
  CHI: ***La bebe** nu i- ***a dat** că ața e a mea.
  to baby NEG CL.2SG.DAT AUX give.PAST.PART CONJ this be.PRES.3SG mine.
  'To baby has not given because this is mine.' (O. 2;07)

- CHI: ***Aduc** pe bebe.
  [CL.3SG.M] bring.PRES.1SG PE baby
  'Bring baby.' (O. 2;07)

- CHI: ***Pun** aici ca să scoată bani.
  [CL.3SG.ACC.M] put.PRES.1SG here COMP SBJV take.3SG money.
  'Put here to take the money.' (O. 2;07)

E-CORPUS

- MOM: Nu ți-ai luat bluza.
  NEG CL.2SG.DAT AUX.2SG take.PAST.PART blouse
  'You didn't take your blouse.'
  CHI: Luat buza.
  [AUX.2SG] take.PAST.PART blouse
  'Take blouse.' (E. 2;09)

- CHI: (S)cuze! Lepal acum.
  sorry fix.PRES.1SG now
  'Sorry! I fix now.' (E. 2;09)

- CHI: Nu veau. Las mâine.
  NEG want.1SG leave.PRES.1SG tomorrow
  MOM: O lași pentru mâine? Bine.
  'You will leave it for tomorrow? Ok.
  CHI: Me(r)ge (de)senele, mami?
  work.PRES.3SG cartoons.the mommy
  'It works the cartoons, mommy?' (E. 2;09)

- CHI: Dai și mie T.?
  [CL.1SG.DAT] give.PRES.2SG and CL.1SG.DAT T.
  'Will you give me too T.?' (E. 2;09)

- MOM: Ce fac aricii?
  What are the hedgehogs doing?
  CHI: Joacă.
  [CL.REFL.3SG]. play.PRES.3SG
  MOM: Se joacă?
  'They are playing?'
  CHI: Da.
  'Yes.' (E. 3;0)

- MOM: Da ce fac fluturații și albinuțele?
  'Yes what arev the butterflies and the bees?'
  CHI: Joacă.
  [CL.3SG.REFL] play.PRES.3SG
  MOM: Se joacă.
  'They are playing.' (E. 3;0)

- CHI: Da. Ce cheamă aicea?
  yes what [CL.REFL.3SG] call.PRES.3SG here
  'Yes. What calls here?
  MOM: Cum se numește? Prospect.
  'What is it called? Instructions.' (E. 3;02)

- CHI: Nu am.
  NEG have.PRES.1SG
  MOM: Nu ai loc?
  NEG have.PRES.2SG place
  'You don't have a place?'
  CHI: Nu p(l)ace.
  NEG like.
  'Not like.' (E. 3;0)

  - CHI: Mie p(l)ace așa.
    CL.1SG.DAT. [CL.1SG.DAT.] like.PRES.3SG INT
    'I like like this.'
    MOM: Îți place să stai așa, relaxată.
    'You like to stay like this, relaxed?' (E. 3;02)

- CHI: Mă p(l)ace pena asta.
  CL.1SG.ACC like.PRES.3SG pillow this.F.SG
  'I like this pillow.'
  MOM: Îți place? De ce?
  'You like it? Why? '

CHI: P(l)ace.
like.PRES.3SG
'Like.'
MOM: De ce?
'Why?'
CHI: Mami, mie p(l)ace așa.
mommy CL.1SG.DAT like.PRES.3SG INT
'Mommy, I like like this.'
MOM: Dar de ce îți place?
'But why do you like it?' (E. 3;02)

- MOM: Mai mica puțin. Asta îmi place că are pantofiori cu toc.
'A bit smaller. This is what `I like that it has high heel shoes.'
CHI: Și mie p(l)ace că aie pafioli ioz.
and CL.1SG.DAT like.PRES 3SG CONJ have.PRES.3SG shoes.little pink.
'I also like that she has pink shoes.' (E. 3;02)

- CHI: (As)culți inima.
listen.PRES.2SG heart.the
'Listen to the heart.'
MOM: Îți asculți inima?
'You listen to your heart?' (E. 3;01)

- MOM: L-ai închis, acuma, te rog să-l pui pe coș.
'You have closed it, now, please, put it in the basket. '
CHI: Pune acolo.
put.PRES.3SG [CL.3SG.ACC.M] there
'Put there.
MOM: Unde?
'Where?'
CHI: Pune acolo. Pune acolo sus.
put.PRES.3SG [CL.3SG.ACC.M] there put.PRES.3SG [CL.3SG.ACC.M] there up
'Put there. Put there up.' (E. 3;01)

- MOM: Numai pe uriaș îl doare.
'It only hurts the giant.'
CHI: Nu doale.
NEG hurt.PRES.3SG
'It doesn't hurt him.' (E. 3;02)

- CHI: Da. Mie nu cald.
yes CL.1SG.DAT NEG hot

MOM: Bine.
'Fine.' (E. 3;02)

- CHI: Ute, pupă.
look kiss.PRES.3SG
'Look kiss.'
MOM: Te pupa pe tine? Te linge.
'It was kissing you. It licks you.' (E. 3;02)

- MOM: Ce s- a întâmplat azi cu rujul?
what CL.REFL.3SG AUX happen.PAST.PART today with lipstick.the
'What has happened today with the lipstick?
CHI: Am peidut.
[CL.2SG.ACC.M] AUX lost.PAST.PART
'I lost.'
MOM: L-ai pierdut? Dar cum așa? Dar unde l-ai pierdut?
'You have lost it? How so? But where have you lost it?
CHI: L- am peidut acolo sus. Nu am aju(n)c.
CL.3SG.M.ACC AUX lost.PAST.PART there up NEG AUX reach.PAST.PART
'I lost it up there. I couldn't reach.'
MOM: Nu ai ajuns la el?
'You couldn't reach to it?' (E. 3;02)

- CHI: Nu toată ziua fac luj.
NEG all day [CL.REFL.2SG.ACC] use.PRES.1SG lipstick
MOM: Nu toată ziua?
'Not all day?'
CHI: Nu.
'No.'
MOM: Dar când?
'But when?'
CHI: Când pun somn, șteg.
when [CL1SG.REFL.ACC] put.PRES.1SG sleep wipe.PRES.1SG
'When I go to sleep I wipe.'
MOM: Când te pui la somn, te ștergi pe față.
'When you go to sleep you wipe your face.'
CHI: Da. Șteg așa, așa, așa.
yes wipe.PRES.1SG INT INT INT
'Yes. I wipe it like this, like this, like this.' (E. 3;02)

- MOM: Nu? Dar gâtul te doare?
No? But the throat hurts?

CHI: Aicea doale nasul.
here [CL.1SG.ACC] hurt.PRES.3SG nose.the
'Here nose hurts.' (E. 3;0)
CHI: **Mie** doale. Acuma vin.
CL.1SG.DAT [CL.1SG.ACC] hurt.PRES.3SG. now come.PRES.1SG
'Me hurts. I come now.' (E. 3;02)

- MOM: Ți- e foame?
CL.2SG.DAT be.PRES.3SG hungry
'Are you hungry?'
CHI: Nu mă foame.
NEG CL.1SG.ACC hungry
'I am not hungry.' (E. 3;02)

- CHI: Da. Mă pace mai cutoanele.
yes CL.1SG.ACC like.PRES.3SG INT crutons.the
'Yes. Me like more crutons.' (E. 3;02)

- CHI: Da, aici sunt bebelus. Mami **dă** **-mi** **-l** ăla?
yes here be.PRES.1SG baby mommy give.IMP.2SG CL.1SG.DAT CL.3SG.ACC.M that
'Yes, here I am a baby. Mommy give me that.' (E. 3;02)

B-CORPUS

- CHI: Jucăm.
[CL.REFL.2SG.ACC] play.PRES.1PL
'Play.'
MOM: Să ne jucăm?
'Should we play?' (B. 2;04)

- CHI: Jucăm.
[CL.REFL.2SG.ACC] play.PRES.1PL
'Play.'
MOM: Hai să ne jucăm cu măgărușul.
'Let's play with the donkey.' (B. 2;04)

- MOM: Nu l-ai prins. Unu.
'You haven't caught it. One.'
CHI: Doi, tei, și. Nu am pinș- o.
two three and NEG AUX catch.PAST.PART CL.3SG.G.ACC
'Two, three and I haven't cought it.' (B. 2;04)

- CHI: Da. Uite, a iupt.
  yes look [CL.REFL.2SG.ACC] AUX.3SG break.PAST.PART
  'Yes. Look is broken.'
  MOM: Ce s-a rupt, iubirea mea?
  'What has broken my love?'
  CHI: Ala a lupt.
  that [CL.REFL.2SG.ACC] AUX.3SG break.PAST.PART
  'That has broken.'
  MOM: Nu s-a rupt. L-a reparat mama.
  'It hasn't broken mom fixed it.'
  CHI: A lupt.
  [CL.REFL.2SG.ACC] AUX.3SG break.PAST.PART
  'Has broken.' (B. 2;04)

- MOM: Ți-e sete?
  'Are you thirsty?'
  CHI: Sete. Aici.
  [CL.1SG.DAT] thirsty here.
  'Thirsty. Here.' (B. 2;04)

- CHI: A (a)jutat?
  AUX.3SG help.PAST.PART
  MOM: Ne-a ajutat, da.
  'It helped us, yes.' (B. 2;05)

- CHI: Pat. A (tre)zit!
  bed AUX [CL.REFL.2SG.ACC] wake.PAST.PART
  'Bed. Woke up!'
  MOM: S-a trezit?
  'Did he wake up?' (B. 2;05)

- CHI: (Con)sut(l)ă, (con)su(l)tă L.
  consult.PRES.3SG consult.PRES.3SG. L.
  'Consult, consult.'
  MOM: Eu să o consult pe Lala?
  'I should consult L.?'
  CHI: Da.
  'Yes.' (B. 2;05)

- CHI: Cap. Două aici dă -mă.
  head two here give.IMP.2SG CL.2SG.ACC
  'Heads. Two here give me.'
  MOM: Două pansamente?
  'Two bandages? (B. 2;05)

- MOM: Of, oare de ce s-a stricat trenul?
  'Oh, why did the train break.'
  CHI: A (s)t(r)icat.
  AUX break.PAST.PRT
  'It has broken' (B. 2;05)

- CHI: Ochii. Cucă C.!
  eyes.the sleep.IMP.2SG C.!
  'Eyes. Sleep C!'
  MOM: Culcă-te, Carla, i-ai spus?
  'Sleep C., did you say that to her?' (B. 2;05)

- CHI: A(s)cuns.
  [AUX] hide.PAST.PART
  'Hidden.'
  MOM: S-a ascuns rechinul.
  'The shark has hidden.' (B. 2;05)

- CHI: Nu pot. Nu pot.
  NEG can.PRES.1SG. NEG can.PRES.1SG
  'I can't. I can't.'
  MOM: Spune ajută-mă, te rog!
  'Say help me please.'
  CHI: Ajută!
  help.IMP.2SG [CL.1SG.ACC]
  'Help.' (B. 2;05)

- CHI: Nu îmb(r)ăcăm.
  NEG [CL.1PL.ACC] dress.PRES.1PL
  'Not dressing.'
  MOM: Nu ne îmbrăcăm?
  NEG CL.1PL.ACC dress.PRES.1PL
  'We are not dressing.' (B. 2;05)

- MOM: Și baba ce a spus?
  'And the old lady what did she say?'
  CHI: Nu dau.
  NEG [CL.2SG.DAT] give.PRES.1SG
  'I don't give you.'
  MOM: Nu-ți dau, a spus baba.
  'I won't give you, said the old lady.' (B. 2;05)

- CHI: A iupt - o.
  AUX.3SG break.PAST.PART CL.3SG.ACC.F
  'She has broken it.'
  MOM: Ce i-a rupt la Cenușăreasa?
  'What has Cinderella broken.' (B. 2;06)

- CHI: M- am udat pataionii
  CL.1SG.ACC AUX wet.PAST.PART trousers.the
  'Me wet my pants.'
  MOM: Nu ți-ai udat pantalonii, puiule. Nu.
  'You haven't wet the pants, chick. No.' (B. 2;06)

- CHI: Pisică. Chema Bafi.
  cat call.INF? Bafi.
  'Cat. Call Bafi.'
  MOM: Cum o cheamă pe pisică?
  'What is the cat's name?' (B. 2;06)

- CHI: Veau apă sete.
  want.PRES.1SG water [CL.1SG.DAT be.PRES.3SG] thirsty
  'I want water [I am] thirsty.' (B. 2;06)

- CHI: Dă mie ca(r)tea.
  give.2SG CL.1SG.DAT book.the
  'Give me book.'
  MOM: Cartea? Care carte?
  'The book? Which book?' (B. 2;06)

- CHI: Unde apinde. Unde e apinde.
  where light where be.PRES.3SG light.
  MOM: Unde se aprinde?
  'Where does it light up?'
  CHI: Da.
  'Yes.'

MOM: Cum nu? Te-ai spălat?
'How? Have you washed?'
CHI: Am păiat.
[CL1SG.ACC] AUX wash.PAST.PART
'I washed.' (B. 2;06)

- CHI: **Uit** pe iup.
look.1SG PE wolf.
DAD: Pe lup? Nu este lup.
PE wolf NEG be.PRES.3SG. wolf
'The wolf? It is not a wolf.'
CHI: Nu e(s)te.
NEG be.PRES.3SG
'It isn't.'(B. 2;06)

- CHI: A(s)cu(l)tă -mă, mami. A(s)cu(l)tă -mă.
Listen CL.1SG.ACC moomy listen CL.1SG.ACC
'Listen to me, mommy. Listen to me, mommy.' (B. 2;04)

Annex 6

Corpora of L1 Romanian Early Language Acquisition

CHAT transcription and coding format and CA conventions are used.

Transcription conventions

.	raised period inhalation, end of utterance
?	mark the end of an utterance
!	mark the end of an utterance
,	mark of phrasal junction
Word	capital letter at the beginning and in the case of proper names
WORD	emphasis – all capital letters
xxx	unintelligible words
www	untranscribed material (if the parent reads a story, talks on the phone)
text(text)text	noncompletion of a word
↑	rising tone – shift to high pitch
↓	falling tone – shift to low pitch
(.)	pause marked by silence
(..)	longer pause
(...)	very long pause
text//	a speaker interrupted by another speaker
text-	self-interruption
[word]	lazy overlap of two turns overlapping used at the beginning of an utterance that overlaps a previous utterance
((text))	making comments
text(text)text	noncompletion of a word. I have been sit(ing)
[x7].	multiple word repetition – the word was repeated 7 times
&-	filled pauses &-hm. &-you know
<@text@>.	laugh in a word
^	broken word spa ^ ghetti
&	non-word string. &gaga word play

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