Phrasal verbs: usage and acquisition

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Abstract

Phrasal verbs are a typical feature of English. Multiword expressions, and especially phrasal verbs, can assess the level of English language proficiency. However, learners of English tend to adopt a strategy of avoidance. Unpredictable, phrasal verbs can be difficult to both understand and remember for non-English speakers, which prompted Sinclair (1996) to call them *'the scourge of the learner'*. The role of multiword constructions has also been emphasized in theories of first language acquisition (Goldberg, 1995; Tomasello, 2003). They are indeed a rich and productive source of predication that children must master, doing so at very young ages. There is, nevertheless, a huge gap in the study of child language acquisition that has largely left unaddressed questions about how the child learns and acquires verb-particle constructions. The purpose of this paper is to explore the gradual development of verb-particle constructions in child language by examining longitudinal data from the spontaneous oral speech of Naima, an English-speaking girl from the Providence Corpus of the CHILDES database (MacWhinney, 2000; Demuth, Culbertson & Alter, 2006), between ages 0;11 and 3;10. My findings also support the claim that input and interaction play a major role in the language acquisition process. Indeed, by analyzing the emergence and usage of phrasal verbs by Naima, I will thus compare the top ten verb-particle construction types used by the child and the adult. Finally, I will show the correlation between the most frequently used phrasal verbs in adult speech and the earliest constructions acquired by Naima. Ultimately, this paper presents a wide-coverage investigation of the acquisition of phrasal verbs and their usage in child speech.

1. Introduction

1.1. Definition and background information

Phrasal verbs are typical of the English language (Fraser, 1976; Moon, 2005, as quoted in Macmillan, 2005). As stated by McArthur (1989), they have always represented *'a vigorous part of English'*. Phrasal verbs indeed make up one-third of the English verb vocabulary (Li, Zhang, Niu, Jiang, & Srihari, 2003). Besides, there are about 3,000 established phrasal verbs in English, including 700 in everyday use (Bywater, 1969; McArthur & Atkins, 1974; Cornell, 1985). In addition to the great number of existing phrasal verbs, new ones are constantly being coined. As noted by Bolinger (1971), they thus constitute a highly productive category: *'an explosion of lexical creativeness that surpasses anything else in our language'*.

There is no universal definition of phrasal verb. Indeed, as underlined by Gardner and Davies (2007), *'linguists and grammarians struggle with nuances of phrasal verb definitions'*. One of the reasons for this lack of consensus (Darwin & Gray, 1999; Sawyer, 2000) is that some linguists qualify phrasal verb as the combination of a verb and a preposition or an adverbial particle whereas others only consider a phrasal verbs as a verb followed by an adverbial particle. Phrasal verbs have, however, traditionally been understood as consisting of a verb and an adverbial particle.

As regards to the meanings of phrasal verbs, they may range from directional, or literal, or transparent, (e.g., *stand up*, *take away*) to aspectual, or completive, (e.g., *burn down*, *eat up*) to non-compositional, or idiomatic, or opaque, (e.g., *face off*, *figure out*) (Live, 1965; Fraser, 1965, 1966; Bolinger, 1971; Makkai, 1972; König, 1973; Moon, 1997; Celce-Murcia & Larsen-Freeman, 1999). The semantic classes of phrasal verbs can thus be represented on a broad continuum between compositional (directional and aspectual) meanings and non-compositional (idiomatic) ones (Bolinger, 1971; Moon, 1998) (see Figure 1).

1.2. Phrasal verbs, *'the scourge of the learner'*

Many linguists and researchers have recognized the importance of multiword expressions as they attest to mastery of English (Klein, 1989; Folse, 2004; Wood, 2004). Phrasal verbs can thus assess the level of English language proficiency. Cowie (1993) views them as *'a nettle that has to be grasped if students are to achieve native-like proficiency in speech and writing'*. As for Cullen and Sargeant (1996), they explain that *'understanding and being able to use these constructions correctly in spoken and written English is essential if the learner is to develop a complete command of the language'*.

Nonetheless, only a limited number of languages possess phrasal verbs (Celce-Murcia & Larsen-Freeman, 1999), which necessarily limits the possibility of successful transfer (Kellerman, 1983) for those learners whose mother tongues lack verb-particle constructions.

There has been considerable discussion about the challenges imposed by phrasal verbs to foreign learners of English. Indeed, not only may verb-particle constructions have reduced syntactic flexibility, but they may also be semantically more figurative.

Accordingly, for some cases, the meaning of a phrasal verb turns out to be difficult to infer from its component words. For instance, the phrasal verb 'to *play* something *down*' does not have to do with a playing event and it rather means 'to minimize the importance of something', as the following example from the *British National Corpus* (BNC) (Davies, 2004-) illustrates:

> (1) The European Commission sought to **play down** fears yesterdaythat new European Community rules limiting imports of cheaper bananas from Latin America would force up prices for consumers.K59_1005 (BNC)

In addition, many phrasal verbs are polysemous, making the task of grasping their different meanings even more difficult for learners.[1] Therefore, interpretation of such ambiguous forms only can be solved by using the context. The following examples illustrate the case of *make up*, a highly polysemous phrasal verb:

> (2) "Come on, Annie. Let's **make up**."ALJ 2705 (BNC)

> (3) Full of cynical amusement, she continued to stare at herself until inspired, she started to **make up** her face carefully, emphasising her brown eyes with liner, and smoky eyeshadow, and dusting her high cheekbones with blusher.HGM 934 (BNC)

> (4) You could **make up** a whole story. On no real evidence. It would change all sorts of things.APR 1125 (BNC)

> (5) The girl in the chemist's shop said the chemist would **make up** the prescription the minute he got back from the bank.H9G 2630 (BNC)

> (6) I understand life, and the family ties that **make up** almost all of it,
> much less than I ever did.AE0 2910 (BNC)

> (7) "Give me time to **make up** my mind. I promise I'll do everything I can to help the rest of you."AEB 1717 (BNC)

> (8) "I'd be ever so appreciative if you could, lass. And as I'm putting you out on your half-day I'll **make** it **up** to you, there will be something extra by way of a thank you in your pay packet on Friday."AN7 304 (BNC)

> (9) Since the plant manager was never able to **make up** a day's loss of output which pulled down his monthly overall efficiency figures on, which he was judged, it was never difficult for Clasper to prove his point.AC2 530 (BNC)

[1] It is interesting to note that, in an analysis of the *British National Corpus*, Gardner and Davies (2007) found an average of 5.6 different meanings for each of the 100 most frequent verb + adverbial particle

(10) "Here's your chance to **make up** for the naughty things you've done to me."$_{\text{B0B 2568}}$ (BNC)

(11) "You hypocrite, stop **making up** to my sisters and playing the shining knight, I saw you go to communion today, and it made me sick. How could you? When you don't even.... You looked like.... I saw you coming back from the communion rails, with your eyes down and your hands folded, as if you weren't putrid inside, but I know. I know."$_{\text{GUX 107}}$ (BNC)

All these examples taken from the BNC clearly show that the context helps to eliminate ambiguity and make sense of the various meanings of *make up*: (2) to become friendly with someone again after an argument; (3) to put makeup on someone's face; (4) to invent a story, often in order to deceive; (5) to prepare/arrange something; (6) to form/constitute something; (7) to come to/reach a decision about something; (8) to do something good that helps someone to feel better after you have caused him/her trouble; (9) to replace something that has been lost, to compensate for something; (10) to do something that corrects a bad situation; and (11) to be pleasant to somebody, to praise somebody, especially in order to get an advantage for yourself.

Given their complexity and their unpredictable nature, multiword expressions, and especially phrasal verbs, can be difficult to both understand and memorize for non-English speakers in the current language experience (Coady, 1997). They are a source of confusion and ambiguity - in terms of idiomaticity and polysemy, in particular (Cornell, 1985; Side, 1990; Moon, 1997; Celce-Murcia & Larsen-Freeman, 1999; Rudzka-Ostyn, 2003) - in such a way that Sinclair (1996) called them *'the scourge of the learner'*. Accordingly, second language learners of English tend to adopt an avoidance strategy with respect to phrasal verbs, preferring most of the time using single-word verbs of Latin origin. This idea of avoidance has been clearly emphasized by Bywater (1969):

> *'The plain fact is that what distinguishes the writing and, above all, the speech of a good foreign student from those of an Englishman is that what an Englishman writes or says is full of these expressions, whereas most foreigners are frightened of them, carefully avoid them, and sound stilted in consequence. Foreign students who enjoy being flattered on their English can best achieve this by correctly using masses of these compound verbs.'*

To highlight the *'under-representation'* (Levenston, 1971) of this particular category of verbs that phrasal verbs constitute, greatly puzzling to non-native speakers, a quantitative corpus study of the use of phrasal verbs has been conducted to compare learners' productions with native students' writings. All phrasal verbs have thus been extracted from the *International Corpus of Learner English* (*ICLE*) (Granger et al., 2002), the largest essay collection of advanced learners from different mother tongue backgrounds (Bulgarian, Czech, Dutch, Finnish, French, German, Italian, Polish,

Russian, Spanish and Swedish), and from the *Louvain Corpus of Native English Essays* (*LOCNESS*) (Granger et al., 1995), the control corpus complementing *ICLE*. Figure 2 shows the extent of over- and underuse of phrasal verbs by foreign learners with respect to native speakers. The results have been summarized in Table 1.

Phrasal verbs are not universally underused by advanced foreign learners of English. Indeed, German learners stand out from all the other learner groups and they even use more phrasal verbs than native students. This much has to do with the fact that speakers of German have phrasal verbs in their mother tongue. As for Dutch and Polish learners, they perform in the same quantitative range as native speakers, whereas all the other learner groups use fewer phrasal verbs than native students. Finally, avoidance has above all been identified in the English of learners with a Romance native language background (e.g., Spanish, Italian, French) - languages which lack phrasal verbs.

2. Purpose

Much has been discussed about the numerous challenges posed by multiword expressions, and especially phrasal verbs, to foreign learners of English, given their unpredictable nature and their complexity. Nonetheless, little or no study has been done on the acquisition of verb-particle constructions by young English-speaking children. Yet, phrasal verbs represent as well one of the most challenging areas for children acquiring English as their native language.

This study explores whether children shy away from using them when they communicate. In this paper, I will then report a wide-coverage investigation of the acquisition of phrasal verbs and their usage in child speech. Studies like these can inform the development of new areas of work for language acquisition.

This paper is structured as follows: section 3 describes verb-particle constructions and related works; section 4 presents the resources and methods used in this paper. The analyses of verb-particle constructions in child speech and in adult discourse are in section 5. I finish with conclusions and possibilities of further studies.

3. Related work

Multiword verbs such as phrasal verbs function as whole units. They are considered as a separate lexical unit, reflecting the semantic unit of the construction. This is indeed consistent with construction grammars, where content and form are paired to form a construction whose meaning is generally unpredictable (Fillmore, 1985, 1988; Lakoff, 1987; Langacker, 1987; Goldberg, 1995, 2003; Stefanowitsch & Gries, 2003).

The impact of such theories on our understanding of child language acquisition has consisted in emphasizing the importance of a construction built piece by piece, *'mosaic-like'* (Robert & Chapouthier, 2006; Schmidtke-Bode, 2009), and based on lexical items rather than rules until very late. Tomasello's verb-island hypothesis (1992) thus states that the child first learns words in chunks in specific constructions. This assumption is in line with the Gestalt theory, which asserts that a perceived

global form does not match the sum of stimuli that constitute it, and the perception of a part fits with our understanding of the whole. Constructions are actually first understood as a whole; the analysis of a verb-island construction being primarily inseparable from the individual verbs previously learned by the child. Thus, children's early grammatical knowledge consists *'not of an abstract and coherent formal grammar but rather of a loosely organized inventory of item-based construction islands'* (Cameron-Faulkner, Lieven, & Tomasello, 2003; see also Rowland, 2007). Equally supported by MacWhinney (1975, 1982, 1988), the theory of item-based learning has been identified as one of the central processes for a correct language production. Ultimately, language acquisition is a gradual process: linguistic categories are not innately given to the child, but gradually built by him from his language experiences.

In this paper, I present a wide-coverage investigation of the acquisition of phrasal verbs and their usage in child speech. More specifically, this work aims to examine the gradual development of verb-particle constructions in child language.

4. Materials and methods

The analysis was carried out on the longitudinal spontaneous speech data of Naima, a monolingual English-speaking girl from the Providence Corpus of the CHILDES database (MacWhinney, 2000; Demuth, Culbertson & Alter, 2006), between ages 0;11 and 3;10. Audio and video recordings, which began at the onset of first-word production and took place for approximately one hour every two weeks, were collected during spontaneous interactions between Naima and her mother (sometimes her father) at home. The utterances were transcribed using CHAT conventions.

For the current study, I used CLAN programs to extract all child utterances containing verb-particle constructions. Since the adult corpus was not coded, I collected the data manually.

5. Verb-particle constructions in early child language

5.1. The development of verb-particle constructions in early child language

Movement and space are two inseparable entities; our conceptualization of the movement being indeed part of the concept of space. As stated by Vandeloise (1987), *'the movement is an aspect of the outside world and it is often inscribed in the linguistic structures'*.[2]

The child lives in a world in motion. The first child language constructions obviously arise from both the movement and space, which are especially salient for the child.

Child's early single-word utterances are called holophrases (De Laguna, 1927). They are attempts at a sentence and convey a holistic communicative intention which

[2] Quotation translated by my care. Original text: 'Le mouvement est un aspect du monde extérieur souvent inscrit dans les structures linguistiques'.

mainly corresponds to that of the adult language from which it was acquired (Barrett, 1982; Ninio, 1992). Generally, child's first productive holophrastic utterances consist in making requests or describing dynamic events involving objects.
What are the parts of adult language utterances that young children select when they produce their first holophrases?

As Slobin (1985) explained, the answer lies in the kinds of discourse children participate with adults. This has to do mainly with the fact that certain words and phrases in adult speech are more perceptually salient than others (Slobin, 1973; Shady & Gerken, 1999). Thus, child's initial holophrases consist of *'dynamic event words'* such as *up*, *down*, *on*, *off*, etc., since adults use these words when referring to particular events (McCune, 1992, 2006; Bloom, Tinker & Margolis, 1993). They appear quite early in child language: they are part of the first twenty lexical items learnt by English-speaking children according to Brown (1973), and are primarily spatial localizers.[3] Many of these words will actually correspond to phrasal verbs in adult language (Leopold, 1939). Thus, the first stage of the development of verb-particle constructions in child language corresponds to the holophrastic use of adverbial particles, also called *'satellites'*[4] (Brown, 1973; Slobin, 1973; Tomasello, 1987). Their frequency in final position in the input speech accounts for their use instead of verbs (Slobin, 1973; Smiley & Huttenlocher, 1995).

Consider the following utterances, extracted from the Providence Corpus (Demuth, Culbertson & Alter, 2006):

(12) NAIMA: **up** Daddy. (1;4,03)
FATHER: oh you wanna get picked up oh that was in the way.
FATHER: that was in the way you wanted to get picked up and that was in the way?

(13) MOTHER: oh oh oh not in the mouth please.
MOTHER: we don't eat our trains in this house.
MOTHER: yucky.
MOTHER: are you a dog?
MOTHER: are you pretending to be a dog?
MOTHER: yeah you can take it out of your mouth yourself I think.
NAIMA: **down**. (1;3,26)
MOTHER: it did fall down didn't it?
NAIMA: **train down**.
NAIMA: **train down**.
MOTHER: the train fell down.
MOTHER: did it fall down?
NAIMA: yy yy yy yy yy.
MOTHER: think it did.
MOTHER: train fell down.

[3] The spatial location is indeed cognitively simpler.
[4] Note that English is a satellite-framed language; the trajectory of the event being expressed in an element of the verbal periphery, or 'satellite'. By contrast, languages that express the path in the verb are called verb-framed languages (French, for instance).

Clearly, Naima's holophrastic use of *up* in (12) and *down* in (13) conveys a spatial meaning corresponding precisely to a vertical path, which is characteristic of the first uses of particles. Moreover, here, *up* and *down* are said to be *'coloured'* particles because they are highly charged semantically, so that Tomasello (1987) considers them as *'verb-like'*. Thus, the particle *up* used by Naima in (12) might actually be, in a way, the equivalent of a truncated phrasal verb and be glossed in *'pick me up'*. There would then be an implicit predicative relation in holophrases. Accordingly, in the acquisition of verb-particle constructions, the child's holophrastic stage, beginning at 0;11,28 and being predominant up to 1;4,03 in Naima's data (see Figure 3), does not so much mark a spatial relationship between objects and people but rather a child's query about an action to be performed. This is indeed particularly emphasized in (12) with the adding of *'Daddy'*, which functions as an addition to Naima's holophrastic statement, thus clarifying her adult interlocutor. Besides, the video clearly shows Naima grabbing her father's T-shirt and straightening her arms up; thus confirming an orientation towards the purpose of the action.

As soon as the child is able to produce more than one word, his earliest multiword utterances refer to many of the same kinds of things he talked about previously with his holophrases (Damon & Lerner, 2006). Child's initial multiword constructions would thus ensue from his earlier holophrases. Indeed, this is especially the case in example (13) with Naima's holophrastic use of *down* and her initial two-word utterance *'train down'*; Naima commenting on a toy that has fallen down and that is now on the floor. The second stage of the development of phrasal verb constructions in child language usually follows the pattern *X up*, *X down*, *X in*, *X out*, *X on*, *X off*, etc., *X* being a noun phrase (Tomasello, 2003). This second period, starting at 1;3,26 in Naima's data and being predominant up to 1;6,21 (see Figure 3), reflects, in a way, the beginnings of predication since *down* is predicated of *'train'*. Again, like in (12), we have here, with *'train down'*, the vertical trajectory prototypically expressed by *down* giving way to an orientation toward both the location at the endpoint and the result of the action. Similar examples can be found in the corpus:

(14) NAIMA: shoes on.
(15) NAIMA: microphone off.

Examples (14) and (15) can thus be respectively glossed in *'put my shoes on'* and *'turn the microphone off'*.

Finally, the last stage of the acquisition of phrasal verb constructions corresponds to the period when children are able to produce complete constructions combining a verb and a particle (with an object, if the verb is a transitive one). In the corpus, Naima produces her first phrasal verb at 1;3,12 (*'fall down'*).[5] Her verb-particle constructions seem to become predominant over the two previous stages by 1;6,21 (see Figure 3), and they are getting more complex as Naima is growing older:

[5] Note that Naima is a particularly precocious child. Table 2 shows the age of production of the first verb-particle constructions. The analysis was carried out on children from the Providence Corpus and the McCune Corpus. The results clearly show variations in acquisition profiles. Obviously, English-speaking children produce their earliest phrasal verbs shortly after their first year of life, namely, at 14 or 15 months of age for the most precocious children. Generally, the initial verb-particle constructions appear, at the latest, before two years old (1;8-1;9).

(16) NAIMA: Mommy **clean up** yy (1;8)
(17) NAIMA: I **took** it **off** because I don't wanna have this on me (2;10)
(18) NAIMA: I have to **watch out** for it so it yy doesn't go in the food (3;1)

The three stages of the development of verb-particle constructions are presented in Figure 3.

Interestingly enough, a close link can be discerned between these three stages of the acquisition of phrasal verbs and the child's mean length of utterance (or MLU[6]), as shown in Figure 4. Indeed, if we consider both Figures 3 and 4, we clearly see that the holophrastic stage is largely predominant up to 1;4,10-1;4,18 (before decreasing a lot and almost disappearing); which exactly corresponds to the period when the child produces only one word - or, to be more precise, less than two words. In Naima's data, we have, for instance, the holophrase *'down'* at 0;11,28, with a MLU of 1.64 (MLU<2). It is the same for the two-word utterance stage, beginning at 1;3,26 (MLU=1.97) and being predominant up to 1;6,21 (MLU=2.00), thus referring to the period when the child is able to produce two words but less than three words - with a MLU fluctuating a lot within this period. For example, we have the two-word utterance *'train down'* at 1;3,26, with a MLU of 1.97 (MLU≈2) and *'off Naima'* at 1;5,26, with a MLU of 2.04 (MLU>2). The last stage also confirms this relationship between the different stages of the development of verb-particle constructions in child language and the MLU. Indeed, Naima's verb-particle construction stage is consistent with the fact that Naima is able to produce at least three words. This can be clearly observed with, for instance, Naima's utterance *'just turn this off'* at 1;9,23, with a MLU of 3.43 (MLU>3). From 1;6,21 to 1;9,23, there is some kind of overlapping with the two previous stages, being still present, though in minority. However, by 1;9,23 and up to the end of the longitudinal study, Naima's data clearly show that the number of phrasal verbs is growing increasingly numerous as Naima is getting older, while the MLU keeps on increasing a lot. As a result, we can infer that, the more Naima's MLU is increasing, the more her verb-particle constructions are becoming complete constructions (in full sentences). Thus, the comparison of Figures 3 and 4 strongly supports the idea of a correlation between the three stages of the acquisition of phrasal verbs in child language and the MLU.

5.2. Verb-particle constructions in child language and the primacy of space

As seen earlier in this paper (Section 5.1), the primacy of space makes the understanding of space and movement one of the possible origins or anchor points explaining child language development.

Table 3 shows the proportion of verb-particle constructions in Naima's data according to their semantic classification. With a huge majority of directional phrasal verbs in Naima's data (81.80%), the results clearly show that the most fundamental, concrete meanings are acquired first in early child language. Indeed, the spatial location is

[6] The Mean Length of Utterance (or MLU) was developed by Brown (1973) to measure children's linguistic productivity.

cognitively simpler. The aspectual and idiomatic phrasal verbs, respectively referring to 10.55% and 7.65% of the total corpus, are largely in minority. Accordingly, they will be acquired later; the most abstract, opaque meanings being cognitively more complex. Thus, the acquisition of verb-particle constructions goes from the simplest to the most complicated meanings. This idea is also confirmed in Table 2 since the first verb-particle constructions to appear in child language are exclusively directional. In Naima's data, the first phrasal verb to be acquired is *'fall down'* (1;3,12); the particle conveying a directional meaning. It is followed by *'knock down'* (1;4,03), *'lie down'* (1;5,02), *'climb up'* (1;5,26), *'get off'* (1;5,26), and *'pick up'* (1;6,09); all expressing a spatial meaning. Naima acquired her first aspectual phrasal verb (*'clean up'*) at 1;6,09, namely, three months after her first directional phrasal verb. As for her first idiomatic phrasal verb (*'dress up'*), it was uttered at 1;7,10, namely, four months after her earliest directional one.

The spatial world would thus have a privileged and critical status for cognition, as well as for the construction of language in language acquisition.

5.3. The influence of the input on the acquisition of phrasal verbs

Whether it be the language addressed directly to the child, or the language spoken around him, the input does not only have a triggering role, but it also plays a crucial role in the acquisition process.

The factors determining the acquisition of verb-particle constructions are related to language use and frequency of input (Rice, 1999). Naima's and her mother's data are summarized in Table 4.

This section examines and compares the top ten verb-particle construction types produced by Naima and her mother. The results are listed in Table 5. From these, 8 out of the 12 are exactly the same, differing only in the order in which they appear. The results obtained clearly indicate that the most frequently used verb-particle constructions in child data follow very closely adult usage. Besides, it is interesting to notice that the verbs used in the most frequent phrasal verbs in Naima's and her mother's data belong to the class of *'light verbs'*. And, indeed, it is not surprising since, given their frequency of use, they are acquired at a very early age by children and they act as centers of gravity from which more specific instances can be learnt (Goldberg, 1995, 1998, 1999).

Furthermore, the hypothesis that there would be a correlation between the most frequently used phrasal verbs in adult speech and the earliest constructions acquired by Naima is confirmed by the data, as shown in Table 6. Indeed, 19 out of 33 of the most frequent verb-particle constructions in the mother's data are acquired by Naima between 1;3,12 and 1;8,08, and it is greatly significant given that Naima was followed from age 0;11 to 3;10.

6. Conclusions

This paper explored the emergence and gradual development of verb-particle constructions in child language. The child's data show that the acquisition of phrasal

verbs by young English-speaking children generally follows three stages, from incomplete forms to complete constructions. First, child's initial utterances consist of holophrastic uses of adverbial particles, which seem to behave in a *'verb-like'* manner and convey the meaning of an entire sentence. Secondly, the two-word utterance stage, combining a noun phrase and a particle, emerges as the beginnings of predication. Thirdly, the child is able to successfully produce complete verb-particle constructions. Furthermore, this study emphasized the close relationship between these three stages of the acquisition of phrasal verbs in child language and the MLU.

This work also examined and compared the top ten verb-particle construction types in Naima's data and her mother's. The results show that the child follows very closely adult usage in terms of the phrasal verb types and is sensitive to their frequencies, thus displaying similar distributions to the adult.

Finally, the hypothesis tested confirms the correlation between the earliest verb-particle constructions acquired by Naima and the most frequent phrasal verbs used by her mother.

The data from spontaneous dialogical contexts may thus give a new insight on how phrasal verbs develop in child language.

I would like to end this paper on a funny note by quoting Jerry Seinfeld (1998):

> *'"Wait up!" That's what kids say. They don't say "wait", they say "Wait up! Hey, wait up!" 'Cause when you're little, your life is up. The future is up. Everything you want is up. "Wait up! Hold up! Shut up! Mom, I'll clean up! Let me stay up!" Parents of course are just the opposite. Everything is down. "Just calm down. Slow down. Come down here. Sit down. Put that down."'*

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Tables

Table 1. Extent of over- and underuse of phrasal verbs by foreign learners in comparison to native speakers.

Corpus	Percentage of use
LOCNESS (control corpus)	0%
ICLE_German	+13.92%
ICLE_Dutch	-0.1%
ICLE_Polish	-0.87%
ICLE_Finnish	-15.4%
ICLE_Bulgarian	-17.59%
ICLE_Swedish	-18.41%
ICLE_Russian	-25.29%
ICLE_French	-26.98%
ICLE_Czech	-28.2%
ICLE_Italian	-30.39%
ICLE_Spanish	-44.57%

Table 2. Age of production of the first verb-particle constructions.

Child	Age	Utterances
Naima (Providence Corpus)	1;3,12	**fall down**
	1;4,03	**knock** [?] **down**
Alice (McCune Corpus)	1;6	**sit down**
	1;7	**take** hat **off**
Alex (Providence Corpus)	1;9,08	yy **go away**
	2;4,25	and **pull** it **up**, apple
Ethan (Providence Corpus)	1;2,18	**fell** [?] **down** [?]
	1;4,00	xx **push down**
Violet (Providence Corpus)	1;7,22	**go away**
	1;8,05	**pick up**

Table 3. Proportion of phrasal verbs in the child's data according to their semantic classification.

	Directional	Aspectual	Idiomatic
Number of phrasal verb tokens	705	91	66
Percentage of phrasal verb tokens	81.80%	10.55%	7.65%

Table 4. Verb-particle construction usage in the child's and adult's data.

Verb-particle constructions	Child	Adult
Number of phrasal verb tokens	862	4019
Number of phrasal verb types	185	472
Number of support verb types	109	246

Table 5. Top verb-particle constructions for the child and the adult.

Rank	Child VPC	Child Freq	Adult VPC	Adult Freq	Child Rank
1	take off	50	put on	219	2
2	put on	42	take off	199	1
3	fall down	30	clean up	125	7
4	put back	28	get out	114	8
5	come back	27	fall down	101	3
6	take out	26	take out	96	6
7	clean up	23	put back	93	4
8	get out	22	put in	89	9
9	come out	21	put away	80	23
9	put in	21	pick up	65	11
10	go away	20	wake up	64	10
10	wake up	20	come out	61	9

Table 6. Results of the hypothesis test.

Most frequent PVs (Mother)	Number of tokens (Mother)	Age of emergence (Child)
put on	219	**1;6,21**
take off	199	**1;6,21**
clean up	125	**1;6,09**
get out	114	**1;7,00**
fall down	101	**1;3,12**
take out	96	**1;8,08**
put back	93	**1;7,10**
put in	89	1;8,19
put away	80	**1;7,17**
pick up	65	**1;6,09**
wake up	64	**1;8,08**
come out	61	2;4,11
pick out	61	2;3,25
turn off	50	1;9,23
come back	49	**1;6,09**
sit down	48	**1;7,10**
take away	44	**1;7,25**
go down	43	2;6,11
come on	42	3;3,26
hold on	42	2;10,08
put down	42	2;4,26
hang up	40	2;1,10
get off	39	**1;5,26**
go back	39	2;5,17
go out	35	2;00,04
dress up	34	**1;7,10**
turn on	34	**1;7,10**
come off	33	2;5,20
find out	33	**1;7,25**
get down	33	**1;8,01**
fit in	32	/
figure out	31	2;11,14
go in	30	**1;8,01**

Figures

Figure 1. Semantic continuum of phrasal verbs.

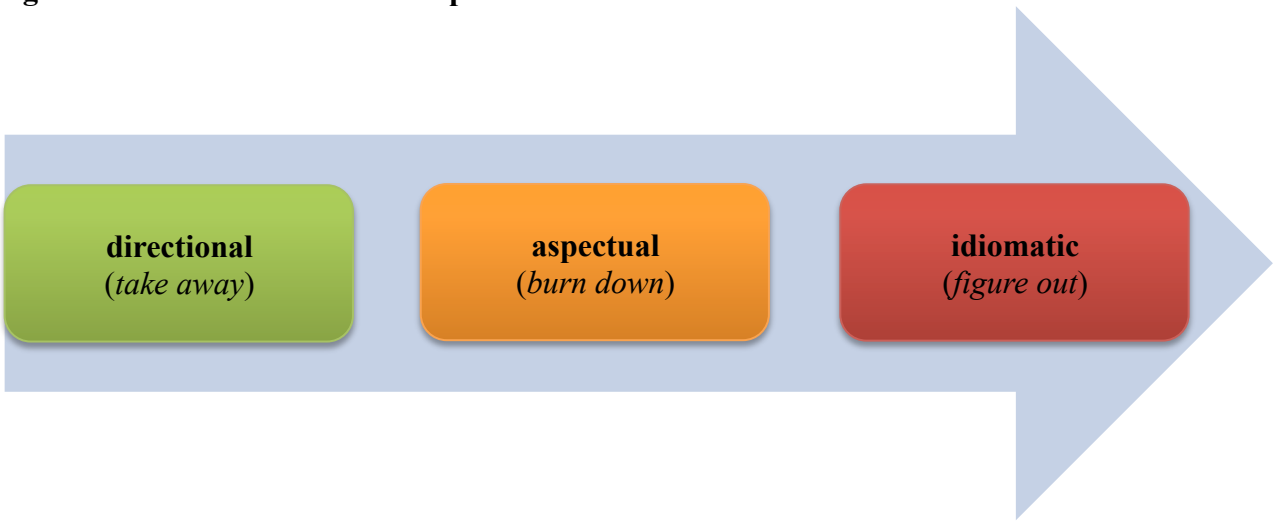


Figure 2. Extent of over- and underuse of phrasal verbs by foreign learners in comparison to native speakers.

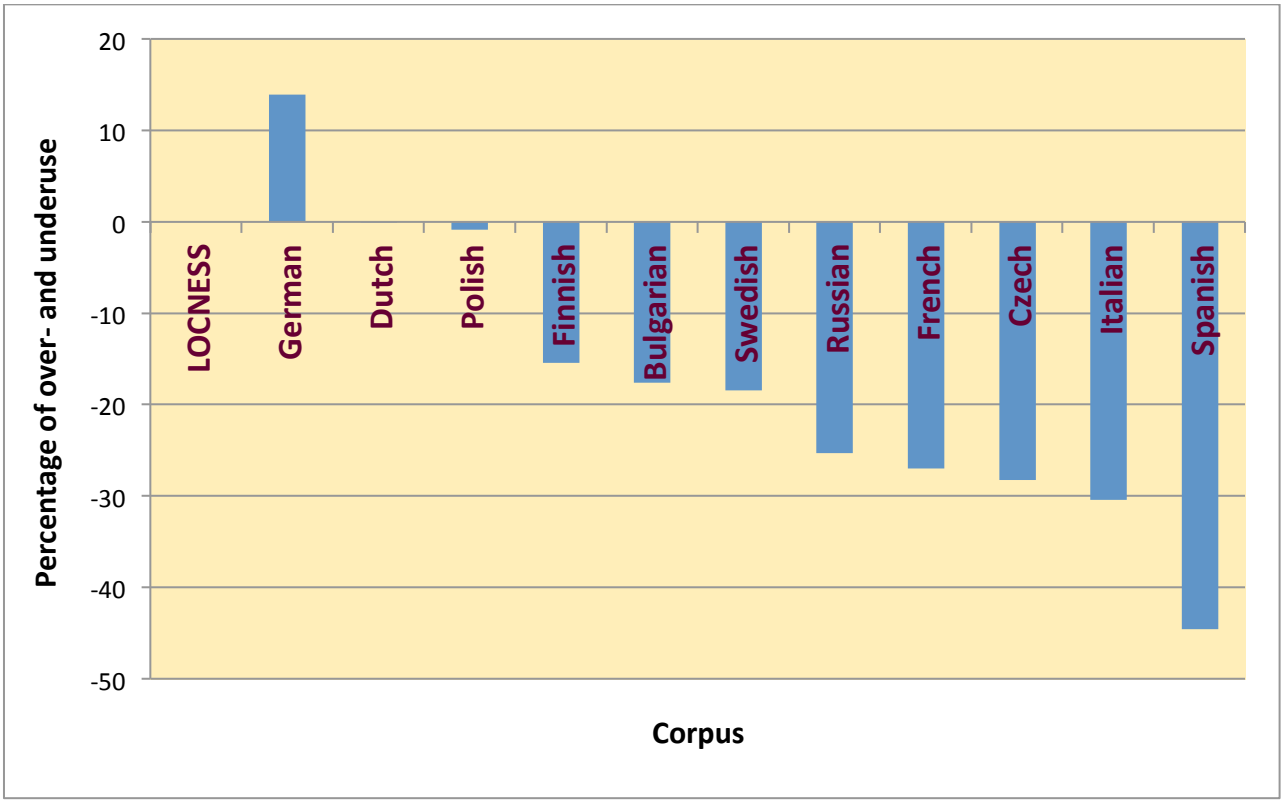


Figure 3. Gradual acquisition of verb-particle constructions by Naima (Providence Corpus)

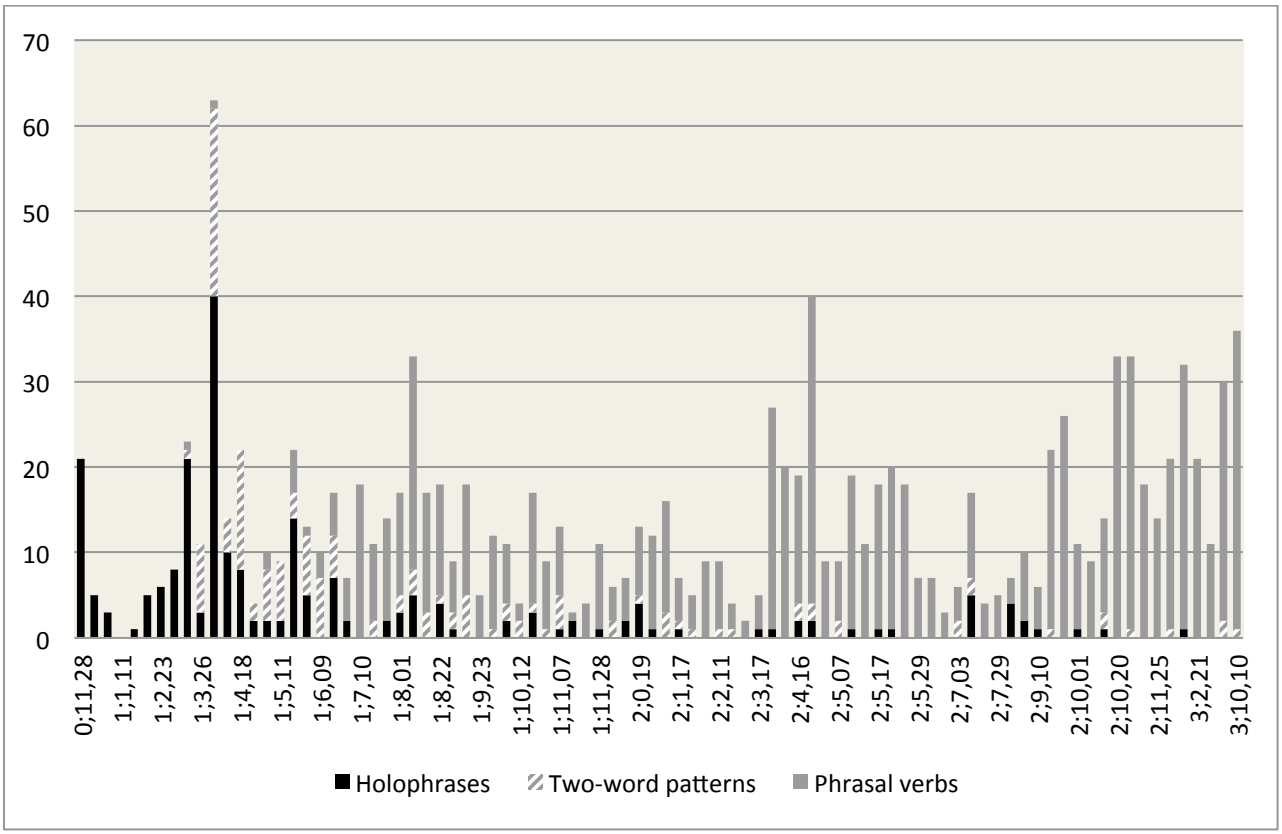
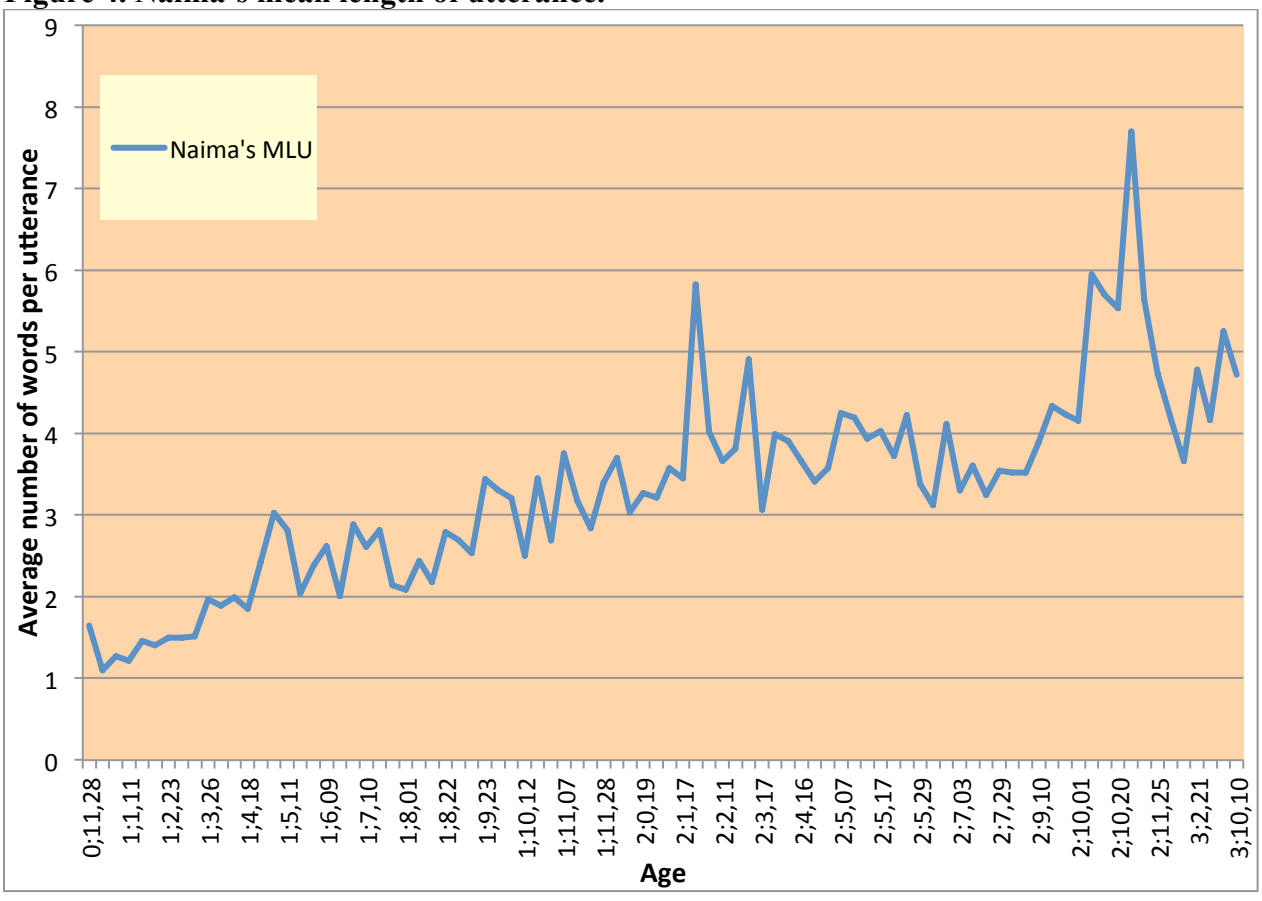


Figure 4. Naima's mean length of utterance.



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