



## Children's acquisition and uses of *what about* and *how about* constructions: A corpus-based perspective\*

**Jungsoo Kim**  
(Kyung Hee University)

**Kim, Jungsoo. 2022. Children's acquisition and uses of *what about* and *how about* constructions: A corpus-based perspective.** *Linguistic Research* 39(Special Edition): 51-96. This paper investigates the acquisition and usage patterns of the *what about* and *how about* constructions by young English-speaking children in North America, making use of corpus data from CHILDES (Child Language Data Exchange System) subcorpora. In previous literature, irregular *wh*-questions including the two under investigation have not received much attention compared to regular *wh*-questions and empirical studies on irregular *wh*-question constructions in general and children's acquisition of them have not been much conducted. In addition, previous literature on the two irregular *wh*-question constructions has mainly discussed their similarities. The findings of this corpus-based study, however, show that children acquire and use the two constructions in rather different ways in early childhood, and in doing so, their parents' input plays an important role, displaying similar behavior and tendencies in several respects. Nonetheless, a detailed analysis of the children's and their parents' *what about* and *how about* construction examples based on their dependent categories reveals that young children's uses of the two constructions exhibit some idiosyncratic linguistic features and tendencies, which are not observed in parents' data and general English. The observations made in this paper suggest that it is worth examining children's acquisition and usage patterns of the two constructions, with particular focus on preferred subtypes and illocutionary functions for each dependent category. (Kyung Hee University)

**Keywords** irregular *wh*-question constructions, acquisition, *what about*, *how about*, CHILDES

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## 1. Introduction

English employs several types of irregular *wh*-question constructions, which occur mainly in conversation (Quirk et al. 1985), as exemplified in attested corpus data in (1):<sup>1</sup>

- (1) a. Oprah, honey, how come you're not coming to our party? (COCA 2004 SPOK) (*how come* construction)  
 b. Why (not) listen to other voices? (COCA 1993 NEWS) (*why (not)* directive construction)  
 c. Why no consensus in Parliament today? (COCA 2019 SPOK) (verbless *why*-existential construction)  
 d. What to do now? (COCA 2019 FIC)/Who to vote for? (COCA 1995 SPOK) (subjectless infinitival *wh*-questions)  
 e. What if things don't go as planned? (COCA 2019 SPOK) (*what if* construction)  
 f. What about another drink? (COCA 1990 FIC)/How about answering this question? (COCA 2019 SPOK) (*what about/how about* constructions)

Each of these irregular *wh*-question constructions shows its idiosyncratic properties. For instance, even though the *how come* construction as in (1a) triggers a causal interpretation like the *why*-question construction, it does not involve subject-auxiliary inversion (SAI) as opposed to typical *wh*-questions in matrix environments. The *why (not)* directive construction as in (1b) gives rise to an imperative interpretation with the base form verb phrase (VP) in the absence of its overt subject. The verbless *why*-existential construction as in (1c) requires the specific *wh*-expression *why* and a noun phrase (NP) and the combination yields an existential interpretation. The subjectless infinitival *wh*-question construction as in (1d) contains a *wh*-expression and an infinitival VP without its subject, and it is used to ask for some opinion from the addressee. The *what if* construction as in (1e) consists of the specific *wh*-expression *what* and an *if*-clause dependent and it is used to ask a hypothetical question, to make a suggestion, etc. The *what about* and *how about* constructions as in (1f), occurring typically with an NP or a VP[-*ing*] dependent,

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<sup>1</sup> The examples here in (1) are from the corpus COCA (Corpus of Contemporary American English) (Davies 2008-). It is the largest structured corpus of Contemporary American English that continues to be updated and it is freely available at: <https://www.english-corpora.org/coca/>.

can be interchangeably used to make suggestions, which are different from typical *wh*-questions introduced by *what* and *how*.

Among such diverse irregular *wh*-question constructions in English, this paper aims to focus on children's acquisition and usage patterns of the *what about* and *how about* constructions as in (1f). In previous literature on children's acquisition of *wh*-question constructions, irregular *wh*-question constructions as in (1) overall have not received much attention and the main focus has been rather limited to the discussion of similarities and differences between *how come* and *why* and inversion errors (Klee 1985; De Villiers 1991; Rowland and Pine 2000; Berk 2003; Ambridge et al. 2006; Conroy and Lidz 2007; Rowland 2007). In addition, most previous studies do not make distinctions between the *what about* and *how about* constructions and simply mention that they are interchangeable (Shopen 1974; Quirk et al. 1985; Malá 2000; Sonoda 2009); on the other hand, other studies point out that although they can serve the same functions, they are different in that one can be more preferably used than the other in certain contexts, and their major functions differ (Gottschalk 1992; J. Kim and H. Kim 2021).

Nothing the idiosyncratic grammatical properties of the *what about* and *how about* constructions as opposed to typical *wh*-questions, their similarities and differences, and the lack of research on children's acquisition of the two constructions, this paper aims to address the following research questions:

- (2) a. When do children produce appropriate instances of the *what about* and *how about* constructions?
- b. Is there any difference between the two constructions with respect to children's development and usage patterns?
- c. Do children's uses of the two constructions show similar patterns to their parents'?

The rest of this paper is organized as follows. Section 2 briefly reviews previous literature on children's acquisition of overall *wh*-question constructions. Section 3 then discusses basic grammatical properties of the *what about* and *how about* constructions noted in previous literature. Section 4 provides a brief description of the data and the methodology used for analysis. Section 5 shows corpus findings and discusses how children in early childhood actually use the *what about* and *how about* constructions in real-life situations and what processes they undergo in acquiring them. Section 6 further

discusses some major corpus-based observations about young children's acquisition and uses of the two constructions noted in Section 5 in more detail in comparison with their parents' uses of the constructions and the properties of the constructions in general English discussed in previous literature. Lastly, Section 7 summarizes the major findings of the study and offers suggestions for future research.

## 2. Literature on acquisition of overall *wh*-question constructions

Acquisition of *wh*-questions has long been of great interest in linguistics, because they have been shown to be a beneficial type of input for children's language learning (Hoff-Ginsberg 1980; Rowland et al. 2003; Valian and Casey 2003; Rowe et al. 2017). It has been also observed that parents' uses of *wh*-questions are associated with many aspects of language development. For example, children who hear more *wh*-questions are overall better able to understand and produce such *wh*-questions themselves and develop verbal reasoning skills as well (Hoff-Ginsberg 1980; Rowland et al. 2003; Valian and Casey 2003; Goodwin et al. 2014; Rowe et al. 2017).

Previous literature on children's acquisition of *wh*-questions has mainly centered around two topics: 1) acquisition order of *wh*-expressions and 2) their error types in producing them. In terms of acquisition order of *wh*-expressions, constraints on abstract thought in cognitive development have been taken to be important (Ervin-Tripp 1970; Tyack and Ingram 1977; Rowland and Pine 2003; Rowland et al. 2003). For instance, *wh*-questions with *why* and *when* are acquired later than those with *what*, *who*, and *where*, because the former refer to more abstract and less tangible ideas than the latter.

As for the errors children make in producing *wh*-questions, it has been shown that two-year-olds make such errors and continue to make those errors for some time (Klima and Bellugi 1966; Labov and Labov 1978; Stromswold 1990). The most common errors involve the omission of an auxiliary and failure of subject auxiliary inversion (SAI). With respect to such auxiliary-related errors, several intriguing observations have been made. For example, *what* is the first *wh*-word to be acquired and displays the lowest rate of SAI failure and the highest rate of correct SAI use; conversely, *why* is typically acquired later than other *wh*-words like *what*, *who*, and *how* and shows the highest rate of SAI failure and the lowest rate of correct SAI use (Labov and Labov 1978; Kuczaj and Brannick 1979; Bloom et al. 1982; Erreich 1984; Rowland and Pine 2000; Rowland et

al. 2003). It has also been noted that SAI failure depends on auxiliary types in that the dummy *do* verb is typically associated with more SAI errors (Santelmann et al. 2002; Rowland et al. 2005) than any other auxiliaries while the copula/auxiliary *be* generally displays a very low rate of SAI failure and a high rate of correct SAI use (Labov and Labov 1978; Maratsos and Kuczaj 1978; Stromswold 1990; de Villiers 1991; Rowland and Pine 2000; Santelmann et al. 2002; Berk 2003; Rowland 2007; Thornton 2008). Some previous studies have further shown that children may initially acquire *wh*-word and auxiliary verb combinations from the input (Ambridge et al. 2006).

As mentioned earlier, there has been little research on children's acquisition of irregular *wh*-question constructions as in (1) in general, and as far as I am aware, there has been no research on the acquisition of the *what about* and *how about* constructions. In this respect, the present work attempts to contribute to the topic on children's acquisition of irregular *wh*-question constructions.

### 3. Key grammatical properties of the *what about* and *how about* constructions

As irregular *wh*-question constructions, the *what about* and *how about* constructions display different behavior from normal, regular *wh*-questions in a few important respects. First, although the two constructions under discussion can be used with a pure inquiry function, their answers are irrelevant to the values for the variables introduced by *what* and *how* in regular *wh*-questions (Quirk et al. 1985; Malá 2000; J. Kim and H. Kim 2021). Consider the examples below:

- (3) a. A: What did you eat for breakfast? B: Some cold pizza.  
 b. A: How did she sing on the stage? B: Perfectly.
- (4) a. A: Prof. Kim is very nice. What about Prof. Lee?  
 B: He is okay in general but he has some temper.  
 b. A: And how about your parents? Are they still living in Texas?  
 B: No, they aren't. They are living in New York these days.

As in (3), regular *wh*-questions introduced by *what* and *how* need a value for them as their appropriate answer. For example, B's response in (3a), *Some cold pizza* as an NP, corresponds to the value for the variable set up by the *wh*-expression *what*. In a similar

vein, B's response in (3b), *Perfectly*, as a manner AdvP, corresponds to the value for the variable introduced by the *wh*-expression *how*. On the other hand, the *what about* and *how about* constructions with a pure inquiry function as in (4) do not require a value for the *wh*-expressions *what* and *how* as their legitimate answer; instead, they ask the addressee(s) for an opinion or information about the dependent. For instance, B's response in (4a), *He is okay in general but he has some temper*, is her opinion about the issue of Prof. Lee's personality. Likewise, in B's response in (4b), *No they aren't. They are living in New York these days*, is her information about the topic of whether they are living in Texas.

Next, as demonstrated in (5), unlike regular *wh*-questions, the *what about* and *how about* constructions cannot occur in embedded environments (Gottschalk 1992; Huddleston and Pullum 2002; Wierzbicka 2003; Sonoda 2009).

- (5) a. John wondered what you ate for breakfast.  
 b. John wondered how she sang on the stage.  
 c. \*Prof. Kim is very nice and I wonder [what about Prof. Lee].  
 d. \*My parents are living in Texas and I wonder [how about your parents].

Examples as in (5a) and (5b) show that regular *wh*-questions introduced by *what* and *how* can stand as indirect *wh*-interrogative complements. However, the *what about* and *how about* constructions even with a pure inquiry function cannot serve as indirect *wh*-interrogative complements as in (5c) and (5d).

Related to the property described above, regular *wh*-questions and the *what about* and *how about* constructions also exhibit different behavior in terms of the possibility to license two-clause readings.

- (6) a. What did you say you ate for breakfast?  
 b. How do you think she sang on the stage?  
 c. \*{What about/How about} do you think [Prof. Lee]?

The examples in (6a) and (6b) show that in regular *wh*-questions, the *wh*-phrase can be related to the embedded clause. On the other hand, the *what about* and *how about* constructions cannot be legitimately used to yield the intended two-clause readings even with a pure inquiry function as in (6c).

Thus far, I have discussed some peculiar grammatical properties of the *what about* and *how about* constructions that distinguish them from regular *wh*-questions introduced by *what* and *how*. Previous literature has also noted other idiosyncratic grammatical properties of the two constructions. For instance, as noted earlier in Section 1, the *what about* and *how about* constructions are both frequently used to make a suggestion with an NP or a VP[-*ing*] dependent. However, they can also take other various syntactic categories as their dependent (Wierzbicka 1986, 2003; Gottschalk 1992; Huddleston and Pullum 2002; Sonoda 2009; Blendin and Rawlins 2019; J. Kim and H. Kim 2021). As an illustration, consider the following attested corpus examples from J. Kim and H. Kim (2021: 420, (9)):

- (7) a. Oh yeah, how about [drunk and disorderly], and an order of protection against you? (AdjP dependent)  
 b. What about [unofficially]? (AdvP dependent)  
 c. What about [if you're a parent]? (Finite subordinating clause dependent)  
 d. How about [Jennifer]? (NP dependent)  
 e. How about [in South Carolina]? (PP dependent)  
 f. How about [you let Santa bring you one]. (S dependent)  
 g. How about [you and me taking a drive down the coast]? (SC dependent)  
 h. Maybe we don't, how about [stay off people's things]? (VP[base] dependent)  
 i. How about [spending some time with your other babies]? (VP[-*ing*] dependent)  
 j. How about [to speak or not to speak]? (VP[*to-inf*] dependent)

Examples as in (7) clearly show that although the major dependent categories of the *what about* and *how about* constructions may be NP and VP[-*ing*], the two constructions can take other diverse types of categories as their dependent in real-life contexts.

The observations made up to this point indicate that the *what about* and *how about* constructions exhibit similar behavior in several respects, showing different grammatical properties from regular *wh*-questions. However, previous literature has further noted some differences between the two constructions. For example, based on college students' answers to "fill-in-the-blanks"-type questions, Gottschalk (1992) claims that native speakers of English make distinctions between the two superficially similar constructions

and the main differences are associated with their preferred illocutionary functions. In particular, Gottschalk (1992) shows that in general the *what about* construction is frequently used as a reminder of something known to all interlocutors (i.e., the speaker and addressee(s)) concerning old information and its basic function is to elicit comments and opinions and ask for further information; on the other hand, the *how about* construction is frequently used to provide new information, conveying suggestions, requests, and invitations and expressing exclamations. Gottschalk (1992) also demonstrates that their preferred illocutionary functions are closely related to the favored grammatical forms of their dependent types. For instance, the *what about* construction tends to occur with a definite NP, which is typically associated with old information, while the *how about* construction tends to occur with an indefinite NP and a non-finite clause, which are typically associated with new information.

On the basis of authentic data from Corpus of Contemporary American English (COCA) (Davies 2008-), J. Kim and H. Kim (2021) make additional observations about real-life uses of the two constructions, focusing on their similarities and differences depending on their dependent category types. Specifically, they discuss the properties of the two constructions in terms of their preferences for particular subtypes and illocutionary functions depending on the dependent category types. Their corpus-based observations reveal that the two constructions should be distinguished, although they show some common properties. For example, they find out that they behave the same in that the two are dominantly used in informal, colloquial dialogue situations and their most dominant dependent category is NP. They also note that the two constructions exhibit similar behavior when they take the so-called minor dependent categories (i.e., AdjP, AdvP, and PP dependents) in terms of subtypes for each dependent category and the preference for the pure inquiry function over the suggestion function. They further show that the two constructions display different behavior when they occur with proposition-denoting categories (i.e., VP, sentence, small clause, and finite subordinating clause dependents) and NPs as their dependents with respect to subtypes for each dependent category and the preference for one illocutionary function over the other. The observations made in J. Kim and H. Kim (2021), thus, do not countenance the earlier claim that the two constructions are interchangeably used, frequently involving an NP dependent and a VP[-ing] dependent with a suggestion function.

As we have seen so far, the *what about* and *how about* constructions under discussion show several peculiar syntactic and pragmatic properties, which distinguish them from



regular *wh*-questions, but the two irregular *wh*-question constructions also exhibit some noticeable differences at the same time. In what follows, I discuss the corpus findings about children's acquisition and uses of the two constructions in early childhood, with particular focus on when they start use the two constructions, how they develop usage patterns of the constructions, and how similar and different their uses of the constructions are in relation to their parents'.

#### 4. Data and methodology

##### 4.1 Corpora used

For the present study, I made use of the CHILDES database (MacWhinney and Snow 1985, 1990; MacWhinney 2000) for transcripts of utterances produced by American English-speaking children which satisfy the following criteria:

- (8) a. A corpus must at least contain data produced by the child between the ages of two years and almost five years, which is the point at which some researchers claim that children exhibit adult-like linguistic behavior.
- b. A corpus must contain an enough number of tokens of *what about* and *how about* produced by the child (15 instances in total at least).
- c. A corpus must include utterances by main caregiver(s) of the child (i.e., their parent(s)). This is not only to figure out their role in children's acquisition and uses of the two constructions but also to avoid including certain utterances by the child when they are simple repetitions of utterances by their main caregivers.

Transcripts of eight children satisfied all these three criteria: Abe (Kuczaj 1977); Adam (Brown 1973); Emma, Matt, and Roman (Weist and Zevenbergen 2008); Laura (Braunwald 1971); Mark and Ross (MacWhinney 2000). Note, at this point, that numerous longitudinal corpora available in the CHILDES database were not included in the discussion of the present study, since they did not satisfy the criterion in (8b). Only very few tokens of the *what about* and *how about* constructions were identified in the production data by each child (fewer than five) in most longitudinal corpora and no token

of the constructions was found in certain corpora. This indicates that children overall start to use and acquire the *what about* and *how about* constructions at later stages than regular *wh*-questions.

Although all the corpora used for the current study satisfy the three criteria given in (8), they, of course, differ with respect to the children's age periods and corpus sizes. Table 1 below shows the time periods and the number of utterances by each child and their parents:

Table 1. Basic information of the corpora from the CHILDES database used for the present study

Child's name	Age range (years;months)	Child's utterances	Parents' utterances
Abe	2;3-4;11	31,752	25,329
Adam	2;3-4;10	45,573	20,197
Emma	2;7-4;7	6,667	3,536
Laura	1;2-7;0	20,230	23,862
Mark	0;7-5;6	18,427	59,056
Matt	2;3-5;0	10,659	18,086
Roman	2;2-4;7	10,807	6,041
Ross	1;4-8;0	34,645	61,187
<b>Total</b>		<b>178,760</b>	<b>217,294</b>

As demonstrated here, the corpora vary in terms of the children's age periods and the data sizes to certain degrees. Despite such differences, it is worthwhile to make use of all the data here to get a broad picture of the phenomena under question.

## 4.2 Methodology

Within each of the corpora, I first searched all the occurrences of *what about* and *how about* uttered by the target child and their parents, using the COMBO program in the CLAN software for CHILDES (MacWhinney 2000). This search method provided me with the occurrence numbers in Table 2:<sup>2</sup>

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2 Throughout the paper, the frequencies of the parents' examples are marked within parentheses.

Table 2. Occurrence numbers of *what about* and *how about* produced by the eight children and their parents in CHIDES

Child's name	<i>what about</i>	<i>how about</i>
Abe	6 (31)	115 (69)
Adam	40 (66)	26 (6)
Emma	5 (6)	49 (23)
Laura	3 (12)	21 (46)
Mark	5 (-)	18 (-)
Matt	3 (24)	18 (203)
Roman	14 (79)	12 (40)
Ross	14 (289)	16 (305)
<b>Total</b>	<b>90 (507)</b>	<b>275 (692)</b>

Note here that the frequencies of the two expressions *what about* and *how about* uttered by Mark's parents are marked as -, since Ross and Mark are siblings and their parents' data are the same. I then filtered out irrelevant examples as in (9):

- (9) a. CHI: So, let's give it a different name.  
 LAU: What?  
 CHI: What about ...  
 LAU: What's your ... your mom's name is Sarah, right? (Emma, 4;08.04)
- b. MAR: How about, can we get a clown one?  
 MOT: I don't know. (Mark, 5;01.24)
- c. CHI: How about xxx xxx.  
 MOT: How about what? (Matt, 3;00.02)

Emma's utterance starting with *what about* in (9a) is incomplete whereas *how about* in (9b) is used as a filler in Mark's utterance. In the meantime, Matt's mother's utterance *how about what* in (9c) is an instance of the echo question construction which involves the repetition of the previous utterance for clarification. These examples are irrelevant to the *what about* and *how about* constructions under investigation and thus they had to be excluded from the analysis. This filter-out process left 80 instances of the *what about* construction and 241 instances of the *how about* construction from the children's data; it left 468 instances of the *what about* construction and 609 instances of the *how about* construction from their parents' data. In what follows, I provide a quantitative and qualitative analysis of the children's acquisition and usage patterns of the two

constructions as compared to their parents' input about them on the basis of the legitimate instances of the constructions extracted from CHILDES subcorpora.

## 5. Corpus findings and discussion

In this section, I first demonstrate overall distribution patterns of the identified *what about* and *how about* construction examples produced by the eight English-speaking children and their parents based on dependent categories and illocutionary functions, regardless of the children's age. Then, I discuss the corpus findings about their development patterns for each dependent type in more detail in terms of its subtypes and favored illocutionary functions.

### 5.1 Overall distributions of the *what about* and *how about* constructions

First, I classified the identified *what about* and *how about* construction examples based on dependent categories. Table 3 below shows the overall frequencies of the identified examples with respect to dependent categories and some representative examples are given in (10):

Table 3. Distributions of *what about* and *how about* construction examples produced by the eight children and their parents in CHILDES based on dependent categories

<b>Dependent category</b>	<b><i>what about</i></b>	<b><i>how about</i></b>
AdjP	2 (1)	0 (1)
AdvP	0 (1)	4 (11)
Sub. clause	0 (16)	7 (50)
NP	73 (423)	151 (467)
PP	1 (12)	11 (25)
S	1 (1)	49 (32)
SC	3 (3)	0 (3)
VP[base]	0 (0)	4 (4)
VP[-ing]	0 (11)	15 (16)
<b>Total</b>	<b>80 (468)</b>	<b>241 (609)</b>

- (10)a. CHI: What about [fat]? (Laura; 4;02.11) (AdjP dependent)  
 b. CHI: How about [later]? (Matt, 3;02.18) (AdvP dependent)

- c. CHI: How about [if you get your saw and I drill]? (Abe, 3;09.06) (Finite subordinating clause dependent)
- d. CHI: What about [two pounds of butter]? (Adam, 3;05.15) (NP dependent)
- e. CHI: How about [on the grass]? (Abe, 3;02.21) (PP dependent)
- f. CHI: This. How, how about [we make this for a snack]? (Mark, 2;09.06) (S dependent)
- g. CHI: What about [this going over (= on) here]? (Laura, 4;10.01) (SC dependent)
- h. CHI: How about [turn it on]? (Adam, 3;04.18) (VP[base] dependent)
- i. CHI: How about [doing this]? (Abe, 3;10.09) (VP[-ing] dependent)

The overall distribution patterns of the identified *what about* and *how about* construction examples produced by the eight children and their parents from CHILDES subcorpora based on dependent categories show some interesting uses of the two constructions by them. First of all, overall the use of the *how about* construction is much more frequent than that of the *what about* construction both by the children and their parents, respectively. Nonetheless, statistical analysis using Fisher's exact test reveals that their frequency difference is significant ( $p$ -value < .0001), meaning that the *how about* construction is more frequently used by the children than by their parents in relation to the *what about* construction. Note, at this juncture, that J. Kim and H. Kim (2021) show that the *what about* construction is much more frequently used than the *how about* construction in Contemporary American English on the basis of examples from COCA (Corpus of Contemporary American English) (Davies 2008-).<sup>3</sup> Therefore, the higher frequency of the *how about* construction than that of the *what about* construction produced by the children and their parents in CHILDES subcorpora indicates that children's acquisition and uses of the two constructions display different behavior from the uses of the constructions in non-specific, general real-life situations.

Another salient observation here is that overall the predominant dependent category is NP for both constructions in the uses by the children (91.3% for the *what about*

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3 The same seems to be true in British English as well. The simple searches *what about* and *how about* in BYU-BNC (British National Corpus) provides 3,880 instances of *what about* and 995 instances of *how about*. Although these frequencies include the number of irrelevant examples, this huge frequency difference seems to suggest that the *what about* construction is more frequently used than the *how about* construction in general Contemporary British English.

construction and 62.7% for the *how about* construction) Nevertheless, the dominance of NP dependent is statistically stronger for the *what about* construction than for the *how about* construction ( $p$ -value < .0001). Other dependent categories than NP are very rarely observed with the *what about* construction by the children (with occurrences lower than three for each); on the other hand, some other dependent categories are also relatively frequently found with the *how about* construction by the children (i.e., S, VP[-ing], and PP dependents with more than 10 occurrences for each). These distribution patterns depending on dependent categories are also somewhat different from general uses of these two constructions discussed in previous literature. Previous literature has noted that on the basis of individual researcher's introspection these two constructions are typically used with an NP dependent or a VP[-ing] dependent (Wierzbicka 1986, 2003; Gottschalk 1992, Huddleston and Pullum 2002; Sonoda 2009) and this is indeed confirmed by a corpus-based study in J. Kim and H. Kim (2021). They specifically show that in their data the most frequent dependent category is NP, followed by VP[-ing], for both constructions, although the dominance of NP dependent is statistically stronger for the *what about* construction than for the *how about* construction (884 instances of the *what about* construction with an NP dependent, 35 instances of the *what about* construction with a VP[-ing] dependent, 742 instances of the *how about* construction with an NP dependent, and 82 instances of the *how about* construction with a VP[-ing] dependent). Thus, no instance of the *what about* construction and only 15 instances of the *how about* construction with a VP[-ing] dependent produced by the eight children also suggest that children's uses and acquisition of the two constructions are different from usage patterns of the constructions in general authentic contexts to some extent. Notice then that similar distribution patterns are also observed in the *what about* and *how about* construction examples produced by the eight children's parents. In other words, although NP is the most frequent dependent category in both constructions in the parents' data, the dominance of NP dependent is statistically more prominent for the *what about* construction than for the *how about* construction ( $p$ -value < .0001), and VP[-ing] is not the second most frequent dependent category in either of the two constructions.

Furthermore, the frequency distributions of the *what about* and *how about* construction examples produced by the eight children based on dependent categories show that some dependent categories are dominantly or favorably used for one over the other. For instance, examples with an AdjP dependent and a small clause dependent are only found in the *what about* construction; on the other hand, AdvP, finite subordinate clause,

PP, sentence, VP[base], and VP[-ing] dependents are only or overwhelmingly found in the *how about* construction. This implies that young children use the two constructions in certain different ways while they acquire them. Observe also that their overall distribution patterns resemble those of their parents, although they exhibit some different behavior with certain dependent categories such as small clause, VP[base], and VP[-ing].

Next, I looked into the illocutionary functions of the identified *what about* and *how about* construction examples, using the broad binary distinction between the pure inquiry function and the suggestion function. Table 4 provides their distributions based on the illocutionary functions and representative examples on this distinction are given in (11) and (12):

Table 4. Distributions of *what about* and *how about* construction examples produced by the eight children and their parents in CHILDES based on illocutionary functions

<b>Illocutionary function</b>	<i>what about</i>	<i>how about</i>
<b>Pure inquiry</b>	72 (438)	83 (397)
<b>Suggestion</b>	8 (30)	158 (212)
<b>Total</b>	<b>80 (468)</b>	<b>241 (609)</b>

- (11)a. CHI: I found part of a balloon too.  
 FAT: You found part of a balloon too?  
 CHI: Uhhuh, where's that club?  
 FAT: I don't know. Where did you put it?  
 CHI: I don't know. How about that thing? Um, um, hey right here. Here's my club. **What about [that other club]?**  
 FAT: Where'd you put it?  
 CHI: I don't know. it must be in here somewhere. (Abe, 3;05.13) (*what about* construction with a pure inquiry function)
- b. CHI: I wanna play.  
 MOT: **What about [all this stuff over here] honey?**  
 CHI: I don't wanna play with it. (Roman, 4;04.26) (*what about* construction with a suggestion function)
- (12)a. CHI: This tastes terrible.  
 MOT: It does?  
 CHI: **How about [your breakfast]?**

MOT: How about my breakfast? I don't think my breakfast tastes terrible.  
(Laura, 2;03.08) (*how about* construction with a pure inquiry function)

b. FAT: You're tricking me.

CHI: No, Mother, can I have something to eat?

FAT: like what?

CHI: **How about [bread]?**

FAT: Bread?

CHI: Yeah, with honey and cinnamon. (Abe, 4;04.21) (*how about* construction with a suggestion function)

The results in Table 4 show that the children dominantly use the *what about* construction to make a question while they use the *how about* construction more preferably to make a suggestion rather than to make a question, and their distribution patterns are statistically different ( $p$ -value < .0001); however, the parents use both constructions mainly to make a question, although the preference for the pure inquiry function over the suggestion function is statistically stronger for the *what about* construction than for the *how about* construction ( $p$ -value < .0001). Note that in terms of illocutionary functions the children's and parents' uses of the *what about* construction are, in fact, not different from general uses of the construction found in J. Kim and H. Kim (2021: 421-422) ( $p$ -value = 0.0921 and  $p$ -value = 0.1256, respectively); however, their uses of the *how about* construction are different from general uses of the construction ( $p$ -value < .001 and  $p$ -value < .0001, respectively).<sup>4</sup> This indicates that in terms of favored illocutionary functions, young children and their parents use the *how about* construction somewhat differently as compared to general uses of the construction in normal, non-specific situations.

## 5.2 Acquisition patterns of the *what about* and *how about* constructions by dependent category types

Let us now consider the overall frequencies of the identified *what about* and *how about* construction examples produced by the eight children and their parents on the basis

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4 In the Contemporary American English data from J. Kim and H. Kim (2021), 917 instances of the *what about* construction involve a pure inquiry function and only 43 instances of the construction have a suggestion function while 430 instances of the *how about* construction are used with a pure inquiry function and 493 instances of the construction are used with a suggestion function.



of the children's age periods in Table 5 below:

Table 5. Distributions of *what about* and *how about* construction examples produced by the eight children and their parents in CHILDES based on children's age periods

<b>Age period</b>	<b><i>what about</i></b>	<b><i>how about</i></b>
1;00-1;05	0 (0)	0 (4)
1;06-1;11	0 (3)	0 (10)
2;00-2;05	0 (19)	5 (62)
2;06-2;11	15 (85)	27 (113)
3;00-3;05	4 (73)	73 (108)
3;06-3;11	18 (55)	69 (67)
4;00-4;05	8 (56)	39 (65)
4;06-4;11	20 (29)	18 (41)
5;00-5;05	7 (20)	8 (16)
5;06-5;11	1 (30)	2 (35)
6;00-6;05	1 (39)	0 (50)
6;06-6;11	5 (39)	0 (23)
7;00-7;05	1 (14)	0 (9)
7;06-7;11	0 (6)	0 (6)
<b>Total</b>	<b>80 (406)</b>	<b>241 (609)</b>

As can be seen here, overall the *how about* construction is not just more frequently used than the *what about* construction by the eight children, but the former is also found earlier than the latter. Indeed, the first occurrence of the *how about* construction is earlier than that of the *what about* construction by seven of the eight children. The time span between the first occurrence of the *what about* construction and that of the *how about* construction varies among the eight children, from about two months to 1 year and 9 months. However, the data clearly indicate that in general children show a tendency to use the *how about* construction earlier than the *what about* construction.

Observe then that in the children's data the number of *what about* construction examples is much lower than that of *how about* construction examples before the age of 4 years and 6 months in each age period; however, the former is similar to or higher than the latter since then. This seems to further support the idea that children acquire the *what about* construction later than the *how about* construction. Note at this point that the frequency distribution patterns of the two constructions uttered by the eight children depending on their age periods show similar behavior to those by their parents in that in earlier age periods the *what about* construction is used much less frequently than the

*how about* construction but in later age periods their frequency differences become smaller or the former is used more frequently than the latter. This suggests that the parents' language input plays a certain role in children's uses and acquisition of the two constructions.

In what follows, I then discuss children's acquisition and usage patterns of the *what about* and *how about* constructions on the basis of the identified examples from CHILDES subcorpora, adopting the classification in J. Kim and H. Kim (2021) in terms of their dependent category types. I first discuss examples with an NP dependent which occur most frequently in both constructions, and move on to examples with dependent categories which describe propositions, and lastly those with minor dependent categories which are comparatively infrequent and do not denote propositions.

### 5.2.1 NP dependent

The *what about* and *how about* constructions with an NP dependent deserve special attention, since previous literature has mainly discussed these constructions with an NP dependent and they occur most frequently in the children's and parents' data. First, as discussed in Gottschalk (1992) and J. Kim and H. Kim (2021), the attested *what about* and *how about* constructions with an NP dependent can be classified based on the NP types, adopting a general binary distinction between definite and indefinite NPs. This distinction of NP dependent types gives us the distribution patterns of the identified examples depending on children's age periods and NP types in Table 6 and basic representative examples are presented in (13):

Table 6. Distributions of *what about* and *how about* construction examples with an NP dependent produced by the eight children and their parents in CHILDES based on children's age periods and NP types

Age period	<i>what about</i>		<i>how about</i>	
	Definite	Indefinite	Definite	Indefinite
1;00-1;05	0 (0)	0 (0)	0 (1)	0 (3)
1;06-1;11	0 (3)	0 (0)	0 (5)	0 (2)
2;00-2;05	0 (13)	0 (5)	3 (34)	2 (2)
2;06-2;11	3 (66)	11 (15)	14 (49)	7 (42)
3;00-3;05	3 (46)	1 (16)	27 (67)	20 (16)
3;06-3;11	16 (45)	1 (7)	17 (41)	15 (12)

4;00-4;05	6 (35)	0 (12)	11 (30)	17 (17)
4;06-4;11	18 (18)	1 (8)	9 (23)	4 (9)
5;00-5;05	5 (18)	2 (2)	1 (8)	2 (3)
5;06-5;11	1 (22)	0 (5)	1 (26)	1 (5)
6;00-6;05	0 (22)	0 (12)	0 (27)	0 (12)
6;06-6;11	4 (25)	0 (10)	0 (13)	0 (7)
7;00-7;05	1 (7)	0 (5)	0 (5)	0 (4)
7;06-7;11	0 (4)	0 (1)	0 (3)	0 (0)
<b>Total</b>	<b>57 (324)</b>	<b>16 (99)</b>	<b>83 (332)</b>	<b>68 (135)</b>

- (13)a. CHI: I don't know, but what about [the mustache]? (Roman, 3;09.25)  
 b. CHI: How about [some milk]? (Abe, 3;10.09)

Definite NP dependents include NPs with the definite article *the*, a demonstrative determiner (e.g., *this*, *that*, *these*, and *those*), a possessive pronoun (e.g., *my*, *your*, and *her*), pronouns (e.g., *me*, *you*, *it*, and *them*), proper nouns (e.g., *Eric* and *Jean*), and other NPs with a definite meaning (e.g., *today* and *noon*). On the other hand, indefinite NP dependents include NPs with the indefinite article *a/an* and an indefinite quantifier (e.g., *some*), plural countable NPs, and non-countable NPs with no determiner. As shown in the results in Table 6, in the children's data the *how about* construction with an NP dependent is used more frequently and earlier than its *what about* construction counterpart and overall definite NP dependents are more frequently used than indefinite ones in each construction. Note also that the preference for the definite NP dependent in the children's data is statistically stronger for the *what about* construction than for the *how about* construction in these acquisition periods ( $p$ -value < .001). Similar observations are made in the parents' data as well in terms of more frequent and earlier uses of the *how about* construction with an NP dependent than its *what about* construction counterpart and preference for definite NP dependents over indefinite ones ( $p$ -value < .05). The results here are consistent with the observation in J. Kim and H. Kim (2021) about a stronger preference for the definite NP in the *what about* construction than in the *how about* construction in general Contemporary American English.

Next, consider Table 7, which provides the frequencies of the *what about* and *how about* construction examples with an NP dependent based on children's age periods and illocutionary functions, and representative examples for the types in (14) and (15):

Table 7. Distributions of *what about* and *how about* construction examples with an NP dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure inquiry	Suggestion	Pure inquiry	Suggestion
1;00-1;05	0 (0)	0 (0)	0 (2)	0 (2)
1;06-1;11	0 (3)	0 (0)	0 (5)	0 (2)
2;00-2;05	0 (18)	0 (1)	3 (30)	2 (6)
2;06-2;11	12 (77)	2 (4)	16 (60)	5 (31)
3;00-3;05	4 (56)	0 (6)	28 (62)	19 (21)
3;06-3;11	16 (51)	1 (1)	15 (37)	17 (16)
4;00-4;05	6 (45)	0 (2)	7 (32)	21 (15)
4;06-4;11	19 (26)	0 (0)	5 (26)	8 (6)
5;00-5;05	6 (19)	1 (1)	2 (9)	1 (2)
5;06-5;11	1 (27)	0 (0)	1 (25)	1 (6)
6;00-6;05	0 (32)	0 (2)	0 (38)	0 (1)
6;06-6;11	3 (34)	1 (1)	0 (19)	0 (2)
7;00-7;05	0 (12)	1 (0)	0 (8)	0 (1)
7;06-7;11	0 (5)	0 (0)	0 (3)	0 (0)
<b>Total</b>	<b>67 (405)</b>	<b>6 (18)</b>	<b>77 (356)</b>	<b>74 (111)</b>

(14)a. CHI: Eagle flying, Mommy.

MOT: Yes, eagles that are alive do fly.

CHI: What about xxx birdie? **What about [birdie]?**

MOT: What about birdies? Birdies fly. (Adam, 2;07.01) (*what about* construction with a pure inquiry function)

b. FAT: Let's hurry up. It got rainy and cloudy and then lightning struck a tree.

CHI: Dad, Dad, **what about [me]?**

FAT: Okay, Ross's turn. Okay, what happened right here? (Ross, 7;05.03) (*what about* construction with a suggestion function)

(15)a. MOT: I don't have any juice today. I'm sorry.

CHI: **How about [milk]?** Have any milk?

MOT: I think so. (Adam, 4;07.01) (*how about* construction with a pure inquiry function)

b. FAT: What would you like to drink, Abe? Milk?

CHI: **How about [water]?**

FAT: Okay.

CHI: I'm gonna have this one. (Abe, 3;04.15) (*how about* construction with a suggestion function)

In the children's data, the *what about* construction is dominantly used with a pure inquiry function (67 instances vs. 6 instances) and the construction with a pure inquiry function is used earlier than the one with a suggestion function; on the other hand, the *how about* construction is rather equally used with a pure inquiry function and with a suggestion function (77 instances vs. 74 instances) and the one with a pure inquiry function is used more frequently in the beginning stages but the one with a suggestion function is more prevalently used in later stages in these acquisition periods. The *what about* construction with an NP dependent by the parents shows the same tendency as in the children's data with respect to the dominance of the pure inquiry function (405 instances vs. 18 instances) ( $p$ -value = 0.1448) and the earlier uses of the construction with a pure inquiry function than the one with a suggestion function. However, unlike the children's uses of the *how about* construction with an NP dependent, the *how about* construction with an NP dependent by their parents is more preferably used with a pure inquiry function than with a suggestion function (356 instances vs. 111 instances) and the distribution difference between the children's and parents' *how about* construction examples in terms of their illocutionary functions is statistically attested ( $p$ -value < .0001), suggesting that children's uses of the *how about* construction are associated with the suggestion function more than parents' in these acquisition periods. In addition, although both constructions are more favorably used with a pure inquiry function than with a suggestion function in the parents' data (*what about* construction: 456 instances vs. 18 instances, *how about* construction: 356 instances vs. 111 instances), the tendency is stronger for the *what about* construction than for the *how about* construction ( $p$ -value < .0001).

Then, notice that the uses of the *what about* construction with an NP dependent by the children and the parents with respect to illocutionary functions are not statistically different or just marginally so from those of the construction in general English observed in J. Kim and H. Kim (2021) ( $p$ -value = .06253,  $p$ -value = .6441, respectively); however, although there is no statistical difference in the distribution patterns of the *how about* construction with an NP dependent in terms of illocutionary functions between the children's uses and general English found in J. Kim and H. Kim (2021) ( $p$ -value = 0.7199), there is a significant distribution difference between the parents' uses of the *how*

*about* construction with an NP dependent and those in general English in terms of illocutionary functions ( $p$ -value < .0001).<sup>5</sup> These results thus suggest that parents use the *how about* construction with an NP dependent to ask questions more frequently than children do and than found in general English.

### 5.2.2 Proposition-denoting dependents

The two constructions under investigation are also found with proposition-denoting dependents and they are finite subordinating clause, sentence, small clause, VP[base], and VP[-ing]. As discussed above, one immediate observation about the *what about* and *how about* constructions with these proposition-denoting dependents produced by the children concerns the fact that they are preferably used in the *how about* construction than its *what about* construction counterpart in each pair, except for the case with a small clause dependent. In addition, such a tendency is also found in the parents' data, although it is overall more salient in the children's data. Then, consider the distributions of the these construction examples by the children's age periods in the table below:

Table 8. Distributions of *what about* and *how about* construction examples with preposition-denoting dependents produced by the eight children and their parents in CHILDES based on children's age periods

Age period	Sub. clause		S		SC		VP[base]		VP[-ing]	
	<i>w.a.</i>	<i>h.a.</i>	<i>w.a.</i>	<i>h.a.</i>	<i>w.a.</i>	<i>h.a.</i>	<i>w.a.</i>	<i>h.a.</i>	<i>w.a.</i>	<i>h.a.</i>
1;00-1;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1;06-1;11	0 (0)	0 (1)	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)
2;00-2;05	0 (0)	0 (14)	0 (0)	0 (6)	0 (0)	0 (1)	0 (0)	0 (1)	0 (0)	0 (0)
2;06-2;11	0 (0)	0 (5)	0 (1)	3 (5)	1 (1)	0 (0)	0 (0)	0 (1)	0 (1)	1 (5)
3;00-3;05	0 (6)	0 (9)	0 (0)	16 (7)	0 (0)	0 (1)	0 (0)	2 (0)	0 (4)	1 (4)
3;06-3;11	0 (1)	3 (1)	0 (0)	22 (2)	1 (1)	0 (0)	0 (0)	0 (1)	0 (0)	8 (1)
4;00-4;05	0 (4)	1 (9)	0 (0)	8 (7)	0 (0)	0 (0)	0 (0)	1 (0)	0 (2)	1 (2)
4;06-4;11	0 (0)	0 (2)	0 (0)	0 (4)	1 (0)	0 (0)	0 (0)	1 (0)	0 (1)	3 (0)
5;00-5;05	0 (0)	3 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)
5;06-5;11	0 (1)	0 (4)	0 (0)	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (1)	0 (1)
6;00-6;05	0 (1)	0 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)	0 (0)

5 The distribution of the *what about* and *how about* construction examples with an NP dependent in J. Kim and H. Kim (2021) based on the binary illocutionary functions is as follows: *what about*: 851 instances with a pure inquiry function and 32 instances with a suggestion function, *how about*: 378 instance with a pure inquiry function and 336 instances with a suggestion function.

6;06-6;11	0 (3)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (2)	0 (0)	
7;00-7;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
7;06-7;11	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)	0 (0)	0 (1)	
<b>Total</b>	<b>0</b> <b>(16)</b>	<b>7</b> <b>(50)</b>	<b>1</b> <b>(1)</b>	<b>49</b> <b>(32)</b>	<b>3</b> <b>(3)</b>	<b>0</b> <b>(3)</b>	<b>0</b> <b>(0)</b>	<b>4</b> <b>(4)</b>	<b>0</b> <b>(11)</b>	<b>15</b> <b>(16)</b>

In addition to the fact that the distribution patterns of the *what about* and *how about* construction examples with proposition-denoting dependents by the children are overall similar to those by parents, the results here also show that in general in the parents' data the *how about* construction is used earlier than its *what about* construction counterpart in each pair.

**Finite subordinating clause dependent:** The identified *what about* and *how about* construction examples occur with various types of subordinating clause dependent.

(16)a. CHI: How did I grow?

MOT: How did you grow?

CHI: **How about [when you were a little girl]?**

MOT: When I was a little girl, where were you? (Laura, 3;07.02)

b. FAT: How are we going to build your fort then?

CHI: **How about [if you get your saw and I drill]?**

FAT: We should use my saw and your drill? (Abe, 3;09.06)

c. FAT: No, but what's on your shirt?

CHI: They're cactus and horses.

RYA: Cactus and horses?

CHI: Yeah.

RYA: Cool!

CHI: Do you show me something when I was a baby again?

FAT: **What about [what's on your sleeve]?**

CHI: Dinosaur. (Roman, 3;03.06)

d. MOT: I know at least two places that Erin would sometimes take you.

CHI: To the park.

MOT: To the park.

CHI: And Nana's.

MOT: And Nana's. And also maybe the ... ? **How about [where you useta**

**bring a lot of books home from]?**

CHI: The library. (Matt, 3;01.29)

Temporal clauses include clauses introduced by temporal subordinating conjunctions like *when*, *before*, and *after* as in (16a), and conditional *if*-clauses are those as in (16b). Free relative clauses are those introduced by *what* as in (16c), which exhibit both nominal and clausal properties, whereas interrogative clauses induce indirect question meanings as in (16d).

This distinction about subordinating clause types gives us the distributions of the two constructions uttered by the children and their parents in terms of children's age periods in the following table:

Table 9. Distributions of *what about* and *how about* construction examples with a finite subordinating clause dependent produced by the eight children and their parents in CHILDES based on children's age periods and subordinating clause types<sup>6</sup>

Age period	<i>what about</i>				<i>how about</i>			
	Temp.	Cond.	FR	Int.	Temp.	Cond.	FR	Int.
2;00-2;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (11)	0 (1)	0 (1)
2;06-2;11	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (5)	0 (0)	0 (0)
3;00-3;05	0 (4)	0 (1)	0 (1)	0 (0)	0 (3)	0 (4)	0 (0)	0 (2)
3;06-3;11	0 (0)	0 (0)	0 (1)	0 (0)	1 (0)	1 (1)	0 (0)	1 (0)
4;00-4;05	0 (1)	0 (3)	0 (0)	0 (0)	0 (2)	1 (5)	0 (2)	0 (0)
4;06-4;11	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (1)	0 (0)	0 (0)
5;00-5;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	3 (1)	0 (1)	0 (0)
5;06-5;11	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6;00-6;05	0 (0)	0 (1)	0 (0)	0 (0)	0 (2)	0 (1)	0 (1)	0 (0)
6;06-6;11	0 (2)	0 (1)	0 (0)	0 (0)	0 (1)	0 (0)	0 (0)	0 (1)
<b>Total</b>	<b>0 (7)</b>	<b>0 (7)</b>	<b>0 (2)</b>	<b>0 (0)</b>	<b>1 (11)</b>	<b>5 (30)</b>	<b>0 (5)</b>	<b>1 (4)</b>

The majority of the *how about* construction examples with a finite subordinating clause dependent produced by the children contain a conditional *if*-clause and a similar pattern is shown in the examples by the parents. In addition, in the parents' data, the temporal clause and the conditional *if*-clause dependents are equally frequently observed, although the former are found earlier in the children's acquisition of the construction with a subordinating clause dependent.

6 When an entire row has no frequencies in tables, it is omitted to save space.



Next, see the distribution patterns of the two constructions with a finite subordinating clause dependent produced by the eight children and their parents on the basis of children's age periods and illocutionary functions, and some relevant examples based on this classification:

Table 10. Distributions of *what about* and *how about* construction examples with a finite subordinating clause dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure inquiry	Suggestion	Pure inquiry	Suggestion
1;06-1;11	0 (0)	0 (0)	0 (0)	0 (1)
2;00-2;05	0 (0)	0 (0)	0 (2)	0 (12)
2;06-2;11	0 (0)	0 (0)	0 (0)	0 (5)
3;00-3;05	0 (5)	0 (1)	0 (4)	0 (5)
3;06-3;11	0 (1)	0 (0)	1 (0)	2 (1)
4;00-4;05	0 (4)	0 (0)	0 (5)	1 (4)
4;06-4;11	0 (0)	0 (0)	0 (0)	0 (2)
5;00-5;05	0 (0)	0 (0)	0 (2)	3 (1)
5;06-5;11	0 (1)	0 (0)	0 (0)	0 (0)
6;00-6;05	0 (0)	0 (1)	0 (3)	0 (1)
6;06-6;11	0 (3)	0 (0)	0 (2)	0 (0)
<b>Total</b>	<b>0 (14)</b>	<b>0 (2)</b>	<b>1 (18)</b>	<b>6 (32)</b>

(17)a. MOT: When is it hard to canoe?

CHI: When it gets snowy all over it.

MOT: Snowy?

CHI: Yeah.

MOT: **What about [when the river's flowing real rapidly]?** (Abe, 3;03.11)

(*what about* construction with a pure inquiry function)

b. CHI: Maybe I could put that pillow over here. So then I could jump.

FAT: **What about [if you put it here instead]?**

CHI: No, it's too far. (Abe, 3;03.28) (*what about* construction with a suggestion function)

(18)a. CHI: How did I grow?

MOT: How did you grow?

CHI: **How about [when you were a little girl]?**

MOT: When I was a little girl, where were you?

CHI: Mhm.

MOT: You were an egg inside my body waiting for me to get big enough to grow a baby. (Laura, 3;07.02) (*how about* construction with a pure inquiry function)

b FAT: Uhhuh Abe, do you wanna wrap Mommy's gift now. Or do you wanna wait until tomorrow?

CHI: **How about [if we wait and wrap it tomorrow]?** And then we'll wrestle today. (Abe, 5;00.04) (*how about* construction with a suggestion function)

The *how about* construction with a subordinating clause dependent by the children is preferably used with a suggestion function and such a preference is also observed in the parents' uses of the construction, although it is stronger in the children's data than in the parents' data. Note also that in the parents' data the *what about* construction with a subordinating clause dependent is dominantly used with a pure inquiry function. Considering that no *what about* construction example with a subordinating clause dependent is found in the children's data, it seems that children acquire this construction in later acquisition periods.

**Sentence dependent:** As noted above, the sentence dependent is dominantly used for the *how about* construction rather than for the *what about* construction, and this is the case in both the children's and parents' data. Only one example of the *what about* construction with a sentence dependent is found in the children's data, and another one in the parents' data. Interestingly, all the *how about* construction examples with a sentence dependent produced by the children and their parents involve a suggestion function, while the two *what about* construction examples with a sentence dependent have a pure inquiry function, as shown in Table 11 below and as exemplified in (19):

Table 11. Distributions of *what about* and *how about* construction examples with a sentence dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure inquiry	Suggestion	Pure Inquiry	Suggestion
1;06-1;11	0 (0)	0 (0)	0 (0)	0 (1)
2;00-2;05	0 (0)	0 (0)	0 (0)	0 (6)
2;06-2;11	0 (1)	0 (0)	0 (0)	3 (5)

3;00-3;05	0 (0)	0 (0)	0 (0)	16 (7)
3;06-3;11	0 (0)	0 (0)	0 (0)	22 (2)
4;00-4;05	0 (0)	0 (0)	0 (0)	8 (7)
4;06-4;11	0 (0)	0 (0)	0 (0)	0 (4)
6;06-6;11	1 (0)	0 (0)	0 (0)	0 (0)
<b>Total</b>	<b>1 (1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>49 (32)</b>

(19)a. FAT: Where is the lawnmower, Ross?

CHI: Outside.

FAT: What happens to the lawnmower?

CHI: Lawnmower might hurt me.

FAT: **What about [the little boy might get hurt by the lawnmower]?**

CHI: The little boy going to get hurt by the lawnmower.

FAT: The little boy is going to get hurt by the lawnmower?

CHI: Yeah. (Ross, 2;09.09) (*what about* construction with a pure inquiry function)

b. MOT: What do we need much more fire for?

CHI: For that candle.

MOT: I think one fire's plenty, don't you?

CHI: **How about [we do it with another one]?**

MOT: This other one? (Abe, 2;11.13) (*how about* construction with a suggestion function)

The dominating use of the *how about* construction with a sentence dependent for the suggestion function and very scarce occurrences of the *what about* construction with a sentence dependent in the children's and parents' data indicate that parents' input plays an important role in the children's acquisition and uses of these constructions.

Note, however, that the *how about* construction with a sentence dependent by the children displays some intriguing properties, as illustrated in (20):

(20)a. MOT: I think I'll just walk beside you while you ride your bike, okay?

CHI: **How about [you could ride your bike]?**

MOT: You want me to ride my bike?

CHI: Yeah. (Abe, 3;05.24)

b. CHI: No, **how about [this be the babysitter]?**

LAU: Okay, we'll change them. (Emma, 4;03.28)

In (20a), Abe uses the modal verb *could* in his utterance involving the *how about* construction with a sentence dependent to make a suggestion. He uses this particular modal verb *could* consistently and it is not found in his parents' data. In (20b), Emma uses the base form verb *be* in the sentence dependent of the *how about* construction. When the subject of the sentence dependent is a first person or second person pronoun it is not clear whether the given verb is in its tensed plain form or in its non-finite base form. However, in examples as in (20b) with a third person subject, we can see that the verb clearly is in its base form. In Emma's data the base form verb is consistently found in the construction but in the parents' data, such verb form is not observed. These grammatical features seem to be associated with the suggestion function in the construction. That is, the base form verb is related to the imperative clause type, which in turn is linked to the suggestion function, and the modal verb *could* can be used to sound more polite when making a request.

**Small clause dependent:** In the children's data, only three instances of the *what about* construction with a small clause dependent are found without any instance of its *how about* construction counterpart; in the parents' data, three instances of the *what about* construction and another three instances of the *how about* construction are found with a small clause dependent. The two constructions with a small clause dependent involve a pronominal subject with an accusative or genitive case form, a proper noun subject, or an NP subject with a possessive marker 's, and a non-finite predicate, as demonstrated in (21):

(21)a. CHI: Mom, what about [the baby's growing]? (Abe, 4;10.01)

b. MOT: How about [you eating your food], sweetie? (Laura, 2;04.23)

Since the two constructions with a small clause dependent are infrequent, it is hard to make a good generalization about their uses. Note, nonetheless, that all the three *how about* construction examples with a small clause dependent by the parents are used with a suggestion function, while the *what about* construction examples by the children and parents are used with both pure inquiry and suggestion functions, as shown below:

Table 12. Distributions of *what about* and *how about* construction examples with a small clause dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure Inquiry	Suggestion	Pure inquiry	Suggestion
2;00-2;05	0 (0)	0 (0)	0 (0)	0 (1)
2;06-2;11	1 (1)	0 (0)	0 (0)	0 (0)
3;00-3;05	0 (0)	0 (0)	0 (0)	0 (1)
3;06-3;11	0 (0)	1 (1)	0 (0)	0 (0)
4;06-4;11	1 (0)	0 (0)	0 (0)	0 (0)
5;00-5;05	0 (0)	0 (0)	0 (0)	0 (0)
5;06-5;11	0 (0)	0 (1)	0 (0)	0 (0)
7;06-7;11	0 (0)	0 (0)	0 (0)	0 (1)
<b>Total</b>	<b>2 (1)</b>	<b>1 (2)</b>	<b>0 (0)</b>	<b>0 (3)</b>

(22)a. CHI: Daddy come home.

MOT: **What about [Daddy coming home]?** (Adam, 2;07.01) (*what about* construction with a pure inquiry function)

b. CHI: And where does this go? **What about [this going on here]?**

MOT: Does it? No. It must be part of the body on this one somehow. (Laura, 3;07.00) (*what about* construction with a suggestion function)

c. FAT: You guys are really be mean to each other.

CHI: No, we're not.

FAT: Okay, are you going to be good friends?

CHI: No.

FAT: **How about [two boys being friends]?** (Ross, 7;06.00) (*how about* construction with a suggestion function)

The distribution patterns in Table 12 suggest that parents use the two constructions with a small clause dependent with the preference for the suggestion function over the pure inquiry function but children acquire and use the *what about* construction with the preference for the pure inquiry function and they may acquire the *how about* construction in later acquisition periods.

**VP[base] dependent:** In the children's and parents' data each, only four examples of the *how about* construction with a VP[base] dependent are observed with no example of its *what about* construction counterpart, and all the eight examples produced by the children and their parents are used with a suggestion function as in (23):

- (23)a. LAU: Tell me what you'd like me to draw.  
 CHI: I don't know. **How about [pick your color]?** I'll pick.  
 LAU: Okay, I have blue. (Emma, 4;03.28)
- b. CHI: Wanna clean the house.  
 MOT: You really feel like vacuuming, don't you?  
 CHI: Vacuum.  
 MOT: Vacuum, **how about [just vacuum a little bit]** and maybe you can vacuum more when Erin goes home. (Matt, 2;04.28)

Examples like these show that although the *how about* construction is not frequently used with a VP[base] dependent by parents, children acquire it with a low frequency, and it is favorably used with a suggestion function, implying that parents' uses of the *how about* construction with a VP[base] dependent have an impact on children's acquisition and uses of the construction.

**VP[-ing] dependent:** As noted above, in the children's data, only 15 instances of the *how about* construction are found with a VP[-ing] dependent and there is no instance of its *what about* construction counterpart. In the parents' data, 11 instances of the *what about* construction and 16 instances of the *how about* construction are found with a VP[-ing] dependent. These examples can be classified in terms of children's age periods and illocutionary functions, as represented in the following:

Table 13. Distributions of *what about* and *how about* construction examples with a VP[-ing] dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure inquiry	Suggestion	Pure inquiry	Suggestion
1;06-1;11	0 (0)	0 (0)	0 (1)	0 (0)
2;06-2;11	0 (0)	0 (1)	0 (0)	1 (5)
3;00-3;05	0 (0)	0 (4)	0 (0)	1 (4)
3;06-3;11	0 (0)	0 (0)	0 (0)	8 (1)
4;00-4;05	0 (2)	0 (0)	0 (0)	1 (2)
4;06-4;11	0 (0)	0 (1)	0 (0)	3 (0)
5;00-5;05	0 (0)	0 (0)	0 (0)	1 (1)
5;06-5;11	0 (0)	0 (1)	0 (0)	0 (1)
6;00-6;05	0 (1)	0 (1)	0 (0)	0 (0)
7;06-7;11	0 (0)	0 (0)	0 (0)	0 (1)
<b>Total</b>	<b>0 (3)</b>	<b>0 (8)</b>	<b>0 (1)</b>	<b>15 (15)</b>

(24)a. MOT: How come you bake when you're big? And not when you're little?

MAR: Because when you're little you might get burned on the hand.

MOT: **What about [blowing your nose]?**

MAR: Well, that's a bigger important thing.

MOT: Do you know how to blow your nose?

MAR: Nope. (Mark, 4;02.02) (*what about* construction with a pure inquiry function)

b. FAT: What are we going to do tonight? Are we going to do anything tonight?

CHI: I don't know.

FAT: **What about [going to Jack and Karen's]?**

CHI: Yeah, I wanna go to Jack and Karen's house. (*what about* construction with a suggestion function)

(25)a. MOT: What was the nicest thing about going to the Vwww's family?

SIS: xxx.

FAT: That was nice.

MOT: Yeah. It was nice, wasn't it? **How about [getting all those nice hugs and kisses]?**

SIS: Yeah.

CHI: Yeah.

MOT: From your special friends. (*how about* construction with a pure inquiry function)

b. CHI: **How about [giving me a spoon]?**

FAT: Here. (Abe, 3;06.29) (*how about* construction with a suggestion function)

As shown in Table 13, all the 15 examples of the *how about* construction with a VP[-ing] dependent produced by the children and 15 out of 16 produced by their parents are used with a suggestion function; the majority of the *what about* construction examples by the parents also involve a suggestion function rather than a pure inquiry function, although the preference is weaker than the *how about* construction. The results here indicate that in these acquisition periods children acquire and use the *how about* construction with a VP[-ing] dependent on the basis of their parents' input, but children do not use its *what about* construction counterpart in a similar way to their parents.

Summing up the observations made thus far based on the *what about* and *how about* construction examples with the proposition-denoting dependents from CHILDES subcorpora, first, parents' input plays a crucial role in children's acquisition and uses of the *how about* construction in early childhood with respect to subtypes for some dependent categories and a strong preference for the suggestion function over the pure inquiry function. In using the *how about* construction with the proposition-denoting dependents, children also exhibit some idiosyncratic properties which are not observed in parents' input (e.g., the uses of modal verb *could* and base verb form in sentence dependents). However, in the acquisition periods under discussion, children do not seem to fully acquire the uses of the *what about* construction with proposition-denoting dependents, since their occurrences of the construction are rare. This may be due to the fact that their parents' uses of the *what about* construction with proposition-denoting dependents are also infrequent compared to the *how about* construction counterpart. In addition, parents use the two constructions in rather different ways when they occur with some proposition-denoting dependents (e.g., favored subtypes of finite subordinating clause dependent and preference for one illocutionary function over the other with finite subordinating clause dependents). Such factors may cause difficulty in children's acquiring the *what about* construction in early childhood in a similar way to their parents. Finally, in the children's and parents' data, VP[-ing] is not the second most frequent dependent category in either of the constructions, contra previous intuition-based and corpus-based studies (Wierzbicka 1986, 2003; Gottschalk 1992; Huddleston and Pullum 2002; Sonoda 2009; J. Kim and H. Kim 2021). This suggests that the uses of the constructions by children and parents are different from the uses observed in general English to some extent.

### 5.2.3 Minor dependents

Minor dependent categories are AdjP, AdvP, and PP. Commonly, these categories do not induce propositional meanings on their own and the *what about* and *how about* construction examples with these dependent categories are relatively infrequent. Consider the distributions of the *what about* and *how about* construction examples with the minor dependent categories in Table 14:



Table 14. Distributions of *what about* and *how about* construction examples with minor dependents produced by the eight children and their parents in CHILDES based on children's age periods

Age period	AdjP		AdvP		PP	
	<i>what about</i>	<i>how about</i>	<i>what about</i>	<i>how about</i>	<i>what about</i>	<i>how about</i>
2;00-2;05	0 (0)	0 (0)	0 (0)	0 (3)	0 (0)	0 (1)
2;06-2;11	0 (0)	0 (0)	0 (0)	1 (3)	0 (1)	1 (3)
3;00-3;05	0 (0)	0 (0)	0 (0)	2 (2)	0 (1)	5 (2)
3;06-3;11	0 (0)	0 (1)	0 (0)	0 (2)	0 (1)	4 (6)
4;00-4;05	1 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (0)
4;06-4;11	0 (0)	0 (0)	0 (1)	0 (0)	0 (1)	0 (3)
5;00-5;05	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (1)
5;06-5;11	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)	0 (2)
6;00-6;05	1 (1)	0 (0)	0 (0)	0 (0)	0 (1)	0 (6)
6;06-6;11	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)
7;00-7;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (2)	0 (0)
7;06-7;11	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (1)
<b>Total</b>	<b>2 (1)</b>	<b>0 (1)</b>	<b>0 (1)</b>	<b>4 (11)</b>	<b>1 (12)</b>	<b>11 (25)</b>

In the children's data with the minor dependent categories, except those examples with an AdjP, which are only found in the *what about* construction, those with an AdvP dependent and a PP dependent are more frequently found in the *how about* construction than in the *what about* construction and with these dependents, the *how about* construction shows a tendency to be used earlier than the *what about* construction counterpart. In general, the children's data with these minor dependents show similar patterns to their parents' data in terms of frequency distributions in the children's age periods.

**AdjP dependent:** In the children's data only two *what about* construction examples are found with an AdjP dependent with no *how about* construction counterpart example; in the parents' data one example of the *what about* construction and one example of the *how about* construction are observed with an AdjP dependent.

Note then that all the identified examples with an AdjP dependent produced by the children and their parents involve a predicative use in the AdjP dependent, not an attributive use, and they are all used with a pure inquiry function, not with a suggestion function, as in (26):

- (26)a. FAT: Then you hafta be especially good.  
 MAR: Okay then I will be specially xxx.  
 MOT: Cmon. Cmon.  
 CHI: What about what about special **what about [especially cute]**? (Ross, 6;01.23)
- b. FAT: How you feel sad, or angry, or happy?  
 KAR: You see some faces that look sad?  
 FAT: **How about [happy]**? (Roman, 3;11.13)

In (26a), Ross uses the *what about* construction to ask his father for an opinion about whether his younger brother, Mark, has to be especially cute. In (26b), Roman's father uses the *how about* construction to ask the addressee(s) for additional information as to whether they see some faces that look happy. The observations suggest that the *what about* and *how about* constructions with an AdjP dependent are rarely used by children and their parents and their productivity is rather restricted to the predicative use of the adjective and the pure inquiry function.

**AdvP dependent:** The attested *what about* and *how about* construction examples with an AdvP dependent can be classified based on the meanings of the AdvP dependent. The AdvP dependent describes a time, location, or manner, as illustrated below:

- (27)a. CHI: How about [later]? (Matt, 3;02.18)  
 b. FAT: How about [right here]? (Laura, 2;06.03)  
 c. MOT: You can walk only slowly. How about [fast]? (Matt, 3;02.18)

AdvP dependents like (*right*) *now* and *later* as in (27a) describe temporal information whereas those such as (*right*) *here* and (*right*) *there* as in (27b) express locative information. Meanwhile, those like *fast* as in (27c) provide manner information.

The classification of the identified *what about* and *how about* construction examples with an AdvP dependent in the children's age periods and AdvP types indicates that the majority of them contain a locative AdvP dependent in both the children's data and the parents' data and such examples are found earlier than those with the other types of AdvP dependent. To be more specific, in the children's data, three of the four *how about* construction examples involve a locative AdvP dependent, the earliest occurrence of which is found in the age period 2;06-2;11; the rest one example involves a temporal

AdvP dependent, which is found in the age period 3;00-3;05. In the parents' data, eight *how about* construction examples have a locative AdvP dependent and the first occurrence of this type is observed in the age period 2;00-2;05; two *how about* construction examples and the only *what about* construction example involve a temporal AdvP dependent and among these three examples the earliest occurrence is found in the age period 3;00-3;05; the remaining one *how about* construction example contains a manner AdvP, which is found in the age period 3;00-3;05.

Then, take a look at the distributions of the identified *what about* and *how about* construction examples with an AdvP dependent by the children's age periods and illocutionary functions in the following table and some representative examples in (28):

Table 15. Distributions of *what about* and *how about* construction examples with an AdvP dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure inquiry	Suggestion	Pure inquiry	Suggestion
2;00-2;05	0 (0)	0 (0)	0 (0)	0 (3)
2;06-2;11	0 (0)	0 (0)	1 (1)	0 (2)
3;00-3;05	0 (0)	0 (0)	0 (2)	2 (0)
3;06-3;11	0 (0)	0 (0)	0 (1)	0 (1)
4;06-4;11	0 (1)	0 (0)	0 (0)	0 (0)
5;00-5;05	0 (0)	0 (0)	0 (0)	1 (0)
5;06-5;11	0 (0)	0 (0)	0 (1)	0 (0)
<b>Total</b>	<b>0 (1)</b>	<b>0 (0)</b>	<b>1 (5)</b>	<b>3 (6)</b>

(28)a. FAT: What happened?

CHI: My tooth got sugar in it.

FAT: Oh, it did. The sugar xxx hurt it.

CHI: Ya, but it didn't hold off.

FAT: Okay, well, **what about [now]?** (Ross, 4;06.01) (*what about* construction with a pure inquiry function)

b. MOT: Okay, let's check. Okay, go ahead.

CHI: You gotta mush it xxx because xxx her face did not come out.

MOT: You gotta push it because her face did not come out. **How about [now]?** Oops, now her head's coming off. (Matt, 3;00.15) (*how about* construction with a pure inquiry function)

c. FAT: Why don't you pick up all the toys and put them in a pile, right here.

MAR: **How about [here]?**

FAT: No. Over here. (Mark, 5;00.24) (*how about* construction with a suggestion function)

As can be seen here, in the children's data the first occurrence of the *how about* construction with an AdvP dependent has a pure inquiry function but the later occurrences all involve a suggestion function; on the other hand, in the parents' data the earlier examples of the *how about* construction with an AdvP dependent are used with a suggestion function while later examples are used with a pure inquiry function.

**PP dependent:** The identified *what about* and *how about* construction examples with a PP dependent can be divided into different types based on the meanings of the PP dependent, as demonstrated below:

(29)a. MOT: What about [in the winder] though? (Abe, 4;08.27)

b. CHI: How about [on the grass]? (Abe, 3;02.21)

c. FAT: Well, how about [to your friends]? (Ross, 6;05.30)

PP dependents like *in the winter*, *at night*, and *for three seconds* as in (29a) describe temporal information while those like *on the grass*, *from here*, and *in your ears* convey locative information. In the meantime, those like *to your friends*, *for you*, and *like a bus* express other meanings specified to the prepositions.

Then, observe the distribution patterns of the *what about* and *how about* construction examples with a PP dependent uttered by the children and their parents in terms of children's age periods and PP dependent types, as shown in Table 16:

Table 16. Distributions of *what about* and *how about* construction examples with a PP dependent produced by the eight children and their parents in CHILDES based on children's age periods and PP types

Age period	<i>what about</i>			<i>how about</i>		
	Temp.	Loc.	etc.	Temp.	Loc.	etc.
2;00-2;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)
2;06-2;11	0 (0)	0 (1)	0 (0)	0 (0)	1 (2)	0 (1)
3;00-3;05	0 (0)	0 (1)	0 (0)	0 (0)	4 (1)	1 (1)

3;06-3;11	0 (0)	0 (1)	0 (0)	1 (1)	3 (4)	0 (1)
4;00-4;05	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)
4;06-4;11	0 (1)	0 (0)	0 (0)	0 (0)	1 (2)	0 (1)
5;00-5;05	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	0 (0)
5;06-5;11	0 (0)	0 (0)	0 (0)	0 (0)	0 (2)	0 (0)
6;00-6;05	0 (0)	0 (1)	0 (0)	0 (0)	0 (2)	0 (4)
6;06-6;11	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)
7;00-7;05	0 (0)	0 (2)	0 (0)	0 (0)	0 (0)	0 (0)
7;06-7;11	0 (0)	0 (1)	0 (0)	0 (0)	0 (1)	0 (0)
<b>Total</b>	<b>0 (1)</b>	<b>1 (11)</b>	<b>0 (0)</b>	<b>1 (1)</b>	<b>9 (16)</b>	<b>1 (8)</b>

In the children's data, the majority of the *what about* and *how about* construction examples with a PP dependent involve a locative PP and such examples occur earlier than those with the other types of PP dependent. A similar observation is found in the parents' data. That is, even in the parents' data, the locative PP dependent is most prominent in both constructions, although the prominence is stronger for the *what about* construction than for the *how about* construction, and its occurrence is earlier than the other types.

Then, consider the usage patterns of the two constructions with a PP dependent by the children and their parents on the basis of the children's age periods and illocutionary functions in Table 17 and some relevant examples in (30):

Table 17. Distributions of *what about* and *how about* construction examples with a PP dependent produced by the eight children and their parents in CHILDES based on children's age periods and illocutionary functions

Age period	<i>what about</i>		<i>how about</i>	
	Pure inquiry	Suggestion	Pure inquiry	Suggestion
2;00-2;05	0 (1)	0 (0)	0 (1)	0 (0)
2;06-2;11	0 (0)	0 (0)	0 (2)	1 (1)
3;00-3;05	0 (1)	0 (0)	2 (2)	3 (0)
3;06-3;11	0 (1)	0 (0)	2 (1)	2 (5)
4;00-4;05	1 (3)	0 (0)	0 (0)	0 (0)
4;06-4;11	0 (1)	0 (0)	0 (0)	1 (2)
5;00-5;05	0 (0)	0 (0)	0 (1)	0 (0)
5;06-5;11	0 (0)	0 (0)	0 (0)	0 (2)
6;00-6;05	0 (1)	0 (0)	0 (6)	0 (0)
6;06-6;11	0 (1)	0 (0)	0 (0)	0 (0)
7;00-7;05	0 (2)	0 (0)	0 (0)	0 (0)
7;06-7;11	0 (1)	0 (0)	0 (1)	0 (0)
<b>Total</b>	<b>1 (12)</b>	<b>0 (0)</b>	<b>4 (15)</b>	<b>7 (10)</b>

- (30)a. MOT: It's kind of hard to draw with more than one, isn't it?  
CHI: Now what do you mostly see?  
MOT: mostly I see ...  
CHI: Right here.  
MOT: Green. Definitely green, but your orange and your red comes out pretty good too. The only one you really can't see very well is the light pink. You don't see light pink really.  
CHI: **What about [down here]?**  
MOT: Mm, almost it almost looks like this color this darker pinkish color. (Matt, 4;03.01) (*what about* construction with a pure inquiry function)
- b. MOT: I've noticed a lot of bees flying around there lately. Let me see.  
CHI: Now how about this?  
MOT: Nope. No bees.  
CHI: **How about [on my head]?**  
MOT: Let me see. I think there are a few ant hills up there. (Abe, 3;03.04) (*how about* construction with a pure inquiry function)
- c. CHI: Oh, Mom, where should I put all these workman's stuff?  
MOT: **How about [in your lunchbox]?**  
CHI: How come in my lunch box? (Abe, 3;07.28) (*how about* construction with a suggestion function)

As shown in Table 17, in the children's data the only *what about* construction example with a PP dependent is used with a pure inquiry function, while as for the *how about* construction examples with a PP dependent the suggestion function is more frequent and is found earlier than the pure inquiry function. In the parents' data, the pure inquiry function is more frequently observed in both constructions with a PP dependent, although such a tendency is stronger for the *what about* construction than for the *how about* construction, and the former use is found earlier than the latter. Thus, at least the children's and parents' *how about* construction examples with a PP dependent show some mismatch effects in terms of preferences for one illocutionary function over the other and their acquisition/input orders.

The observations made thus far indicate that overall children tend to favorably use one construction over the other with minor dependent categories and their uses of the two constructions follow the uses by their parents with respect to general frequency

distribution patterns. This seems to be the case even for subtypes of each minor dependent category. Nonetheless, a closer investigation reveals that there are also certain differences in terms of preferred illocutionary functions and acquisition/input orders of the illocutionary functions when the examples take a PP dependent.

## 6. Further discussion on some major corpus-based observations

In this section, I further discuss some major corpus-based observations about young children's acquisition and uses of the *what about* and *how about* constructions noted in the previous section in comparison with their parents' uses of the constructions and the properties of the constructions in general English discussed in previous literature. First, as noted above, in general, both children in early childhood and their parents very strongly prefer to use the *what about* construction for the pure inquiry function and this tendency is also observed in general English (J. Kim and H. Kim 2021: 421-422). However, children in early childhood prefer to use the *how about* construction for the suggestion function while their parents still tend to use the construction for the pure inquiry function more often than for the suggestion function. In general English, the *how about* construction is slightly favorably used for the suggestion function than for the pure inquiry function (J. Kim and H. Kim 2021: 421-422). Then, the question is why such distributional differences are observed about preferred illocutionary functions of the *how about* construction here. This seems to be related to the nature of communication between a young child and their parents and the main purposes of *wh*-questions by parents. It has been shown in previous literature that *wh*-questions by parents play an important role in children's vocabulary development (Ninio 1980; Goldfield 1993; Leech et al. 2013; Rowe et al. 2017). In particular, parents use *wh*-questions with the expectation that their child attempts to respond to them, and they then provide feedback and correct or supply the information if the child does not answer them satisfactorily (Ninio 1980; Clark and Wong 2002, Bornstein et al. 2008; Yu et al. 2019). These *wh*-question/answer feedback loops are helpful in developing the child's vocabulary. As is clear, the *how about* construction has two associated functions: pure inquiry and suggestion functions. However, considering parents' main purposes of asking the child *wh*-questions in general (i.e., encouraging them to talk more and developing their vocabulary accordingly), parents still tend to use the *how about* construction with the preference for the pure inquiry function

over the suggestion function even as an irregular *wh*-question construction. In addition, previous literature has shown that children in the three morpheme period already use interrogatives for making suggestions and reports in an analogous way to their parents (Holzman 1972; Van Hekken and Roelofsen 1982). Children in early childhood then seem to use the *how about* construction more preferably for the suggestion function than for the pure inquiry and they appear to make a distinction between the two superficially similar *what about* and *how about* constructions in terms of their preferred functions. Note, at this point, that in both the children's and their parents' *how about* construction data, the suggestion function is dominant for those with proposition-denoting dependents; however, in the children's *how about* construction data with an NP dependent, the two illocutionary functions are rather equally observed while in their parents' *how about* construction data with an NP dependent, the pure inquiry function is favored over the suggestion function. This tendency difference in the *how about* construction data with an NP dependent leads to the overall functional distribution difference between the children's data and their parents' data.

Another major intriguing observation about children's acquisition and uses of the *what about* and *how about* constructions concerns the fact that in the children's data there is no occurrence of the *what about* construction with a VP[-*ing*] dependent and there are only a few occurrences of the *how about* construction with a VP[-*ing*] dependent, all of which involve a suggestion function. The infrequent occurrences of the *how about* construction with a VP[-*ing*] dependent and its preference for the suggestion function by the children reflect the uses of the construction by their parents. However, zero occurrence of the *what about* construction with a VP[-*ing*] dependent by the children despite some occurrences of the construction by their parents indicates that children acquire and use the *what about* construction with a VP[-*ing*] dependent in later acquisition stages. Furthermore, it is striking to see infrequent uses of the two constructions with a VP[-*ing*] dependent both by the children and their parents, considering that VP[-*ing*] is the second most frequent dependent category for both constructions in general English (J. Kim and H. Kim 2021: 419-420). Note that when the VP[-*ing*] dependent is used in the two constructions, an overt subject or agent of the event described by the VP[-*ing*] predicate is missing. Given that the sentence dependent is more frequent than the VP[-*ing*] dependent in the parents' data and that examples with both dependents are dominantly used with a suggestion function, parents tend to make it clear who the subject or agent is for a suggestion event described by the dependent



for the sake of children's easier comprehension of their *how about* construction. This naturally accounts for why the sentence dependent is more frequent than the VP[-ing] dependent in parents' *how about* construction utterances. Children in early childhood in turn learn this tendency in using the *how about* construction from their parents' input.

Lastly, we have also observed in the previous section that children use the two constructions in some peculiar ways. For instance, some children make use of the modal auxiliary verb *could* and the base form verb in the sentence dependent for the *how about* construction and these are shown particularly when the construction is used with a suggestion function. These properties are not seen in their parents' data and they are not noted in previous literature either. Nonetheless, previous literature has shown that children in early childhood start using different types of politeness strategies (Garvey 1975; Wilkinson et al. 1982; Brown and Levinson 1987; Ervin-Tripp et al. 1990). Some children then seem to make use of such properties in order to clearly indicate that their *how about* construction with a sentence dependent is associated with the suggestion function and even to make their suggestion function for the construction more salient, although they are not shown in the parents' input and in general English. This thus shows that children in early childhood develop the grammar of their language not just based on language input data but they also do it in idiosyncratic, creative, and productive ways in certain respects (De Villiers 1985; Goldberg 2019).

## 7. Conclusion

In this paper I have investigated how children in early childhood acquire and use the *what about* and *how about* constructions based on attested corpus data from CHILDES subcorpora. The corpus-based observations made here point to the conclusion that children acquire and use the two constructions in rather different ways in early childhood, overall reflecting their parents' input. However, young children also use the two constructions with some linguistic features which are not observed in their parents' input, and use them with different tendencies or preferences as opposed to their parents' uses or even general uses of the two constructions. For instance, some children make use of the modal verb *could* and the base form verb for the sentence dependent in the *how about* construction to clearly indicate that the construction is tightly associated the suggestion function. In addition, the overall strong preference for the suggestion function in the

children's *how about* construction and the overall preference for the pure inquiry function in the parents' *how about* construction suggest that in early childhood periods children and parents use the construction for different main purposes. Furthermore, rather infrequent occurrences of the VP[-ing] dependent in both constructions by both the children and their parents imply that they prefer to use other proposition-denoting dependents with an overt subject such as finite subordinate clause and sentence dependents to make suggestions, which is not observed in general uses of the two constructions. The observations here, therefore, show that it is worth examining children's acquisition and usage patterns of the two constructions, with particular focus on their preferred subtypes and illocutionary functions for each dependent category.

As noted in the beginning, irregular *wh*-question constructions have not received much attention as compared to regular *wh*-questions, and as far as I am aware, empirical studies on irregular *wh*-questions in general and acquisition on them are scarce (Gottschalk 1992; J.-B. Kim and O. Kim 2011; O. Kim and J.-B. Kim 2017; Radford 2018; J. Kim and H. Kim 2021). In this regard, the current study further contributes to the body of literature on irregular *wh*-questions, inviting subsequent empirical studies on children's acquisition and uses of other irregular *wh*-questions.

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**Jungsoo Kim**

Lecturer

Department of English Linguistics and Literature

Kyung Hee University

26 Kyungheedaero, Dongdaemun-gu,

Seoul 02447, Korea

E-mail: jungsookim@khu.ac.kr

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