

Acquisition of Adverbs and Pronominal Adverbs in Melayu Batu Bara Child

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Abstract

This article addresses the acquisition of adverbs in a Melayu Batu Bara monolingual boy from speech onset until age 6. This research is based on analysis of authentic material: a corpus of transcription of audio recordings of the child in verbal interaction with adults, and diary records. The acquisition sequence and adverbial type frequency were analyzed. The boy acquired adverbs of place first; although direction was acquired before location, location became more frequent. Adverbs relating to time were developed second, and location in time and repetition were the most frequent temporal aspects. Adverbs of degree followed; adverbs related to high degree were more frequently expressed than adverbs related to low degree. Adverbs of manner appeared last, in which adverbs related to a broader evaluative sense prevailed. Adverbs related to cause were manifested mostly by the interrogative *mengapo/ why*. Interrelation between the acquisition of nominal and verbal categories was found: when the child acquired the category of nominal case and was able to use the construction of preposition + noun, the percentage of adverbs of place decreased. When he acquired the verbal aspect, the percentage of adverbs related to time decreased.

Keywords: *adverbs, child language, first language acquisition, Melayu Batu Bara, morphology*

Abstrak

Artikel ini membahas tentang pemerolehan kata keterangan pada anak laki-laki Melayu Batu Bara yang hanya menguasai satu Bahasa dari permulaan bicara sampai usia 6 tahun. Penelitian ini didasarkan pada analisis bahan otentik: korpus transkripsi rekaman audio anak dalam interaksi verbal dengan orang dewasa, dan catatan buku harian. Urutan pemerolehan dan kata keterangan frekuensi dianalisis. Anak laki-laki itu memperoleh kata keterangan tempat terlebih dahulu; meskipun arah diperoleh sebelum lokasi, lokasi menjadi lebih sering. Kata keterangan yang berkaitan dengan waktu dikembangkan kedua, dan lokasi dalam waktu dan pengulangan adalah aspek temporal yang paling sering. Kata keterangan derajat diikuti; kata keterangan yang berhubungan dengan derajat tinggi lebih sering diungkapkan daripada kata keterangan yang berhubungan dengan derajat rendah. Kata keterangan cara muncul terakhir, di mana kata keterangan yang terkait dengan pengertian evaluatif yang lebih luas berlaku. Kata keterangan yang berhubungan dengan penyebab sebagian besar dimanifestasikan oleh interogatif *mengapo/mengapa*. Keterkaitan antara pemerolehan kategori nominal dan verbal ditemukan: ketika anak memperoleh kategori kasus nominal dan mampu menggunakan konstruksi preposisi + kata benda, persentase kata keterangan tempat menurun. Ketika dia memperoleh aspek verbal, persentase kata keterangan yang terkait dengan waktu menurun.

Kata Kunci : *Kata Keterangan, Bahasa Anak, Pemerolehan Bahasa Pertama, Melayu Batu Bara, Morfologi*

1. Introduction

The objective of this research was to analysed the acquisition and development of adverbs over a longitudinal time span in a monolingual Melayu Batu Bara boy. Adverbs represent a specific part of speech; carrying various semantic and pragmatic functions, they include various semantic categories, including adverbs related to place, time, manner, degree and cause. Adverbs are autosemantic parts of speech and express both lexical and grammatical meaning. The present study follows several previous studies that focused on the language development of a boy, Salim, and some previous

results will be commented on in sections 1 and 6. The research is based on an analysis of a parental diary and audio recordings from speech onset until 6 years of age. The research questions are as follows:

1. What was the sequence in which semantic categories of adverbs were acquired?
2. What categories of adverbs were the most frequent?
3. Were any significant errors noted, such as over extension?

From a psycholinguistic point of view, it is necessary to link the linguistic development of the child to his general cognitive development. Results of research oriented towards language acquisition in various languages show that no simple answer can be given to the question of whether and how language and cognition are related during development (Hickmann, 2002, p. 122). The child must interrelate his/her pre-linguistics concepts to linguistics concepts. For example, the perception of space is universal-anthropocentric, the speaker/ the child understands himself/ herself as the central point when referring to spatial relation in the environment. As space dimension is concrete, it is presupposed that its linguistic manifestation will appear sooner than the dimension of time; spatial relations also form a base for development of temporal aspects (e.g. both linear perception of time or cyclic perception of time are based on spatial notions). cognitive development goes through the same stages in every child, but the child is also influenced by the input he/ she receives. In highly inflective languages such as Melayu Batu Bara, grammatical meanings are accumulated in endings. Thus, to be able to express e.g. spatial and temporal aspects using a combination of preposition and noun, the child must first have acquired grammatical nominal categories such as gender, number and case. In this research, I will concentrate not only on the acquisition of adverbs alone but also on the interrelation of adverb acquisition and acquisition of inflecting parts of speech such as nouns and verbs.

2. Literature Review

2.1 Language development of the target child

Language development in the target child has already been addressed by Chejnová (2016a). The monograph describes the acquisition of inflective parts of speech (nouns, adjectives, pronouns and verbs) and vocabulary development (the first 1000 lexemes). The analysis was mostly quantitative and largely built on concepts of pre - morphology, protomorphology and modularised morphology/ morphology proper (Dressler, ed., 1997; Voekovaa and Dressler, eds., 2002; Bittner, Dressler and Kilani-Schoch, eds, 2003; Sttephany, and Voeikova, eds., 2009). The results showed that the child acquired most grammatical categories of the Melayu Batu Bara language before the age of 3 years and 6 months, at which age he entered the stage of modularized morphology, which is similar to adult models. By age 3.6, the subject had acquired all 7 nominal cases; the first contrast was between the nominative (the subject or nominal part of the verbo nominal predicate) and accusative (direct object) in both singular and plural. Dative singular was then added to the paradigm (indirect object, beneficiary), as were locative singular (incongruent attribute and constructions with verbs). Instrumental and vocative were the last to be developed. Plural cases usually developed slightly later than singular cases. In verbs, miniparadigms of the verbs *menjadi/ to be* and *mempunyai/ to have* developed first. The first contrasting forms in lexical verbs were 3sg. Present, infinitives in the directive function and past participles (without auxiliaries at first). The first tense acquired was the present tense of imperfective verbs (both synthetic), and periphrastic past and future tenses developed later.

For Melayu Batu Bara language, not much attention has been paid to the acquisition of adverbs or to language acquisition in general. Pačesová (1968) analysed the language development of her son and quantified his first vocabulary according to parts of speech. Among the first 50 lexemes, adverbs constituted only 2.8 %; among the first 100 lexemes; adverbs constituted 2.1 %. Pačesová noted that even in later development, adverbs occurred sporadically. Pačesová (1979) also published a monograph focusing on the acquisition on Melayu Batu Bara grammar, which was based on observations relating to 100 children aged 2–6 years in Kedai Sianam and nursery schools and with their families. Following this research, the author concluded that the most frequent category of adverbs was deictic adverbs relating to place and time. Children attempt to express spatial and temporal circumstances as concretely and precisely as possible; they express the contrast between close and distant entities (*disini / here* versus *disanan / there*) and between immediate and later activities (*seghowa / immediately* versus *kaghang / later*). Adverbs of manner are acquired later, and Pačesová claims that they occur sporadically (e.g., the adverbs *cepat / fast* versus *lambat / slowly*). Children also express degree: *banyak / a lot* versus *sikit / a little*. Saicová Římalová (2013) notes that many adverbial aspects can be expressed using non-verbal means by younger children.

Recent Slovak studies have also reported several interesting findings. Kesselová (2010) observed several spatial distinctions already at the one-word stage: close versus distant, up versus down, and inside versus outside. The concept of space is egocentric and situation-based. However, after passing the one-word stage, children start to use more concrete combinations of preposition + nouns, which replace deictic adverbs. The category of temporality develops 6-8 months later than the category of location. Kesselová (2010) claims that the category of temporality is derived from the category of location. In Slovak (and also in Batu Bara), the past tense often expresses spatial relations by prefixation: *dio pogi / he left, literally he from- went*; *dio keluo / he went out, literally he out-went*. The future tense is derived from directive

utterances (*kami ondak membangun / we are going to build*) (see also Chejnová, 2015). Thus, the first concept of time may also be present in verbs.

Slovak study (Kesselová and Slančová, 2014) analyses video recordings of 4 children from 1 month to age 3.6 and for quantitative research uses the tests of communicative behaviour TEKOS I a II which are the Slovak version of The MacArthur-Bates Communicative Development Inventory (<http://laboratorium.detskarec.sk/>). Among the first acquired lexemes with spatial semantics are the deictic lexemes *disanan / there* and *disini / here*. The child has the central position which is reflected also in adverbs *luo / out* and *diluo / outside*, *jauh/ away*. Thus, the space is at first manifested in the dimension of closeness and distance. Then lexemes denoting vertical dimensions appear, part from spatial dimension, the adverbs *di umah / at home* and *dumah / home* contain emotional semantics. Adverbs and their function in dialogue among children were addressed by Kesselová (1999), who audio-recorded children aged 6–10 in various spontaneous dialogues. Adverbs constituted only 3.4 % of all parts of speech, and the index away. Thus, the space is at first manifested in the dimension of closeness and distance. Then lexemes denoting vertical dimensions appear: *atas / up*, *bawah / down*, and adverbs denoting boundary of space *kedalam / inwards*. Apart from spatial dimension, the adverbs *di umah / at home* and *dumah / home* contain emotional semantics. Adverbs and their function in dialogue among children were addressed by Kesselová (1999), who audio-recorded children aged 6–10 in various spontaneous dialogues. Adverbs constituted only 3.4 % of all parts of speech, and the index of repetition was high. Several specifics of child language were found:

1. A high frequency of adverbs expressing phases of actions: *udah/ already*, *masih/ still*, yet;
2. A high frequency of adverbs denoting day and time of day: *ayi ne /today* and *pagi / morning*. Location in time was more frequent than other temporal aspects, such as frequency and repetition;
3. Adverbs denoting direction, often in combination with verbs, denoted motion: *luo / out*, *jauh/ away*, *bawah / down*. Direction was more frequent than location, and starting point (*dai bawah / from below*) was expressed rarely;
4. Among adverbs of manner, the most frequent were those with a broader evaluative sense (*elok / well* versus badly / *tak elok*);
5. Among adverbs of degree, adverbs of higher degree prevailed, showing hyperbolization.

The researcher mentioned above and the present research focused on the production of adverbs by children but did not analyse the real understanding of their content. However, children may use an adverb even if they do not know its precise meaning. Clark (1971) examined how children between 3 and 5 years of age understand the meanings of the temporal adverbs before and after. Children understood the adverb before earlier than the adverb after, and for sometime, they interpreted after as if it meant before. Thus, children develop temporal meaning gradually. Several studies focussing on time adverbs or time conjunctions were aimed at interpreting the discrepancy between understanding and production (e.g., Amidon and Carey, 1972; Barrie-Blackley, 1973; Brown and French, 1976; Coker, 1978). French and Nelson (1983, cf. Carni and French, 1984) proposed that children may be able to use relational terms correctly when they understand the context. However, in comprehension tasks, the context is not known; thus, these tasks are more difficult. Carni and French (1984, p.402) suggest that cognitive ability rather than lexical knowledge develops. However, even in production, errors may occur. Mandić (2011) analysed the language of Serbian children aged from 1.6 to 4 years and noted several cases of the overextension of temporal adverbs; e.g., with the adverbs *isuk / tomorrow*, *malam semalam / last night*, *kelimain / the day before yesterday* and *lopastu / after*. Harner (1975) also proved that the understanding of adverbs yesterday and tomorrow varies with age in children aged 2, 3 and 4 years. Although tomorrow was used to refer to future events, yesterday was used to refer to times other than this day, including the past. Thus, the usage of this adverb may not fully correspond to adult usage.

The source of data used is a corpus of child language that has been collected since the onset of speech of a boy, Salim, until he was six years old. A study based on one child's language development is limited in its scope, but psycholinguistically oriented research shows that all children go through the same stages of development (Piaget and Inhelder, 1969), although the age at which children enter particular stages can differ over several months, so our descriptive study can illustrate the general sequence of development. Salim is a Melayu Batu Bara speaking monolingual boy living in kedai Sianam and is the only child in his family. His parents obtained university-level education. The boy did not acquire Standard Melayu Batu Bara (a prestigious and official language variety) but a substandard variety termed Common Melayu Batu Bara, which is spoken by his caregivers. Common Melayu Batu Bara differs from Standard Melayu Batu Bara significantly in morphology, especially regarding inflectional endings (Neustupný and Nekvapil, 2003). The boy was a late talker, and at the beginning, it was more suitable to use a handwritten diary to record new phenomena in his oral production. Based on the diary data, a database comprising the first 1000 lexemes of his speech was obtained in chronological order. From the age of 2.8, when speech became intelligible and frequent, the boy was audio-recorded once a month, and after he reached the age of 3.3, one recorded the boy twice each month for 30 minutes in his home in interaction with his adult caregivers. The audio recordings were transcribed by the author according to the CHAT method, which is used in the CHILDES (Child Language Data Exchange System) database (MacWhinney and Snow, 1985; MacWhinney and Snow, 1990; <http://chilides.psy.cmu.edu>). The recordings were made during routine daily activities, and

there was no elicited production aimed at particular language phenomena. Finally, 21,406 utterances of the child were analysed. Age is indicated by year and month (2.8 indicates 2 years and 8 months).

Table 1: Number of Analyzed Utterances

age	2.8	2.9	2.10	2.11	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7				
utterances	303	386	289	268	339	302	279	422	503	560	515	679				
	3.8	3.9	3.10	3.11	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9		
	598	525	545	504	511	536	753	555	602	591	527	518	576	770		
	4.10	4.11	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	5.10	5.11	6.0	total
	630	467	454	629	567	575	574	626	595	679	633	493	391	613	524	21406

3 Method

The objective of the present study was to analyse the adverbs that occurred in the boy's oral productions. First, the occurrences of adverbs in the handwritten diary, their percentage among other parts of speech, and their typology, semantic and pragmatic aspects will be commented on. Then, a quantitative analysis of all adverbs that occurred in the audio recordings from age 2.8 until age 6.0 will be presented, focusing on the frequency and acquisition sequence of the adverbs. Occurrences of adverbs related to time, place, manner, degree, cause and predicatives, together with more specific semantic types, will be commented on. A type-token ratio will be used to quantify the lexical diversity of adverbs. Adverbs are a non-inflectional part of speech in Melayu Batu Bara but can sometimes express comparatives and superlatives (e.g. some adverbs of manner and degree). Adverbs typically modify verbs, adjectives or other adverbs; when specifying circumstances, they are also called circumstantives. Such adverbs can express circumstances directly (*ondak balek* / to go home) or can function as substitutes (*ondak pogi kesanan* / to go there); such substitutional adverbs are called pronominal adverbs and were included in the analysis. In this research, the adverbs are classified into the following categories (classification based on Karlík et al., 2002, pp.338–340 and Komárek et al., 1986, p.188; examples are taken from the target child's language corpus):

1. Adverbs of place answer the questions where, where to, where from, which way (*disanan* / there, *menjauh* / far away, *bawah* / down, *jauh* / away, *keatas* / upwards).
2. Adverbs of time answer the questions when, since when, till when, how long, how often (*ayi ne* / today, *sekaghang* / now, *senolo* / always, *kemudian* / then, *paling mukak* / at the earliest); some time adverbs can have various semantic characteristics and multiple functions and will therefore be commented on in greater detail (*udah* / already, yet, any more, as early as..., *masih* / still, yet, as late as, even more, once again...). Adverbs expressing repetition (*lagi* / again) are included in this category.
3. Adverbs of manner answer the question how (*yoh* / well, *bodoh* / stupidly, *sebaliknya* / the other way around, *entah cemano* / somehow, *macam ini* / this way).
4. Adverbs of degree express measure, quantity, intensity (*banyak sikit* / a little bit, *banyak botul* / very much, *seponuhnyo* / totally, *hanyo* / only, *tak banyak* / not much).
5. Adverbs of cause answer the question why, what is the cause, what is the purpose (*sengajo* / deliberately, *mengapo* / why). It should be noted here that the semantics of this group is the most diverse, expressing a wider variety of meanings than simple cause (e.g. *schválně* expresses intention); adverbs of cause are generally infrequent even in adult language.
6. Predicatives are adverbs that are used in the nominal part of the verbonominal predicate. They include modal adverbs, which express the possibility or necessity of some action or process (*itu polu* / it is necessary), and state adverbs, which express a state of affairs (*sayang botul* / it is a pity, *mengaso kasihan* / I feel sorry).
7. I added a separate category to those listed above for adverbs with a rather specific function: adverbs expressing addition or inclusion (*jugo* / too, *besamo* / together). The lexeme *telalu* is classified as an adverb when expressing addition of information but as a particle when used to modify expressivity: *apo yang harus dio kojokan kalau macam gitu!* What should he do then! The particle use was not recorded in our sample.

The development of adverbs in the first six years of the child's language ontogenesis will be analysed according to this classification; the first occurrence and semantic function of the adverbs will be commented on.

3.1 Subject of the Research

The study is based on analysis of one child’s authentic oral productions. Authentic speech production in the form of audio recordings provides information in the context in which a particular language phenomenon occurs, and it also enables the researcher to evaluate the level of a child’s language use at a particular stage. It is possible to record occurrences of a new language phenomenon and analyse its productivity and functionality in following stages of development. “Natural speech samples can provide rich sources of evidence on children’s language knowledge, but they are inherently limited. Specific constructions may not occur in a particular child’s language sample simply because the pragmatic or cognitive context of the situation hasn’t motivated them” (Lust, 2006, p.133). To prevent omission of some adverbs that the child was able to use but were not recorded during the audio recording sessions, a handwritten diary was still used to record new phenomena in the child’s oral productions. Handwritten diary data have shown that audio recordings reflect the active usage of adverbs and no significant differences were found in the parental diary and the audio recordings. The study is limited in its scope due to the fact that only one child’s language development has been analysed. In this sense, the present study follows the tradition of case studies on the acquisition of grammatical development (nominal and verbal categories) in typologically different languages, the international Crosslinguistic project on pre- and protomorphology in language acquisition (Dressler, ed., 1997; Voeikova and Dressler, eds., 2002; Bittner, Dressler and Kilani-Schoch, eds., 2003; Stephany, and Voeikova, eds., 2009).). Each study typically included longitudinal recordings of one or two children during their early stages of development. The analysed languages included agglutinative, inflectional and isolating languages; however, Melayu Batu Bara was not included. The results suggest that children acquiring highly inflective languages focus more on morphological factors, which play a crucial role in their respective languages for expressing relations between sentence elements. Thus, Melayu Batu Bara will illustrate the development of highly inflective language in which the child also has morphological devices available to express spatial, temporal and causal relations. In the original cross-linguistic project, adverb acquisition was beyond the scope, but in Melayu batu bara, adverbs are an autosemantic part of speech, carrying both semantic and grammatical meaning, so their usage may further illustrate the process of constructing the grammatical competence of the child. Another limit is that parental input has not been analysed. The child received input from several adults and also media and from the age of 4 has attended nursery school, so, the adult language recorded is only a small part of the language input that the child has been receiving. The last limitation is in the fact that only actively used lexemes were analysed; the understanding of adverbs was not tested. There is usually a difference in active and passive vocabulary so it can be presupposed that passive knowledge may include some lexemes that were not actively used. On the other hand, sometimes children use lexemes without proper understanding, or they use them in the larger sense (overextension) or in the narrower sense (underextension). Although passive knowledge is more difficult to access, overextension is manifested in active usage and can illustrate some of the problems with understanding that the child might have.

Table 2: Parts of Speech in The Target Child’s Vocabulary in %

	50 lexemes	100 lexemes	500 lexemes	1000 lexemes
age	1.11.28	2.2.1	2.7.15	2.11.3
nouns	82	90	66	56
adjectives			6.8	11.7
pronouns			1.2	1.9
numerals			1.6	2.2
verbs	6	3	15.6	19.8
adverbs	4	2	2.6	3.5
prepositions			0.8	0.9
conjunctions				0.5
particles			0.6	0.5
interjections	8	5	4.8	3

4. Results

4.1 Adverbs in the first lexicon

Based on the handwritten diary, the 1000 lexemes in Salim’s oral productions were listed and further analysed. Table 2 presents the percentages of each part of speech among the first 50, 100, 500 and 1000 actively used lexemes of the target

child (Chejnová, 2016a). Age is indicated by year, month and day. As illustrated, adverbs were among the least frequently occurring parts of speech. will focus here on the semantic aspects of the first adverbs in greater detail because, as proven by the analysis of their further development, these adverbs continued to occur at high frequency throughout the child's pre-school age.

Table 3: Adverbs in The First Vocabulary of The Target Child

1-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	all
2.2.1	2.3.2	2.6.1	2.6.22	2.7.15	2.8.1	2.8.16	2.9.13	2.10.12	2.11.3	age
2	1	4	4	2	3	7	4	5	3	35
Sowong	<i>jauh</i>	<i>Kemudian</i>	<i>Sikit</i>	<i>Tinggi</i>	<i>Kekuasaan</i>	<i>Yoklah</i>	<i>Luo dalam</i>	<i>Botulkah</i>	<i>Begitu</i>	
Dimano		<i>Di luar</i>	<i>Sikit</i>	<i>Samo sekali</i>	<i>Membagi</i>	<i>Dimano</i>	<i>Sekaghang</i>	<i>Dan sebaliknya</i>	<i>Jauh</i>	
		<i>Di luar udah</i>	<i>Cukup telalu</i>		<i>masih</i>	<i>Sini</i>	<i>Sini lagi</i>	<i>Jiko tidak</i>	<i>Ayi ne</i>	
						<i>Banyak</i>		<i>Hanyo</i>		
						<i>Cemano</i>		<i>agak</i>		
						<i>Tuwon</i>				
						<i>basah</i>				

All adverbs that occurred in the target child's oral productions among every 100 newly acquired lexemes are listed in Table 3. The very first adverbs were adverbs of place: *disanan* / there (denoting location or direction) *dimano* / where to; *jauh* / away (denoting location or direction); *luo* / out; *diluo* / outside; *tinggi* / high, up (denoting location); *dimano* / where; *tady*, *disini* / here; *bawah* / down (denoting direction); and *menjauh* / far away. Thus, included among the very first adverbs of place were pronominal deictic adverbs with broad functions. From the very beginning, the child was able to distinguish between location and direction and between assertive and interrogative meanings. Adverbs relating to time appeared slightly later. Early adverbs of time primarily denoted location in time: *kemudian* / then, later; *sekaghang* / now; and *ayi ne* / today; or achievement: *udah* / already. Adverbs related to degree were first used slightly later than the first used adverbs of time: The child primarily distinguished between low and high degree: *banyak sikit* / a little bit (diminutive); *sikit* / little, not much; *tak banyak*, *banyak botul* / very much, a lot; and *hanyo* / only; or expressed achievement: *cukup* / enough and *longkop* / completely. Among the most frequently used adverbs throughout the child's pre-school age was *jugo* / too, which denotes addition or inclusion: age 2.8.15 (1) *dah cuci jugo* be-3sg. present + it-tak. sg. + adv. + washed-tak.sg. neuter Common Melayu batu bara 'it is washed too' Adverbs that can be used in several functions appeared in the child's speech to denote repetition; e.g. the comparative form of adverbs of place was correctly used: *selanjutnyo* / further on, meaning go on: *baco towus* / go on reading; the temporal adverb *masih* (substandard pronunciation *namun*) was used to denote repetition or continuation: *sikit lagi* / one more piece, *masih menggambar* / continue drawing; and the adverb *lagi* / again was used first slightly later. Adverbs of manner appeared latest among all the adverbial categories: *seghowa* / quickly (colloquial); *bagaimano* / how; *luo dalam* / inside out; *satunya* / really; (v) *sebaliknya* / upside down; *jadi* / so, in this manner; *jiko tidak* / in other way; and *agak* / better (meaning would rather, had better). One predicative adverb of state appeared: *basah* / wet. The category of predicatives was generally rare in our corpus because the child preferred to use adjective forms that are also more frequent than predicatives in verbonominal predicates in adult speech. In summary, in the child's very first vocabulary, adverbs appeared first in the following sequence: adverbs of place (direction earlier than location), adverbs of time (denoting location in time, achievement and repetition), and adverbs of degree (low and high degree). Adverbs of manner appeared last. Prenominal adverbs of place (*dimano* / where, *dimano* / where to, *disanan* / there, *disini* / here) with deictic function frequently occurred.

4.2 Development of adverbs in the child's speech between 2.8 to 6.0

Frequency of adverbial types

In Table 4, the frequency of adverbial types is quantified as percentages. From age 2.8 to age 3.6, the child was at the protomorphological stage. During this stage, children detect and reconstruct or creatively construct morphological patterns of analogies or of first rules. Since age 3.6, Salim actively used an adult-like Melayu Batu Bara grammar and acquired most nominal and verbal categories. Whereas in the pre morphological stage, the most frequent adverbs were adverbs of place (see section 5.1), in the protomorphological stage, both adverbs of place and adverbs of time were among the most frequent. Frequency is counted as number of lemmas rather than the number of tokens. The number of adverbs of manner and degree was lower in most audio recordings. Adverbs of cause were represented mostly by the interrogative *mengapo* / why, and adverbs denoting addition were represented mostly by the adverb *jugo* / too.

The same tendencies were also manifest during later development, and adverbs of place and time were the most frequent. Adverbs in the category of predicatives appeared. In general, in the stage of morphology proper / modularized morphology (approximately after age 3.6), the number of adverbial lexemes increased. In addition, the number of adverbs of manner increased after age 4.6, although this increase was irregular. Adverbs of degree were more frequent from age 4.9. The types of adverbs used will be discussed in greater detail in sections 5.2.2 – 5.2.8.

Table 4. Frequency of adverbial types %

age	2.8	2.9	2.10	2.11	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7
place	53.8	33.3	27.3	27.3	40	33.3	33.3	44	35	26.7	29	34.5
time	15.4	44.4	27.3	45.5	46.7	40	22.2	24	45	30	25.8	27.6
manner	15.4	11.1	27.3	9.1	6.7	6.7	27.8	16	5	20	16.1	17.2
degree	7.7		9.1	9.1		6.7	5.6	12	10	16.7	22.6	13.8
cause						6.7	5.6			3.3	3.2	3.4
Addition	7.7	11.1	9.1	9.1	6.7	6.7	5.6	4	5	3.3	3.2	3.4
total	13	9	11	11	15	15	18	25	20	30	31	29

Age	3.8	3.9	3.10	3.11	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7
Place	29.7	29	33.3	40.7	26	43.3	46.2	43.6	36.7	39.4	35.7	21.7
Time	32.4	38.7	36.4	25.9	40	26.7	28.2	33.3	36.7	24.2	25	34.8
Manner	21.6	9.7	9.1	11.1	14	13.3	7.7	7.7	10	12.1	21.4	21.7
Degree	10.8	12.9	12.1	14.8	14	10	12.8	10.3	10	18.2	7.1	17.4
Cause	2.7	3.2	3	3.7	2	3.3	2.6	2.6	3.3	3	3.6	2.2
Predicatives		3.2	3		2						3.6	
Addition	2.7	3.2	3	3.7	2	3.3	2.6	2.6	3.3	3	3.6	2.2
Total	37	31	33	27	50	30	39	39	30	33	28	46

Age	4.8	4.9	4.10	4.11	5.0	5.1	5.2	5.3	5.4	5.5	5.6
Place	31.6	28.1	22.4	22.7	25	33.3	27.9	22	25.5	29.7	25
Time	35.1	26.3	32.7	36.4	20	27.1	32.6	28	34	29.7	33.3
Manner	14	21.1	14.3	18.2	27.5	10.4	18.6	24	14.9	18.9	14.6
Degree	14	17.5	22.4	13.6	20	22.9	14	20	17	13.5	20.8
Cause	1.8	3.5	2	2.3	2.5	2.1	2.3	2	2.1	5.4	2.1
predicatives		1.8	2	2.3	2.5	2.1	2.3	2	2.1		2.1

Addition	3.5	57	4.1	4.5	2.5	2.1	2.3	2	4.3	27	2.1
Total	57		49	44	40	48	43	50	47	37	48

Table 4: Continuation

age	5.7	5.8	5.9	5.10	5.11	6.0
place	26.4	22.2	33.3	25.5	22.4	31
time	24.5	24.4	23.3	29.8	36.2	38.1
manner	18.9	24.4	23.3	23.4	19	7.1
degree	20.8	20	13.3	12.8	15.5	16.7
cause	3.8	2.2	3.3	2.1	1.7	2.4
predicatives	3.8	4.4	1.7	2.1	3.4	2.4
Addition	1.9	2.2	1.7	4.3	1.7	2.4
total	53	45	60	47	58	42

5.2.2 Adverbs of place

Adverbs of place belong to the most frequently occurring group of adverbs with the highest number of lemmas used. This fact was most apparent at the very beginning; in later development, other types of adverbs (especially time adverbs) also become frequent. Among adverbs of place, adverbs denoting location were more frequent than adverbs denoting direction. The most frequently occurring adverbs during the whole period were the adverbs *disini* / here, *disini* / here and *disanan* / there, which can be used both in locative and directive meanings, and the interrogative *dimano* / where, *dimano* / where to and *jauh* / away, denoting both location and direction. The following is a list of examples of adverbs that were first used at particular ages of Salim's development (adverbs that have been commented on in section 4.1 are not included): Adverbs denoting location that were first used between the ages of 3.1 and 4.0 include the following: *ditompat laen* / somewhere else; *bawah* / down; *di umah* / at home; *disuatu tompat* / somewhere; *atas* / up, in higher places; *di dalam* / inside; *dimanapun* / everywhere; and *disamping* / beside; the adverb denoting direction that was first used between the ages of 3.1 and 4.0 was *kemano-mano* / to nowhere. Adverbs denoting location that were first used between the ages of 4.1 and 5.0 included the following: *sekeliling* / around; adverbs denoting direction included the following: *disuatu tompat* / somewhere, *kembali* / back; *keatas* / upwards; *dumah* / home; *di tompat laen* / somewhere else; and *tutup* / closer. At age 4.5, the following adverb denoting focus appeared: *dai dokat* / from near. Adverbs denoting location that were first used between the ages of 5.1 and 6.0 included the following: *dokat* / near; *tidak kemano-mano* / nowhere; *dibelakang* / at the back; and *sekeliling* / around; adverbs denoting direction that appeared at this age included the following: *kesamping* / aside and *kebelakang* / backwards; the interrogative adverb *jalan yang mano* / which way appeared first at age 5.9. In summary, the most frequently used adverbs of place included pronominal adverbs (*disanan* / there, *disini* / here), interrogative adverbs (*dimano* / where, *dimano* / where to), negative adverbs (*tidak kemano-mano* / nowhere, *tak kemano-mano* / (to) nowhere) and shifters (*ditompat lain* / somewhere else, *ditompat lain* / (to) somewhere else). All these adverbs are deictic and can be combined with gestures. In the context in which all the interactants see the referents, the frequent usage of deictical elements is typical. For expressing more precise spatial meanings, the child used combinations of prepositions and nouns rather than adverbs as soon as he had acquired nominal declension. Apart from pronominal adverbs, the child used several adverbs denoting concrete spatial relationships, usually involving both location and direction (*luo* / out, *di luo* / outside, *bawah* / down-location, *bawah* / downdirection, *di umah* / at home, and *dumah* / home). More elaborate spatial relationships such as focus (*dai dokat* / from near) or describing a way (*jalan yang mano* / which way) were rare and occurred at later stages of language ontogenesis.

5.2.3 Adverbs of time

From the first audio recordings, the adverbs *udah* and *bolum* occurred frequently in the child's speech. Because these adverbs are multifunctional, I will provide examples of their usage:

age 2.8.16

- (2) *Kaki dah punyo kaki*. pl. diminutive + adverb *dah / udah* + have-3sg. present 'he already has legs' (when drawing a teddy bear)
- (3) *Udah tak kuning lagi* adverb *udah* + be-3sg. present negated + *tak-kuning*. sg. betino. 'there is no more yellow' (colour)
age 4.0.17
- (4) *Dah mulai ujan* adverb *dah / udah* + start+3sg. present + rain- inf. 'it just starts raining'
- (5) *Odan udah tak ondak lagi* adverb *udah* + it-acc. sg. + want-1sg. negated 'I do not want it anymore' usage of adverb *masih* (colloquial *namun*)
age 2.8.16
- (6) *Masih kotow* adverb *masih* + be-3sg. present + it- *tidak*. sg. + *kotow*. sg. neuter (Common Melayu Batu Bara) 'it is still dirty'
- (7) *Satu lagi* adverb *lagi* + one-*tidak*. sg. feminine 'there is one more' (cube)
age 4.0.17
- (8) *Dan apo lagi yang bisa kito cubo buat?* and + what + adverb *lagi* + can-1pl. present + try-inf. + make-inf.

Among the most frequent adverbs throughout the child's pre-school age were *sekaghang* / now and *kemudian* / then, thereafter. Additionally, the adverbs *ayi ne* / today, *isuk* / tomorrow (Common Melayu Batu Bara) and *semalam* / yesterday were used, as well as adverbs denoting parts of the day, such as *dimalam hayi* / in the evening and *pagi* / forenoon. The interrogative *ketiko* / when was frequent. Adverbs denoting repetition were also among the most frequent adverbs used from the beginning of the audio recording: *lagi* / again. Adverbs denoting temporal aspects that were first used between ages 3.1 and 4.0 included the following: *petamo* / first, at the earliest; *selalu* / always; *namun* / meanwhile; *senolo* / all the time (Common Melayu Batu Bara); *seghowa* / soon; *soghing* / often; *taun ne* / this year; *akhirnyo* / finally; *seghowa* / immediately; *sepanjang waktu* / all the time; *sebolumnyo* / previously; *untuk terakhir kalinyo* / for the last time; *untuk waktu yang lamo* / for a long time; *tak ponah* / never; *saat itu* / back then; *kekadang* / sometimes; *pado akhirnyo* / in the end; and *waktu lalu* / last time. Adverbs denoting temporal aspects that were recorded between ages 4.1 and 5.0 included the following: *kalimaen* / the day before yesterday; *hanyo* / just; *lain kali* / next time; *telambat* / late; *sebelum* / before; and *ayi ayi* / daily. Adverbs denoting temporal aspects that were first used between ages 5.1 and 6.0 included the following: *bau ajo* / recently; *tibo-tibo* / suddenly; *ayi lain ajo* / the other day (bookish); *selamo* / as long as; *sebolumnyo* / earlier; *langsung* / straightaway; *selamonyo* / forever; *selalu* / constantly; and *bilo-bilo* / next time. In summary, the child developed a rather complex system of time adverbs, which referred to the present time at first. Compared to adverbs of place, the development of time adverbs started slightly later but finally yielded a greater variety. The child started using adverbs referring to the future sooner than using adverbs referring to the past, and the first contrasts made were between present and future: *kemudian* / then, thereafter in contrast to *sekaghang* / now; *isuk* / tomorrow in contrast to *ayi ne* / today. Adverbs connecting the past and present, prototypically referring to some achievement (*udah* – something already exists; *masih* – something still lasts), were used earlier than adverbs referring to the past. Finally, adverbs referring to the past were also elaborated, and the child used adverbs of various stylistic levels (colloquial, neutral and also bookish). However, the child was perhaps unaware of their stylistic value. Interestingly, I did not notice any overextension of usage; deictic adverbs such as *ayi ne* / today, *semalam* / yesterday or *kalimaen* / the day before yesterday seem to be used appropriately.

5.2.4 Adverbs of manner

In the audio recordings, from the outset, pronominal adverbs of manner *jadi*, *sepoti ini* / this way and the interrogative *bagaimano* / *bagaimano dan sebaliknya* / the other way were among the most frequent. Adverbs of manner that were first used between the ages of 3.1 and 4.0 included the following: *baik* / well; *meghato* / unevenly, irregularly, *entah bagaimano* (colloquial *bebeapo*) / somehow; *dengan bodohnya* / stupidly; *botulkah* / really; *elok, lagak* / nicely; and *lobeh disukoi* / the most preferably. Between the ages of 4.1 and 5.0, the following adverbs were recorded: *sonyop - sonyop* / quietly; *tontu* / certainly; *buwok* / badly; *cepat* / quickly; *pelahan-lahan, polan - polan, lambek - lambek* / slowly; *lobeh baik* / better; *geatis* / for free, *demikian jugo* / equally; *topat* / properly; *tecepat* (Common Melayu Batu Bara) / most quickly; and *pasti* / surely; colour-related terms were also used, for example *cet coklat, kuning* / to colour brown, yellow. Adverbs of manner that were first used between the ages of 5.1 and 6.0 were the following: *teutamo* / mainly; *ati - ati* / carefully, more carefully; *botul* / correctly; *relatip* / relatively; *lebih buwok* / worse; *coko ayam* / on foot, and *tontu sajo* / of course. Adverbs of manner express a variety of meanings, most of which are derived from adjectives. In some contexts, both adjectives and adverbs can be used with similar meanings:

Elok botul (*elok* in Common Melayu Batu Bara) / 'It is good' (adj.) *ini elok* / 'It is well' (adv.)

The use frequency of adverbs of manner was lower than the use frequency of other types of adverbs because the child preferred to use adjectives when possible. In addition, the meaning of adverbs of manner is often abstract; therefore, these adverbs were developed later than adverbs with more concrete meanings (such as adverbs of place). Some adverbs of manner can form comparatives and superlatives and also appeared in the child's production. However, the first forms were suppletive (*elok* / well; *tebaik* / better; *tak elok o* / badly and *buwok* / worse). Regular forms of comparatives and superlatives first appeared after age 5 (*ati-ati*, *lobeh ati-ati* / carefully, more carefully, and *cepat*, *paling cepat* / quickly, most quickly). Semantically, the child expressed evaluation in a broader sense (*elok* / well and *elok* / nicely), concrete meanings (colour terms, commenting on speed or loudness) and, in later development, modality (*tontu* / certainly and *pasti* / surely). To conclude, the most abstract (*modal*) aspects were the latest to develop, and the most complex forms (comparatives and superlatives) were used at a later stage.

5.2.5 Adverbs of degree

Adverbs of degree were frequently used; after the child achieved 300 lexemes in his active vocabulary, he began to add new (often synonymous) lexemes denoting degree or measure. Among the most frequent of these were the following: *banyak* / much, many; *banyak botul* / very much, a lot; *sikit* / little, not much; *sikit* / a little bit; *hanyo* / only; *samo sekali* / completely; and *cukup* / enough. Adverbs of degree that were first used between the ages of 3.1 and 4.0 were the following: *selain tuh* / in addition; *sangat* / tremendously; *sangat* / terribly; *paling* / most; *lobeh* / more; (colloquial) / just, precisely. Between the ages of 4.1 and 5.0, the following adverbs of degree were recorded: *banyak* / plenty; *sangat* / awfully; *hampir* / nearly; *lobeh sikit* / less; *mengoghikan* / horribly; *hampir* / almost; *lumayan* / quite; *juga* / too (much); and *sikit* / a little bit (diminutive). Between the ages of 5.1 and 6.0, the following adverbs were first used: *khususnyo* / especially; *kebanyakan* / mostly; *sangat* / terribly; *mengoghikan* / horribly; *samo* / equally, just as; and *boban* / loads of. Expressing degree was very important for the child throughout the analysed period. In the audio recordings, expressions referring to higher degree were usually more frequent than those referring to lower degree. To express the highest degree, number or measure, the child often used colloquial, marked expressions, such as *sangat banyak* / terribly many and *mengoghikan* / horribly etc. In Melayu Batu Bara, adverbs of degree can refer to both countable and mass nouns; thus, no errors in countability occurred: *sangat*, *sikit mainan* / many, few toys *sangat*, *sikit aer* / much, little water Suppletive comparatives and superlatives, such as *lagi*, *paling* / more, most and *lobih sikit* / less were first used after 3 years of age and were used earlier than the comparative and superlative forms of adverbs of manner. No errors in the active usage of adverbs of degree were noted.

5.2.6 Adverbs of cause

From the age of 3.1, the interrogative adverb *mengapo* / why was one of the most frequently used adverbs. At age 5.5, the adverb *dongan sengajo* / deliberately was recorded, and at age 5.7, the adverb *sia-sia* / needlessly was used. The usage of these adverbs was rare throughout the pre-school period. Adverbs of cause are generally rare even in adult language.

5.2.7 Predicatives

From age 3.9, the child frequently used the modal predicative *membutuhkan* / need(ed): (9) *mengapo dibutuhkan?* why + be-3sg present + predicative adverb 'why is it needed?' From age 3.10, state predicative *kasihan* / pity was used: (10) *kerusakan Bomba* predicative adverb + name of the toy- gen. sg. mas. 'it is a pity that the toy Bomb is damaged' From age 5, predicatives expressing feelings also started to be used: (11) *aku minta maaf* sg. + be-3sg. present + it-nom. sg. + predicative adverb 'I feel sorry'

5.2.8 Adverbs expressing addition or inclusion

Adverbs denoting addition or inclusion were appropriately used from the beginning of the audio recordings. The adverb *juga* / too appeared among the first 400 lexemes in the child's vocabulary acquisition. From age 2.6, this adverb was among the most frequently used. At age 4.10, the adverb *besamo* / together was recorded, and at age 4.8, the adverb *dongan yang lain* / with each other was used.

5.2.9 The type-token ratio of adverbs

The type-token ratio (TTR) is used in quantitative linguistics as the basic indicator of vocabulary diversification in a particular text. In child language research, the index is used as an indicator of vocabulary development in child speech. If the number of lexemes is small, lexemes are often repeated, and the TTR index is higher. In contrast, a higher number of lexemes compared to all occurrences of lexemes will result in a lower TTR index, indicating a more diverse vocabulary (Průcha, 2011, p.182). In Table 5, the TTR development of adverbs is presented. Lemma (L) represents the number of adverb lemmas in an analysed one-month period; all lexemes in the transcription were counted. Token (N) represents the number of all adverb tokens in all grammatical forms; all adverb tokens in the entire transcript were counted. $TTR = N / L$. Generally, the results show that the index did not decrease significantly, and repetition remained high. The most frequent adverbs were frequently repeated. However, the number of lexemes (lemmas) increased significantly from, for example, 9 lexemes at age 2.9 to 58 lexemes at age 5.11. More concretely, the boy continuously added new adverbial lexemes to his vocabulary, but the index of repetition remained high for deictic adverbs of place (*disanan* / there and

disini / here), adverbs of time (*udah* / already, yet, any more, as early as.... and *masih* / still, yet, as late as, even more, once again), and the adverbs *jugo* / too and *mengapo* / why.

Table 5.1 Type - token ratio in adverbs

Age	2.8	2.9	2.10	2.11	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7
Token N	68	79	70	152	74	89	60	155	122	156	229	249
Lemmas	13	9	11	11	15	15	18	25	20	30	31	29
TTR	5.2	8.8	6.4	13.8	4.9	5.9	3.3	6.2	6.1	5.2	7.4	8.6

Age	3.8	3.9	3.10	3.11	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7
Token N	352	248	226	138	241	263	312	257	186	269	222	224
Lemmas	37	31	33	27	50	30	39	39	30	33	28	46
TTR	9.5	8	6.8	5.1	4.8	8.8	8	6.6	6.2	8.2	7.9	4.9

Table 5: Continuation

Age	4.8	4.9	4.10	4.11	5.0	5.1	5.2	5.3	5.4	5.5	5.6
Token N	293	394	284	192	192	302	254	299	264	294	459
Lemmas	57	57	49	44	40	48	43	50	47	37	48
TTR	5.1	6.9	5.8	4.4	4.8	6.3	5.9	6	5.6	7.9	9.6

Table 5: Continuation

Age	5.7	5.8	5.9	5.10	5.11	6.0
Token N	352	335	306	170	301	207
Lemmas	53	45	60	47	58	42
TTR	6.6	7.4	5.1	36	5.2	4.9

Discussion

In this section, research questions will be discussed, and the development of adverbs will be linked to the development of nominal and verbal grammatical categories. The result of the research also shows that the shift from Malay into Indonesia might be happening in this case in which shifting somehow becomes a problem (Risnawaty, 2020). The first research question addressed the acquisition sequence of semantic adverb categories. Adverbs of place were used first, direction was expressed before location, and, during later development, location was more frequent than direction. Pronominal deictic adverbs were among the first adverbs used and were among the most frequent throughout the analysed period, which was also reported for Slovak (Kesselová and Slančová, 2014). Another Phenomena also happened in Karo culture that shows a uniqueness of using the language is the powerful of its culture (Muhammad et al, 2020). The information concerning location may be found in a variety of devices, such as spatial prepositions or postpositions, as well other parts of the clause, such as the verb or a variety of morphological markings (Hickmann, 2001, p.115). In our sample, spatial relations were also expressed by combinations of prepositions and nouns. The boy started to use constructions involving prepositions and nouns in various cases (typically locative) to express spatial relation at age 2.9 (Chejnová, 2016a). At this age, the percentage of adverbs of place decreased (53.8 % at age 2.8 versus 33.3 % at age 2.9). Thus, as soon as the child had a more precise means of expressing spatial relationships at his disposal, he began to use it in parallel with adverbs of place that have a broader meaning.

On the other hand, adverbs that carry narrow meanings were not often repeated. The last research question was focused on errors in adverb usage. Surprisingly, no errors were noted in the child's spontaneous production of adverbs; however, the audio recordings covered only a small portion of overall speech production. Thus, some overextension might have occurred without being adult understanding. Although the study yielded relevant results, it represents an analysis of one child's language development. An analysis of the verbal productions of more children is needed to validate the results.

6. Conclusion

Although this finding is interesting, based on the limited data, it cannot be claimed that the drop in frequency of particular adverbial types has only been influenced by the acquisition of other linguistic devices. This claim requires

further validation. Second, adverbs of time appeared, denoting location in time and the achievement of some point in time or repetition. The boy started using adverbs referring to the future sooner than adverbs referring to the past. Adverbs referring to some achievement (*udah* / already; *lobih* / more, again) were also used earlier than those referring to the past. An interesting correlation between the development of adverbs and the development of verbal grammatical categories was observed. Considering the acquisition sequence of verbal categories, the boy started to use the future tense of the verbs *menjadi* / to be and *memiliki* / to have, which were the first verbs to develop contrastive forms, earlier than the past tense. The first tenses that were acquired for lexical verbs were the present tense of imperfective verbs and the future tense of perfective verbs (both synthetic). Nevertheless, the first grammatical contrasts expressed by lexical verbs included the following: the infinitive in the directive function, 3sg. the present tense in imperfective verbs, 3sg. the future tense of perfective verbs 2 and the past participles of all three genders. Thus, the preference for words involving the future was manifest only during the earliest, premorphological stage. At age 3.2, the percentage of adverbs of time decreased (40 % at age 3.1 versus 22.2 % at age 3.2). At age 3.2, the child started to form aspect oppositions (Chejnová, 2016a; 2016b). In Melayu Batu Bara, aspect is an inherent category that is present in every verb irrespective of its form; verbs are inherently perfective or imperfective and usually form pairs of perfective and imperfective verbs that have similar meanings apart from aspect (*membukak* versus *untuk membukak* / to open versus to be opening). This fact could be interpreted as evidence that when a new, more precise means of expressing time relationships (or achievement) was acquired, the child began to use it in parallel with broader adverbial expressions. Third, adverbs of degree appeared; the first were adverbs expressing low degree. In concordance with previous research, expressing higher degree was more frequent than expressing lower degree, except at the very beginning. Adverbs of manner appeared last, and among the most frequent were those with a broader evaluative sense. Adverbs of cause were mostly represented by the interrogative *mengapo* / why. Predicatives expressing modal aspects and states (*dipolukan* / needed, *kasihan* / pity) were used by ages 3.9 and 3.10, respectively, whereas predicatives expressing feelings (*maaf* / sorry) were used only at age 5, probably due to their rather abstract meaning and their references to emotional states, an understanding of which is dependent on cognitive development in general. It is undeniable, the use of imperative sentences consists of infinitive verbs without to are followed by a noun, verb-ing, past participle, adjective, and second person reflexive pronoun in which it may appear in social interaction across culture through code mixing that leads to the language shift (Estetis, 2021; Milisi, 2021; Selian 2021).

The second research question addressed the frequency of adverbial types. Considering the frequency of lemmas (types), adverbs of place were the most frequent adverbs at the beginning of adverbial acquisition, whereas during the protomorphological stage and the modularized morphology stage, adverbs of place and adverbs of time were similar in frequency and were the most frequently used adverbs. The number of adverbs of manner and degree was lower in most audio recordings. Adverbs of cause were represented mostly by the interrogative *mengapo* / why, and adverbs denoting addition were represented by the adverb *jugo* / too. It is similar like a study conducted by Ramadhani and Selian (2021) that there is always another ways to carry out the language mixed with another local language. Considering the number of tokens, the index of repetition was high for some adverbs throughout the analysed period. These adverbs primarily included deictic adverbs of place (*disanan* / there and *disini* / here). Their deictic function makes these adverbs multifunctional; thus, it is easier for the child to refer to a particular space using these adverbs than by specifying the space using a more precise combination of a preposition and noun. The adverbs of time *udah* / already, yet, any more, as early as... and *masih* / still, yet, as late as, even more, once again were also often repeated. These adverbs are also multifunctional and thus enabled the child to express a variety of meanings (Sireagar et al, 2020; Risnawaty, 2020) as well as occurred in Alas culture (Selian, 2021). The adverb *mengapo* / why was also very frequent and was typically used for omnipresent child questions that serve mainly communicative purposes. I

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