Taiwan Sign Language and Beyond. 2009.

Edited by James H-Y. Tai and Jane Tsay. Chia-Yi, Taiwan: The Taiwan Institute for the Humanities, National Chung Cheng University. Pages 21-47.

Acquiring FINISH in Hong Kong Sign Language¹

Gladys Tang

Centre for Sign Linguistics and Deaf Studies, Department of Linguistics and Modern Language, Chinese University of Hong Kong

Abstract. L1 studies on the acquisition of grammatical aspect in spoken languages show that the process interacts closely with the development of lexical aspect and tense. In this paper, we focus on a deaf child's acquisition of the sign FINISH in Hong Kong Sign Language (HKSL). In the adult grammar, there are two entries of FINISH which we assume head their own syntactic positions: VP and AspP, the latter of which marks the perfective aspect in the language. In the child data, FINISH first emerged as a lexical verb. Subsequently, and in parallel to a verb, the sign also occurred as a perfective marker and consistently followed a verb in clause final position, in line with the adult data. There is also a systematic distribution of the sign according to situation types. FINISH as a main verb was inherently telic and marked the end of an atelic predicate (i.e. an activity). As an aspect marker, it occurred initially in accomplishments before other situation types. As for temporal reference, FINISH as a main verb was mostly for present reference but initially for past or future reference if it served as an aspect marker. These findings show that the acquisition of perfective aspect in HKSL largely conforms to the grammatical constraints as observed in the spoken language literature; however, some minor differences are observed.

1. Introduction

There are two levels to the study of aspect: lexical aspect and grammatical aspect. Lexical aspect, or 'Aktionsart', refers to the 'inherent meaning of situations' (Comrie 1976) or 'situation types' (Smith 1997). It offers information about the internal, temporal structure of situations characterized by oppositions like events versus states, telic versus

¹ This research was supported by grants from RGC# CUHK4278/01H entitled "Grammatical Development of HKSL by Deaf Children (to Gladys Tang). Earlier versions of this paper have been presented at The First Conference on Comparative Study of East Asian Sign Languages Chung Cheng University, Chiayi, Taiwan, September 16-17, 2006; and Workshop on Acquisition of Functional Categories in Asian Languages, December 26th, 2007, The Chinese University of Hong Kong. I am grateful to the parents of the deaf child and the deaf researchers who have participated in this project. I thank the audiences at both conferences for their invaluable comments and feedback on my research.

atelic, punctuals versus non-punctuals. Based on these distinctions, verbs have been classified into different aspectual classes: states, activities, accomplishments, and achievements (Vendler 1967). Recent analyses show that the verb's inherent meaning alone is not enough in determining the aspectual properties of the clause, rather, it is the verb's lexical semantics – its arguments and the related semantic properties, or sometimes the different types of adverbials that contribute to a clause' aspectual interpretation (Smith 1997, Tenny 2000). Whereas lexical aspect focuses on the internal temporal contour of eventualities, grammatical aspect focuses on how speakers view the eventualities at a given point in time, either as perfective or imperfective. Imperfective aspect views a situation as ongoing whereas the perfective aspect views a situation in its entirety as 'complete' with clear boundaries (i.e. beginning point and endpoint). Perfectivity and telicity interact in the computation of completion entailment. Telic predicates entail culmination of an event, reaching a natural endpoint of the event contour itself, where culmination is realized under the conditions specified by different eventualities (Rothstein 2004). On the other hand, the perfective aspect applies to eventuality descriptions to provide a perspective on the situation, asserting its initial and final boundaries while establishing a relation between the event time and the reference time in the temporal domain (Klein 1994).

L1 studies on the acquisition of aspect have been studied intensively for a variety of languages (cf. e.g. Antinucci and Miller 1976 for Italian; Hyams 2005 for Greek; Shirai and Andersen 1995 for English; Brun et.al. 1999 for Russian; Shirai 1998 for Japanese and Li and Bowerman 1989 for Mandarin, to name but a few). These studies show that children produced aspectual morphology as early as age 2;6 before full mastery of the tense morphology. The findings that were based on production data also converge on the significant relationship between the development of perfective/imperfective and telic/atelic distinctions. Specifically, the perfective aspect tends to occur initially in telic predicates (i.e. achievements and accomplishments) with past reference whereas the imperfective aspect in atelic predicates (i.e. activities) with present reference. This 'aspect first' phenomenon is also being studied intensively within the framework of Root Infinitive (RI) in child language.² Olsen and Weinberg (1999) argue that the verbal forms thus observed reflect an initial mapping of lexical aspect onto grammatical aspect rather than tense. It is difficult to tease apart the independent contribution of lexical and grammatical aspect in the initial acquisition process, particularly when the language in question like English do not have distinct morphology for these two grammatical categories and in most cases lexical aspect in natural languages is not encoded by distinct morphology but rather either inherently manifested in the root of the verbs or compositionally derived through the verb and the semantic properties of its arguments.

 $^{^2}$ The RI Stage has been attested in early child language of a number of languages. During this stage of development, young children use both finite and non-finite verbs in root contexts. In addition to analyzing the related morphosyntactic properties, Hyams (2005) show that this stage also demonstrates young children's acquisition of aspectual and modal properties.

However, it is intriguing to observe in many of these studies that young children tend to employ grammatical aspect initially to mark temporal properties of events. Children aged 1;5-2;5 acquiring Russian that has a rich system of verbal inflection tense, aspect and person agreement used the perfective marker to refer to past events and imperfective with present events (Brun et. al. 1999). Greek children during the RI stage adopted the 'bare perfective' for eventive but not stative predicates.³ Hyams (2005) argues that it is perfectivity rather than telicity that is responsible for event closure at the RI stage, marking an event as 'closed' or 'terminated'. Even with languages like English that do not have rich aspect morphology, young children used '-ed' for telic predicates (i.e. completed events with clear results,) and '-ing' for atelic predicates (i.e. ongoing events). Van Hout (2007) also found that the perfective aspect was acquired systematically before the imperfective aspect.

For languages that do not have tense morphology, similar results are observed. Mandarin-acquiring children use '-le' with achievement and accomplishment verbs and '-zai' with activities and stative verbs (Li and Shirai 2000). But a recent study by Chang (2002) found 28% of atelic verbs (i.e. activities and statives) produced by Mandarin-acquiring children that were followed by a perfective marker '-le'. As for Cantonese, Chan (2000) found that young children initially used a verbal particle 'jyun' (finish) in place of the perfective '-zo' in the process of acquiring perfective aspect.⁴

These results suggest that perfective aspect marking is prominent in child language and interacts closely with lexical aspect and temporal reference of events, past or present. It could be that grammatical aspect also concerns time – how situations develop over time or how speakers view situations at a given point in time. It seems that young children typically adhere to the 'here-and-how' principle and choose to view situations at a point in time, perceiving them as either 'ongoing' or 'finished'.

Both functional and formal accounts have been put forward for this acquisition phenomenon. The prototype account proposes that achievements with inherent aspectual characteristics of being telic and punctual constitute the prototype of the category of perfective aspect while activities constitute the prototype of the progressive aspect. Therefore, children acquire the past morphology by first associating it with the prototype (i.e. achievements) and later with other non-prototype members like accomplishments, activities and statives. Young children will start with the form-meaning mapping of the prototypes before expanding it to the less prototypical relations such as perfective and atelic predicates (Li and Shirai 2000). These researchers argue that input from the environment is a determining factor because a similar distributional bias for verbs and

³ It is a verb form which lacks tense, agreement morphology or modal particles but attached with perfective morphology.

⁴ Cantonese has a verbal particle 'jyun' (finish) as in 'ngo mei se jyun feng seon.' (I-not_yet-write-finish-CL-letter 'I haven't yet finished writing the letter'). It comes after a verb and marks either termination or completion of an event. If it is completion, it marks a change of state.

grammatical aspect is also observed in the adult discourse. Arguing against the input-driven approach, Olsen and Weinberg (1999) claim that this state of perfective-telic versus imperfective-atelic mapping reflects the 'initial hypothesis' of young children's acquisition of aspect in all languages. In other words, lexical and grammatical aspect categories are part of Universal Grammar. This initial hypothesis allows young children initially to restrict the English '-ed' to perfective marking rather than tense marking, but this rule will be relaxed upon positive evidence. They further propose that it is lexical aspect that guides the acquisition of grammatical aspect. To pursue this proposal further, Torence and Hyams (2003) predict that when neither tense nor grammatical aspect is morphologically specified initially, inherent aspect (i.e. telicity) provides the temporal reference for the clause.

Little has been done on how deaf children acquire aspect in sign language. In this paper, we report on how a deaf child acquires the sign FINISH in Hong Kong Sign Language (HKSL). Initial analysis of the adult grammar has identified FINISH as a perfective marker in the language (Lee 2002). In what follows, we will first provide a grammatical description of FINISH with its related aspectual properties in HKSL. Then, we will outline the methodology of the current study and a summary of the research findings.

2. Grammatical Aspect in HKSL

Except for ASL, not much analysis has been done on aspect in sign languages so far.⁵ Some preliminary analysis conducted by Lee (2001) on HKSL concludes that while no manual sign for imperfective aspect is found, FINISH in HKSL mainly serves as a perfective marker (77.1% of her conversational corpus), as shown in (1) and (2).⁶ Other grammatical functions of FINISH include being a main verb (3), and a discourse marker meaning 'That's it' signaling the end of a topic and the switch to a new one, as in (4).⁷

⁵ Studies on other sign languages have also identified a sign glossed as FINISH. Among the many functions cited, perfective aspect marking is most common. This sign is a function word on its own, and its syntactic position varies among different sign languages and even within an individual sign language. (Sutton Spence and Woll 1999 for BSL; Johnston and Schembri 2007 for Auslan; Meir 1999 for ISL; Fischer and Gough 1972, Grose 2003, Janzen 2003, Rathmann 2005 for ASL).

⁶ Grose (2003) analyzes FINISH in ASL as a functional aspect marker for completion, which he refers to as 'completive aspect'. He argues that FINISH in ASL correlates with telic events only because only telic events may be completed. In other words, FINISH does not occur in those cases in which a telic event is closed but incomplete, or with an atelic event that is closed but lacks a natural endpoint. As we shall see, HKSL allows FINISH to mark an incomplete event as closed, using FINSH.

⁷ There is one function of FINISH which was not reported in Lee (2002). FINISH may be an adverb denoting the upper bound of a quantized object, as in (i). This use of FINISH occurs in our child data but we will not include it in our analysis because we suspect that it belongs to the study of quantification rather than aspect.

- (1) LAST SUNDAY PARENT COME-BACK FINISH. WHY COME-BACK WHY? IX-pro1 HOME BUSINESS, IX-pro1 GRANDFATHER DIE FINISH.
 'My parents came back last Sunday. You know why? My family business, my grandfather died. (Lee 2002)
- (2) FINISH? ALL MONEY PAY FINISH? 'Have (you) paid all money? (Lee 2002)
- (3) COME-BACK, FUNERAL-CEREMONY ALL FINISH. YESTERDAY, DAY-BEFORE-YESTERDAY, SLEEP NIGHT-TILL-MORNING.
 '(I) came back. All matters about the funeral ceremony were finished. Yesterday and the day before yesterday, I slept.' (Lee 2002)
- (4) ...RIGHT, FINISH, UNCLE-SIXTH LAST-YEAR NATURALLY SLEEP PAINLESS, DIE.....
 'Alright, That's it. Uncle-sixth died naturally and painlessly during sleep....' (Lee 2002)

Following Giorgi and Piansi (1997), we assume that the closure or termination of an event obtains in two ways: (a) perfective aspect, or (b) telicity. However, termination does not necessarily entail completion. Comrie (1976) makes a distinction between an event being viewed as 'complete' or 'completed' A terminated event may be viewed as 'complete' but it may not be completed or culminated, which is needed to satisfy the requirement of telic predicates. Following Pustejovsky (1995), telic predicates involve two event variables. The first event variable 'e1' reflects the process and the second event variable 'e2' (i.e. a telo) denotes a change of state. The introduction of a second event variable marking the event as completed, which is potentially viewed as 'terminated' or 'closed', allowing the speaker to view the event as a whole with clear boundaries. This understanding of event termination and event completion is crucial for the current analysis of FINISH in HKSL, and probably in some other sign languages.

B: ONE FINISH, SALTY_{very}, DISLIKE. 'Just one; (the sausages) are very salty, I didn't like them.

⁽i) A: YESTERDAY BBQ SAUSAGES IX-pro2 EAT HOW_MANY? 'How many sausages did you eat during the barbecue yesterday?'

FINISH in HKSL encodes termination or completion of a situation, or sometimes both. In (5), FINISH may encode just termination, but not completion because the sign imposes a temporal boundary on the atelic predicate CRY.⁸

(5) IX-det BOY CRY FINISH, GO HOME. 'After the boy had cried, he went home.'

FINISH also marks experiential perfect, as in (6):

- (6) A: IX-pro2 AFRICA TRAVEL FINISH? 'Have you ever traveled to Africa?'
 - B: TRAVEL FINISH; IX-pro2 NOT_YET?'(I) have traveled (to Africa) already. Haven't you been (to Africa)?'

Being a perfective marker, FINISH poses constraints when interacting with different situation types. It co-occurs with achievements, activities, semelfactives, accomplishments, but not with statives (7).

(7) *IX_a WOMAN DISLIKE DOG FINISH.

'The woman has disliked dogs.' (Lee 2002)

In HKSL, whether FINISH marks an event as terminated or completed depends on how it combines with different situation types (Lee 2002). With achievements and accomplishments, FINISH entails termination as well as completion. For activities like RUN or CRY, FINISH only refers to event termination. Derived accomplishments involving an activity and a result with FINISH indicate both completion and termination. Statives are incompatible with FINISH because they do not entail an endpoint to an event. This observation is similar to Rathmann (2005) in which he suggests that FINISH in ASL correlates with stage-level predicates which are bounded eventualities; hence it is incompatible with statives which may be about individual-level predicates and unbounded event types.

Syntactic position offers some clues for the grammatical status of FINISH as a main verb. In (3), FINISH is a verbal predicate and occurs after the syntactic subject 'FUNERAL_CEREMONY'that is modified by ALL, a quantifier. It appears that the phonology of a main verb is different from that of a perfective marker. Phonologically, main verb FINISH may be one-handed or two-handed, and both may be marked by the feature [repeat], especially when the sign occurs on its own as an utterance. FINISH as a

⁸ Israeli Sign Language marks termination and completion with distinct aspectual markers. FINISH in ISL denotes completion and ALREADY termination. In ISL, FINISH is taken to be a perfective marker and ALREADY a perfect marker which relates a terminated situation to present relevance.

perfective marker is realized by a single movement of wrist rotation. As a perfective marker, FINISH occurs after a verb. Distinguishing FINISH between a perfective marker and a discourse marker is always difficult because both may occur in contexts where there is a sequence of events. However, there appears to be a difference in the prosody. Where FINISH is a perfective marker, it consistently occupies the end of a prosodic unit, as it either immediately follows a blink, if not overlaps with it, as in (8):

bl

(8) CC CANDY GIVE BRENDA FINISH, TAKE ANOTHER GIVE KENNY. 'CC gave Brenda a candy, then he took another one and gave it to Kenny.'

A discourse marker is not necessarily accompanied by this prosodic cue. Instead, it is preceded by a prosodic break usually in the form of a pause, as in (4). As a discourse marker, we assume it forms its own prosodic unit.

In HKSL, FINISH as a perfective marker is consistently postverbal and clause final. In ASL, FINISH can be clause final (9a) or preverbal (9b). However, in HKSL, preverbal FINISH is ungrammatical, as shown in (10a) and (10b):

<u>ASL</u>

(9a)	JOHN CLEAN ROOM FINISH. 'John cleaned the room.' (Rathmann 2005)
(9b)	JOHN FINISH CLEAN ROOM. 'John cleaned the room.' 'John has cleaned the room.' (Rathmann 2005)
<u>HKSL</u>	

(10a) *IX_a FEMALE FINISH COMPUTING. 'The woman has finished (working with) the computer.' (10b) *IX_a FEMALE FINISH COMPUTING FINISH. 'The woman has finished (working with) the computer.'

As FINISH may appear either as a lexical or a functional element, we assume that FINISH comes with two entries in the lexicon, as shown in (11). As a lexical element, FINISH₁ occupies V^0 of the lower VP and heads an unaccusative predicate with the theme subject in the spec of lower VP. Following Chomsky (1995), we assume that the morphosyntax of temporal, aspectual and modal interpretation of an event is determined by the functional structure of the clause. Hence, the functional projection of grammatical

⁹ The prosodic unit may be an intonational phrase or a phonological phrase in HKSL, depending on the syntactic constituent marked by the blink, as reported in Tang et.al (In press).

aspect is posited to be above vP. We posit that FINISH₂ occupies the head of AspP and is licensed by the [perfective] feature attracting the verb from the VP to merge with it at this higher position. The head of this functional projection is final rather than initial as the sign FINISH consistently follows the verb in clause final position.¹⁰ The main verb FINISH₁ being inherently aspectual agrees with the feature [perfective] in the head of AspP and stays in situ. Recent analyses of aspect show that there may be different tiers in the syntactic representation, reflecting the crucial components of an event structure. Tenny (2000), following Cinque (1999), aligns these tiers with different 'semantic zones' which are defined syntactically on a hierarchy of functional projections representing an event structure. In this case, FINISH₂ heads a functional AspP at the zone of 'middle aspect' which is one zone higher than the zone of 'core event'. This middle aspect 'sees the event in its entirety rather than participating in its composition' (Tenny 2000, p. 321). At this current stage of development, we make no assumption as to how many tiers of functional projections for aspectual properties in HKSL. However, it is possible to assume that lexical aspect may head its own functional projections and aligns itself more within the vP domain, in line with Travis (2000). FINISH₁ is inherently aspectual as it denotes a state of completion and termination. Therefore, FINISH₁ and FINISH₂ do not co-occur as the natural endpoint is already lexically specified.

¹⁰ Recent analyses of Hong Kong Sign Language also confirm that the functional elements under study so far such as negators or modals are clause final, giving further proof that the head of functional projections is final rather than initial (Lee 2006 on negation; Lam 2009 on modals).

(11) Syntactic positions of FINISH in HKSL



FINISH is not a tense marker with past interpretation because FINISH may occur in sentences with present, past and future interpretation, as in (12a-c):

(12a) EVERYDAY IX-pro1 SLEEP FINISH, EMAIL GIRL-FRIEND.

'Everyday after I have slept, I email my girlfriend.'

- (12b) YESTERDAY IX-pro1 SLEEP FINISH, EMAIL GIRL-FRIEND. 'Yesterday, after I had slept, I emailed my girlfriend.'
- (12c) TOMORROW IX-pro1 SLEEP FINISH, EMAIL GIRL-FRIEND. 'Tomorrow after I have finished working, I will email my girlfriend.'

In ASL, where FINISH occupies the clausal final position of a preceding clause in a bi-clausal construction, a controversy arises as to whether it is a perfective marker or a subordinating conjunction. Grose (2003) and Rathmann (2005) argue against a conjunction analysis suggested by Fischer and Gough (1972) and Janzen (2003). Both claim that FINISH remains an aspectual marker in this position. Rathmann justifies that FINISH as a perfective marker in this position reflects the typical properties of inducing narrative advancement (i.e. event listing condition). In HKSL, if FINISH is a subordinating conjunction and occupies head of a CP, it will be difficult to explain the grammaticality of (13). In that example, the manual sign IF is clause initial and is assumed to occupy the head of CP. As syntactic projections cannot be doubly-headed, FINISH has to be head of AspP rather than head of CP.¹¹

(13) IF KENNY BATH FINISH, GIVE₃ TOWEL.

'If Kenny has finished bathing, give (him) a towel.'

In this study, one crucial question is whether the child knows that FINISH in HKSL assumes different grammatical status. If language acquisition involves a progression from lexical to functional categories, we would expect FINISH to occur initially as a main verb and FINISH as a perfective marker will occur at a subsequent stage of development. From the perspective of language acquisition, how deaf children differentiate the different functions of FINISH and assign the sign to different grammatical categories is a moot point. Equally important is the development of FINISH as a functional category. In this study, we assume the continuity approach that young children have the underlying representations of the lexical and functional categories the configuration or which may be subject to parametric variation and acquisition is based on positive evidence (Lust 2006). When FINISH emerges as a perfective marker, we need to verify whether it typically marks a telic predicate with a past reference, as a way to confirm whether the observations from the acquisition of spoken language also hold true in child sign language.

¹¹ Note that the sentence initial IF could be due to Cantonese influence. In fact, IF is not required in conditional sentences and one normally finds brow raise instead.

3. The Study

3.1. Background

The study is based on longitudinal data of a deaf child acquiring HKSL. This child, CC, was born of deaf parents but he had not been exposed to sign language input systematically until he was 1;9 when the project began. CC attended a special child care centre which promoted oral education and spent most of his day at home with his hearing grandmother and domestic helper because both his parents were working. Since his mother was not native and attended a hearing school, CC's exposure to HKSL mainly came from the deaf signers who were native signers, and his father who was a graduate of a local deaf school. The data covered the period between age 1;9 and 4;6. We extracted one hour of recording in each month. The recordings were transcribed using ELAN, documenting the interactions between CC and the deaf researcher most of the time, and very occasionally with a hearing researcher. The contexts and verbs associated with FINISH were identified and classified according to situation types. Some were produced during spontaneous conversations and some during narration of stories and daily events. All together we have 34 hours of transcribed data out of which 21 sessions contain tokens of FINISH.

In child language research, Mean Length Utterance is adopted as a general reference for measuring children's morphological and syntactic development (Brown 1973). However, there does not appear to be a single method for calculating MLU; some use words and some morphemes as units, and some use phonological criterion and some grammatical rules to segment utterances in the calculation. Applying MLU to child sign language research is even more taxing as conventional concepts of 'word' and 'morpheme' require a new understanding because whether a manual sign assumes wordhood or a phrasal status depends a lot on how it is signed and configured in space, not to mention whether one would take the different parts of the manual articulators or the non-manuals on the face to be morphemic. In this study, therefore, we made no attempt to use MLU as a general reference of CC's syntactic development, particularly also when CC's first exposure to HKSL is late, at age 1:9, and documenting his HKSL development based on MLU may not be too revealing. As a preliminary measure, we adopted a convention of using duration of sign language exposure as a reference and divided the period of observation into three phases, as shown in Table 1. The first two phases consists of 12 months of sign language exposure and the last phase ten. Table 1 also shows the mean number of utterances and FINISH produced by CC during the three phases. The difference is big between Phase 1 and Phase 2 but minimal between Phase 2 and Phase 3 for both number of utterances and number of FINISH produced.

Periods of Observation	Age	Mean no. of Utterances	Mean no. of FINISH
Phase 1	1;9-2;8	217.58	0.58
Phase 2	2;9-3;8	297.08	4.25
Phase 3	3;8-4;6	300.7	4.58

Table 1. Background of raw data

3.2. Results

3.2.1. Production of FINISH from Phase 1 to 3

Appendix 1 provides the exact number of utterances and tokens of FINISH produced by CC in each session. From the 34 hours of recording, we extracted a total 112 utterances which contain the sign FINISH. Seven tokens of FINISH were judged to be imitations from the mother or the native deaf signer, hence discarded, leaving a total of 105 tokens for the analysis. Although we did not adopt MLU to mark CC's syntactic development with age, CC's HKSL production saw a progression from one sign per utterance to two signs. Towards the end of the period of observation, the length of CC's utterance was longer with bi-clausal constructions. There were very few tokens of FINISH produced by CC in Phase 1 as it was non-existent in 9 out of 12 sessions. It was only in Phase 2 that FINISH began to occur systematically in a number of linguistic contexts to serve different grammatical functions (7 out of 12 sessions). In Phase 3, FINISH occurred in all sessions.

Next, we examined the distribution of FINISH according to whether it serves as (a) a main verb, (b) a perfective marker, (c) a discourse marker meaning 'That's it.', or (d) a quantifier meaning 'just or only'. In the current set of data, most tokens were categorized into main verbs or perfective markers. There were very few tokens of FINISH as a discourse marker and they occurred only towards the end of the period, suggesting that using FINISH as a discourse marker is developmentally late. A few tokens of FINISH meaning 'just or only' were also found. Table 2 and Figure 1 give the distribution of FINISH for these four categories.

	Age 1;9-3;8	Age 2;9-3;8	Age 3;9-4;6	Total
				(raw tokens)
Main Verb	5 (100%)	39 (82.9%)	17 (32.01%)	61
Perfective Marker	0 (0%)	3 (6.38%)	32 (60.37%)	35
Discourse Marker	0 (0%)	0 (0%)	2 (3.78%)	2
'Just or Only'	0 (0%)	5 (10.64%)	2 (3.78%)	7
Total (raw tokens)	5	47	53	105

Table 2. Development of the Different Grammatical Functions FINISH



■ Main Verb ■ Perfective marker ■ Discourse marker ■ 'Just or only'

Figure 1. Development of FINISH

Although it is not feasible to adopt MLU as a way to chart CC's morphological and syntactic development, the current method does show interesting developmental patterns. Between age 1;9-2;8, CC only produced 5 tokens of FINISH as independent utterances and they were all main verbs, as in (14). All of the tokens produced during this period have the phonological feature [repeat] in the sign articulation.

(14) CC, ag	ged 2;2.
*CHI	BLACK.
	'Black.'
*EXP	BLACK.
	'Black, gesture [showing CC's handshape configuration]
*CHI	BLACK (passing a stuffed toy to experimenter) FINISH.
	'Black, finished.'
*EXP	FINISH WHAT FINISH WHAT?
	'What have you finished?'
*CHI	FINISH.
	'Finished.'

In (14), CC was learning color terms from the deaf researcher who taught CC how to sign BLACK. Then, CC passed a stuffed toy to the deaf researcher and signed FINISH. When the researcher asked him what he had finished, he responded by signing FINISH with [repeat] again.

Between age 2;9-3;8, there was an upsurge in the production of FINISH as main verbs. Out of the 39 tokens, 28 of them constituted independent utterances like (14) above. The remaining 11 tokens were embedded in run-on clauses. In (15), FINISH combines with a preceding index sign to form a simple sentence, signaling the end of a book reading activity. In (15), CC was signing to a deaf researcher asking for another book to teach his sister. He told her that the book he was holding was finished but the deaf researcher told him that his sister was holding a book, but CC insisted on another book since he had finished his:

(15) CC, aged 3;0.
*CHI FINISH, IX-book_a FINISH. 'It's finished. This book is finished.'
*EXP IX-book_b. 'Pointing at the book. (You have that book).'
*CHI NO, FINISH, NO. 'No, it's finished. No.

During the same period, we also found a few tokens of FINISH as a perfective marker. (16) shows the first emergence of FINISH as a perfective marker in the data. CC's helper was asking CC and his sister to take a bath. His sister refused and CC told his helper to wait until they had finished eating and drinking some snacks. This articulation of FINISH is similar to the main verb FINISH, containing the feature [repeat] in the articulation. This is rather unusual of FINISH as a perfective marker because it usually requires a single movement.

(16) CC, aged 3;0
*CHI EAT FINISH, DRINK FINISH.
'(Let us) finish eating and drinking.'

Between 3;8 and 4;6, there was a significant increase in CC's production of FINISH as a perfective marker (60.37%) while main verb FINISH continued to occur in the data (32.01%). Out of the 17 tokens of FINISH as main verbs, only 8 occurred as one sign utterance and the rest occurred in run-on clauses, as in (17):

(17) CC, aged 4;5

bl IX-book_a FINISH, IX-book_b CHANGE GOOD. *CHI 'It's better to change to that book when this book is finished.'

In (17), a deaf researcher was discussing with CC which book they should start narrating first. CC insisted on reading a book he preferred before reading the one the researcher chose for him. In this example, FINISH occurred at the end of a preceding clause of a bi-clausal construction and was immediately preceded by a blink that marks the end of a prosodic unit.

As a perfective marker, FINISH consistently followed the verb and was clause final, as shown in (16) above. Among the 32 tokens of FINISH, 9 occurred at the end of the preceding clause of the multi- or b-clausal constructions, as in (18) and (19):

(18) CC, aged 4;5

*CHI EAT FINISH, CHANGE DIE. 'After she ate the apple, she became dead.'

(19) CC, aged 4;6

*CHI

IX-picture_a CL:open door with two hands; Gesture "open the door, sit

bl

down, and close the door" FINISH, CL ride the horse.

'(In this picture), (the soldiers) opened (the door of the carriage),

(Cinderalla) sat down, and (they) closed the door. They rode away.

Again, one way to verify whether FINISH occupies the final position of the subordinating clause or the beginning of the matrix clause is to identify the position of the eve blink in these sentences. As mentioned in Section 2, in HKSL, blinks mark the right edge of intonational phrases. Not all the FINISH signs in the 9 multi- or bi-clausal sentences are marked with a blink. With the three tokens that occurred with one, it either overlaps with FINISH or precedes it. This suggests that FINISH forms a prosodic unit with the subordinating clause but not the matrix clause. Following the analysis of FINISH discussed in Section 2, these cases are taken to be a perfective marker for closing the event in the subordinating clause before the next event sets in, as a form of narrative advancement (Rathmann 2005).

Towards the end of Phase 3, we observed two tokens of FINISH as a discourse marker. In (20), CC was narrating SNOW WHITE to a native deaf signer. After signing QUEEN, CC paused for a long while and signed FINISH, followed by another long pause before he continued to sign the second sentence. Although no blinks were observed in these two lines of data, that the sign is bracketed by relatively long pauses suggests that it may form its own prosodic/syntactic unit. At this stage, it is difficult to make generalization about CC's development of FINISH as a discourse maker because only 2 tokens were found in the data.

(20) CC, aged 4;4

*CHI	IX-picture _a HOUSE, SEE INSIDE HAVE QUEEN, FINISH,
	'This picture, there is a house. Looking inside, there is a queen. That's it.'
*EXP	IX-page _b ?
	'How about this page?
*CHI	PRINCE LOVE SEE HAVE INSIDE HAVE QUEEN.
	'The prince, loves to see inside the house. There is a queen (inside the
	house).

In sum, we observed a gradual development of FINISH from a lexical element to a functional element. We assume such a development reflects a concomitant change in the syntactic positions that the two entries of FINISH occupy at the two stages of development. Such a development conforms to the syntactic representation we posit for FINISH in adult HKSL.

3.2.2. Verifying the Acquisition Hypotheses

To verify whether CC's production of FINISH as a perfective marker is initially associated with telic predicates and past reference, as reported in the acquisition studies of spoken languages, we analyzed the distribution of FINISH according to (a) situation types and (b) temporal reference. In this analysis, telicity is defined as whether the situation has a natural endpoint leading to a change of state (i.e. compositional telicity). Typical telic predicates are achievements and accomplishments where a change of state is inherently entailed. Typical atelic predicates are activities, semelfactives and statives where the situation is perceived as unbounded without clear initial and final endpoints. The results are summarized in Table 3. On the whole, 35 FINISH have been identified to be a perfective marker in the data. Since the total number is quite small, we will present the raw tokens rather than percentages.

As reported, FINISH as a perfective marker did not show up in Phase 1 (i.e. age 1;9-2;8). In Phase 2 (i.e. age 2;9-3;8), only three tokens of FINISH were recorded, 1 for past reference (i.e. example 16) and two for future reference (i.e. example 17). However, during Phase 3 (i.e. age 3;8-4;6), there was a preference for past to future reference (30 tokens for past and only 2 tokens for future reference). We categorized these situations as accomplishments because in most of these cases, CC was referring to the completion of a book reading activity. As a perfective marker, FINISH did not yield present interpretation for the events in question during the entire period of observation. Therefore, except for the initial two tokens of future interpretation, findings from the previous studies that the perfective aspect initially yields past interpretation also holds in CC's data, suggesting that although no manual signs are available for temporal marking, CC's use of FINISH

and temporal reference is systematic, lending some support to the Aspect First Hypothesis.

		14010 5.11111011 45		
	Age 1;9-3;8	Age 2;9-3;8	Age 3;9-4;6	Total (raw tokens)
Temporal Ref	erence	I	l	I
Past	0	1	29	30
Present	0	0	0	0
Future	0	2	3	5
Eventualities	0	Past 1 accomplishment <u>Future</u> 2 accomplishments	Past 17 accomplishments 6 achievements 3 activities 3 semelfactives Future 3 activities	Past 18 accomplishments 6 achievements 3 activities 3 semelfactives Future 2 accomplishments 3 activities
Aspectual Pro	perties			
Completion & Termination	0	3 <u>Past</u> : 1 accomplishment <u>Future</u> 2 accomplishments	21 <u>Past</u> 4 achievements 17 accomplishments	24 <u>Past</u> 4 achievements 18 accomplishments <u>Future</u> 2 accomplishments
Termination only	0	0	9 <u>Past</u> 3 semelfactives 3 activities <u>Future</u> 3 activities	9 <u>Past</u> 3 semelfactives 3 activities <u>Future</u> 3 activities
Experiential	0	0	2 Past 2 achievements	2 <u>Past</u> 2 achievements

Table 3.	FINISH as	an Aspect Marker

As a main verb, FINISH initially yielded a present reference and this tendency remained high throughout the three phases (ref. Table 4). CC's habitually used FINISH to either terminate or demand a termination of the current activity. However, from Phase 2 onward, we also observed an increasing number of instances where CC used the main verb FINISH for past reference: 5/34 token for age 2;8;-3;9 and 7/9 tokens for age 3;8-4;6. Taken as a whole, we suspect that associating the main verb FINISH with present reference represents early acquisition. As a main verb, the sign inherently provides the aspectual interpretation of the event, marking it as completed or terminated. When FINISH was subsequently used as a perfective marker, there was a preference for FINISH to be associated with past, and occasionally for future reference. It was also during this stage of development that CC began to associate the main verb FINISH with past reference, signaling an extension of FINISH to cover other temporal domains.

	Age	Age	Age	Total
	1;9-2;8	2;9-3;8	3;9-4;6	(raw tokens)
Temporal Reference	e			
Present	5	34	9	48
Past	0	5	7	12
Future	0	0	1	1
Eventualities	Present	Present	Present	Present
	5 activities	34 activities	9 activities	48 activities
		Past	Past	Past
		5 activities	7 activities	12 activities
			<u>Future</u>	Future
			1 activity	1 activity

Table 4. FINISH as a Main Verb

Next, we examined the type of eventualities that FINISH occurred with during the period of observation. Table 3 shows no records of statives but 20 tokens of accomplishments, 6 tokens of activities, 6 tokens of achievements and 3 tokens of semelfactives. The results do not entirely conform to the prototype account. Although FINISH first occurred in telic predicates, it is accomplishments but not achievements that the sign was initially associated with in Phase 2. Telic predicates involving achievements only came at Phase 3. In fact, all accomplishments in the data involved a null object with a definite and specific referent as direct object, as in (21). The deaf researcher and CC were fighting over a story book which the deaf researcher wanted CC to narrate to him. CC was trying to grab the book from the researcher and said 'TELL FINISH'.

(21) CC, age 4;5

*EXP gesture "attention" ₂TELL₁ NOT_HAVE. Gesture "attention" ₂TELL₁ NOT HAVE. AGAIN ONCE.

'You haven't yet told (this story) to me.' You haven't yet told (this story) to me. Come on, say it again, just once.

*CHI TELL FINISH......HAVE.

'I have told (this story) already, I did.'

We observed that the verbs produced by CC subcategorizes for a definite or quantized direct object as an internal argument. Examples are TELL (a story), READ (a book), and DRINK (a cup of poison), which when followed by FINISH, lead to a configuration for telic interpretation.¹² As accomplishments are conceptualized as having a sub-event structure made up by a process and a change of state, the activity verbs in fact form the first sub-event of the complex event structure. Therefore, the perfective marker here does not offer an arbitrary endpoint of an activity as most typical atelic predicates may be encoding, it in fact marks the completion of the activity leading to a change of state. Evidence for FINISH to associate with other typical telic predicates was also found between age 3;9 and 4;6 when CC produced 6 achievements.

In terms of perfective meaning, CC's initially used FINISH to mark 'completion' and 'termination' in accomplishments and achievements. It was only during Phase 3 that FINISH occurred with activities and semelfactives to encode 'termination' or 'experiential' aspect, as shown in (22) and (23). Smith (1997) suggests that semelfactives are single-stage events with no result or outcome and may become multi-stage activities with repeated events. For activity verbs, FINISH entails an arbitrary endpoint of termination rather than completion.

(22) CC age 3;11

*CHI IX-picture YOUNGER_SISTER RAIN FINISH WET_ALL_OVER CLOTHES

'In this picture, the sister, when the rain stopped, her clothes was wet all over.'

(23) CC, age 4;4
*CHI SLAM_a SLAM_a SLAM_a++ FINISH, DIE.
'I slammed (an insert there), slammed many times, it died.'

During the same period, we also found 2 tokens of experiential perfect with achievement verbs, as shown in (24). In this episode, the deaf researcher was discussing the content of SNOW WHITE with CC and he was surprised to learn that CC knew that

¹² Following Lee (2002), the internal movement of sign articulation for TELL, READ and DRINK marks event completion in HKSL.

the queen turned herself into a witch. CC replied by signing that he had seen it on TV. (24) CC age 4;5

*CHI	DIE CHANGE WITCH.
	'(The queen) died and turned into a witch.
*EXP	IX-pro2 KNOW IX-pro2?
	'You know it?'
*CHI	IX-pro2 SEE SEE FINISH.
	'I have seen (it).
*EXP	WATCH_TV IX-pro2?
	'Did you watch it on TV?'
*CHI	HAVE
	'I did.'

Taken as a whole, the findings are in line with Lee's (2002) observation that FINISH in adults HKSL marks termination with activities but completion and termination in accomplishments and achievements. It is probably due to this separation of termination from completion with activities that allows the child to perceive a temporal boundary of the event independently of its internal constituency, thus further grammaticalizing FINISH as a functional element and ultimately achieving the status of a perfective marker. That CC subsequently encodes experiential aspect with FINISH gives further evidence of this process of grammaticalization.

4. Discussion

To recapitulate, the sign FINISH first appears as a root verb which is inherently telic as CC used it mostly to terminate or demand a termination of a current activity, leading to a change of state from activity to non-activity. This seems to echo Slobin's (1995) proposal that young children are initially prone to conceptualizing a basic distinction between process and result. However, while this basic cognitive knowledge holds at the initial stage of development, formal analysis of the different functions of FINISH is called for because the child needs to learn that FINISH assumes different grammatical functions and occupies different positions in the phrase structure: V⁰ as a main verb and Asp^0 as a perfective marker. As a functional element, FINISH denotes not only completion but also termination or experiential aspect. If we assume that FINISH as a perfective marker occupies the head of a functional projection, a crucial question to pursue is whether CC possesses the underlying representations of functional categories at an early stage. In the literature, If knowledge of tense is a crucial test for the existence of functional categories, at least the occurrence of FINISH provides some evidence that CC has some knowledge of temporal reference. In CC's data, the first emergence of FINISH as a perfective marker occurs at age 3;0 not for present, but future reference, after 13 months of exposure to HKSL. The next recorded data is at age 3;4 and for past

reference¹³ As there is no manual marking for tense in adult HKSL, it is possible that the perfective aspect anchors the events to the temporal dimension since the perfective aspect generally involves a polarity transition in the temporal domain because of the typical entailment of 'change of state' from 'not P to P' or vice versa. This issue has been discussed in Chinese, a language that lacks tense marking. In this case, the perfective markers encode both temporal and aspectual meanings as it is tense sensitive (Lin 2003). Therefore, we claim that the occurrence of FINISH as a perfective marker offers some evidence for the existence of a functional category that encodes the temporal reference of events in child HKSL. This functional projection in HKSL is at a level between TP and VP. In the analysis of early temporal-aspectual system, tense and aspect cannot be treated separately because they both deal with the temporal structure of situations and their functions are complementary. Following Gueron and Hoekstra (1989), if we assume that the temporal interpretation of a clause is given by a tense chain of which AspP is a member, a tense chain cannot be formed if AspP is underspecified at the child's initial development. Therefore, AspP represents the border between the lexical and functional domains of the tense chain and takes up the task of providing a spatial-temporal interpretation for the event. A number of child language studies have already proposed that young children do have a temporal system although they do not produce overt tense marking initially; in this case, an aspectual marker may be adopted for temporal interpretation.

What causes CC to reanalyze FINISH as a functional element? The first possibility is the availability of positive evidence from the adult data in which FINISH features quite prominently either as a main verb or as an aspectual marker. If the acquisition of grammatical properties is based on the subset principle and going from the subset grammar to the superset requires the availability of positive evidence, then the acquisition of FINISH typically reflects that this learning principle is at work. Table 4 shows that main verb FINISH with present reference constitutes the initial subset grammar, yet positive evidence from the adult HKSL allows CC to reanalyze FINISH as a perfective marker, ultimately allowing two variants of the same sign to fulfill different grammatical functions. While positive evidence is available, the inherent aspectual meaning of the main verb FINISH also bootstraps CC's development of grammatical aspect, allowing him to view the event in its entirety as 'completed' or 'terminated'. Torrence and Hyams (2003) propose that in the absence of morphologically specified tense and grammatical aspect, inherent aspect (i.e. telicity) offers the temporal reference for the clause in child language. Therefore, FINISH as a main verb becomes a candidate for grammaticalization, extending its function to cover perfective aspect due to its intrinsic aspectual properties.

¹³ It is not clear why FINISH as a perfective marker first appeared with future reference but not past reference. However, as there are only two tokens based on one single utterance, we suspect this occurrence is explainable due to methodology such as the frequency of data collection.

5. Conclusion

The current study offers some preliminary observation about how a deaf child acquires the grammatical functions of FINISH in HKSL. The results generally show that the acquisition process is systematic. CC initially assumed the most restrictive hypothesis about FINISH, perceiving it as a main verb; this hypothesis was then relaxed upon positive evidence, which eventually allowed him to acquire FINISH as an aspectual marker. CC also initially used main verb FINISH for present reference and perfective FINSIH for past reference, displaying a systematic distribution of the temporal reference that FINISH is associated with. That CC associate the perfective FINISH with past reference and telic predicates to some extent lends some support to the Aspect First Hypothesis. Despite this similarity in the acquisition process, some subtle differences do occur. In this study, tokens of associating FINISH as a perfective marker with future reference were also observed. Also, the prototype account which stresses the importance of achievements for initial form and meaning mapping is not entirely confirmed in the current study. As mentioned, the telic predicates are mainly accomplishments which in the current set of data are largely built upon activity verbs with null objects. In fact, it has been argued in the literature that compositional telicity represents a more advanced stage of development in child language because it is more complex than inherent telicity, yet CC initially used FINISH with accomplishments rather than achievements.

Another unresolved issue is how deaf children acquire imperfective aspect in HKSL and how lexical aspect interacts with grammatical aspect in the acquisition process. The current study is made possible because there is a manual marker for perfective aspect in HKSL and one can approach the topic and analyze the associated word order in order to verify the underlying syntactic representation of perfective aspect. This study fails to verify the interaction between imperfective aspect and atelic predicates in the acquisition process. As studies on aspect in the adult grammar are few, a lot needs to be done in order to see whether deaf children learning sign language in a different modality observe similar constraints. This study at least shows that grammatical constraints are independent of modality and CC entertains a similar set of constraints in the acquisition process. In terms of methodology, there is a need to identify some appropriate criteria to calculate MLU in sign language acquisition research against which one may investigate the morpho-syntactic development of sign language systematically or compare the results against those documented in the spoken language literature. Moreover, the current study is based on production data. Although it is generally assumed that comprehension precedes production, experimental data will certainly enable us to tap comprehension and to appreciate the acquisition process more in depth. In fact, some studies show that the comprehension of perfective aspect develops at a later stage than the production of aspectual morphology in some child languages (Hodgson 2003). It is possible because the perfective aspect comes with a range of aspectual interpretations and young children need to map out the semantic scope of the form systematically. The present study shows that the entire semantic scope of FINISH does not obtain in one go initially: interpreting an event as 'terminated' or 'experiential' is developmentally later than interpreting it as 'completed'. In order to verify this initial observation, experimental elicitation is a better procedure in future investigation.

References:

- Antonucci, F.; Miller, R. 1976. How children talk about what happened. *Journal of Child Language*, 3:167-189.
- Brown, R. 1973. A First Language. Cambridge: Harvard University Press.
- Brun, D.; Sergey, A.; Babyonyshev, M. 1999. Aspect and its temporal interpretation during the optional infinitive stage in Russian. *Proceedings of BUCLD* 23/1: 120-131. Sommerville: Cascadilla Press.
- Chan, Y.L. 2000. Verb semantics and aspect in the language of Cantonese-speaking preschoolers. B.A. Dissertation. The University of Hong Kong.
- Chomsky, N. 1995. The Minimalist Program. Cambridge. Mass.: MIT Press.
- Cinque, G. 1999. *Adverbs and functional heads: a cross-linguistic perspective*. Oxford: Oxford University Press.
- Comrie, B. 1976. Aspect. Cambridge, UK: Cambridge University Press.
- Fischer, S.; Gough, B. 1972. Some unfinished thoughts on FINISH. Reprinted in *Sign Language and Linguistics* 1999, 2/1:66-77.
- Giorgi A.; Pianesi, F. 1997, *Tense and Aspect: From Semantics to Morphosyntax*. Oxford University Press, New York.
- Grose, D. 2003. The perfect tenses in ASL: Nonmanually marked compound tenses. Unpublished Master Thesis, University of Purdue.
- Gueron, J. and Hoekstra, T. 1989. "T-chains and constitutent structure of auxiliaries". In Cardinaletti, A.; Cinque.G.; Giusti, G. (Eds.) *Constituent Structure:Papers from the Venice GLOW*, pp. 35-99. Dordrecht: Foris
- Hodgson, M. 2003. The acquisition of Spanish perfective aspect: a study on children's production and comprehension. *ZAS Papers in Linguistics*, 29: 105-117.
- Hyams, N. 2005. Child non-finite clauses and the mood-aspect connection: evidence from child Greek. In Kempchinsky, P.; Slabakova, R. (Eds.) Aspectual Inquires. Dordrecht: Kluwer Academic Publishers, pp. 293-316.
- Chang, H.H. 2002. Child Acquisition of the Aspect marker –le in Mandarin. Unpublished M.A. Dissertation. Michigan State University.
- Janzen, T. 2003. FINISH as an ASL conjunction: conceptualization and syntactic tightening. Paper presented at the 8th International Cognitive Linguistics Conference, University of La Rioja, Spain.

- Johnston, T.; Schembri, A. 2007. Australian Sign Language (Auslan): An Introduction to Sign Language Linguistics. Cambridge University Press.
- Klein, W. 1994. Time in language. London: Routledge.
- Lam. W.S. (In preparation). Early Phrase Structure in Hong Kong Sign Language. Ms. The Chinese University of Hong Kong.
- Lee, W.F. 2002. Aspect in Hong Kong Sign Language. Unpublished MPhil Dissertation, Chinese University of Hong Kong.
- Lee, Y.F. 2006 Negation in Hong Kong Sign Language. Unpublished MPhil. Dissertation. The Chinese University of Hong Kong.
- Li, P. ; Bowerman, M. 1998. The acquisition of lexical and grammatical aspect in Chinese. *First Language*, 18: 311-350.
- Li, P.; Shirai, Y. 2000. *The Acquisition of lexical and grammatical aspect*. In Studies on Language Acquisition Series, 16. Berlin & New York: Mouton de Gruyter.
- Lin, J.W. 2003. Temporal reference in Mandarin Chinese. Journal of East Asian Linguistics, 12: 259–311. Kluwer Academic Publishers.
- Lust, B. 2006. *Child Language: Acquisition and Growth*. Mass.: Cambridge University Press.
- Olsen, M.B.,; Weinberg, A. 1999. Innateness and the acquisition of grammatical aspect via lexical aspect. *Proceedings of BUCLD* 23: 132-151, Sommerville, M.A.: Cascadilla Press
- Meir, I. 1999. A perfect marker in Israeli Sign Language. *Sign Language and Linguistics*. 2/1:41-60.
- Rathmann, C. 2005. Event Structure in ASL. Unpublished Ph.D. Dissertation, University of Texas at Austin.
- Rothstein, S. 2004. *Structuring events: a study in the lexical semantics of aspect.* Malden, MA: Blackwell.
- Pustejovsky, J. 1995. The Generative Lexicon. Cambridge, Mass.: MIT Press.
- Shirai, Y.; Andersen. R.W. 1995. The acquisition of tense-aspect morphology: prototype account'. *Language*. 71: 743–62.
- Shirai, Y. 1998. The emergence of tense-aspect morphology in Japanese: universal predisposition'. *First Language*. 18: 281–309.
- Slobin, D. I. 1985. Cross-linguistic evidence for the language making capacity. In D. I. Slobin (Ed.) *The Cross-linguistic Study of Language Acquisition* (Vol. 2). Hillsdale, NJ: Erlbaum, pp.1157–1256.
- Sutton-Spence, R.; Woll, B. 1999. *The Linguistics of British Sign Language: an introduction*. Cambridge: Cambridge University Press.
- Smith, C. 1997. *The parameter of aspect.* (second edition) Dordrecht: Kluwer Academic Publishers.
- Stephany, U. 1997. The Acquisition of Greek. In Slobin, D. (Ed.) *The Crosslinguistic Study of Language Acquisition*. Vol. 4. New Jersey: LEA.
- Torence, H. and Hyams, N. 2003. Finiteness and temporal interpretation in early grammar:

the role of lexical aspect. Van Kampen, J.; Baauw, S. (Eds.) Proceedings of GALA 2003, pp.

- Tang, Gladys. 2006. "Acquisition of Aspect in Hong Kong Sign Language by a Deaf Child." Paper presented at First Conference on Comparative Study of East Asian Sign Languages. Chung Cheng University, Chiayi, Taiwan, Sept 16-17, 2006.
- Tang, Gladys. 2007. "Grammaticalizing FINISH into a perfective aspect marker in HKSL. Paper presented at The Workshop on Acquisition of Functional Categories in Asian Languages, December 26th, 2007, The Chinese University of Hong Kong.
- Tang, G.; Brentari, D.; González, C.; Sze, F. (In Press). Crosslinguistic variation in the use of prosodic cues: The case of blinks. In Brentari, D. (Ed.) Sign Languages: A Cambridge Language Survey. Cambridge University Press.
- Tenny, C. 2000. Core events in adverbial modification. In Tenny, C.; Pustejovsky, J. (Eds.) Events as Grammatical Objects. CSLI Publications. pp. 285-334.
- Torrence, H.; Hyams, N. 2003. Finiteness and temporal interpretation in early grammar: The role of lexical aspect. In van Kampen, J.; Baauw, S. (Eds.) Proceedings of GALA, LOT, The Netherlands.
- Travis, L. 2000. *Event Structure in Syntax*. In Tenny, C.; Pustejovsky, J. (Eds.) Events as Grammatical Objects. CSLI Publications. pp. 145-185.
- Van Hout, A. (2008). Acquiring perfectivity and telicity in Dutch, Italian and Polish. *Lingua*.
- Vendler, Z. 1967. Linguistics in philosophy. Ithaca, NY: Cornell University Press.

			No. of
Age	Raw number	Accumulative	FINISH
1;9.27	94	94	0
1;10.21	169	263	0
1;11.22	194	457	0
2;0.26	267	724	0
2;1.9	204	928	3
2;2.0	230	1158	3
2;3.5	162	1320	0
2;4.23	205	1525	0
2;5.23	117	1642	1
2;6.17	357	1999	0
2;7.19	298	2297	0
2;8.18	314	2611	0
2;9.29	203	2814	0
2;10.9	262	3076	0
2;11.21	416	3492	7
3;0.13	296	3788	7
3;1.15	204	3992	1
3;2.24	298	4290	7
3;3.29	167	4457	2
3;4.13	473	4930	2
3;5.23	398	5328	5
3;6.28	278	5606	0
3;7.13	201	5807	0
3;8.19	369	6176	20
3;9.24	237	6413	1
3;10.28	238	6651	5
3;11.26	286	6937	4
4;0.23	301	7238	3
4;1.27	347	7585	4
4;2.25	387	7972	7
4;3.22	223	8195	1
4;4.13	241	8436	6
4;5.3	471	8907	20
4;6.21	276	9183	3
		Total	112

Appendix 1. Number of Utterances and FINISH per Session

香港手語完整貌的習得

鄧慧蘭

手語語言學及聾人研究中心 語言學及現代語言系 香港中文大學

摘要

在口語第一語言獲得體的研究中發現到語法體跟詞性體及時態有很密切的 關係。本文重點討論一個香港手語的聾兒在學〔完〕這手語的過程。成人語 法中〔完〕是兩個語類-動詞短語和體短語-的中心語, 他們都有自己的 語法投射 。體短語中〔完〕標誌著〔完成體〕。在這個聾兒的語料中,〔完 〕首先用作動詞;其後除了動詞之外,〔完〕也 標誌著 〔完成體〕。後者往 往出現在動詞後面或者句未, 跟成人語法一樣。〔完〕在這兩個語類也有系 統性的分佈;作爲動詞,〔完〕是帶有終結體,把一個活動完結。作爲體標 誌,它首先出現在成就動詞(accomplishments)後面。〔完〕作爲動詞它大 多帶有現在時的指涉意義。〔完〕作爲完成體標誌在語法開始發展的時候就 指涉過去時和將來時。總括來說,聾兒在發展〔完〕這手語是受到語法規範 的,但跟口語第一語言獲得研究也有一些不同的地方。