A perfect marker in Israeli Sign Language

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In this paper I argue for the existence of an aspectual marker in Israeli Sign Language (ISL) denoting perfect constructions. This marker is the sign glossed as ALREADY. Though this sign often occurs in past time contexts, I argue that it is a perfect-aspect marker and not a past tense marker. This claim is supported by the following observations: (a) ALREADY can co-occur with past, present and future time adverbials; (b) its core meaning is to relate a resultant state to a prior event; (c) it occurs much more in dialogues than in narrative contexts. Further examination of the properties and functions of ALREADY in the language reveals that it shares many properties with perfect constructions in other languages. In addition, it is shown that the co-occurrence of ALREADY with various time adverbials, as well as with the durational aspectual modulation, gives rise to a rich aspectual system in the language. This aspectual system is compared to similar systems in other languages. The ISL system turns out to be very different from that of Hebrew on the one hand, while showing significant similarities to that of ASL. However, there are also some differences between ISL and ASL aspectual markers, which might be due to the relative youth of ISL, and to the different source for the aspectual marker: a verb in the case of ASL, and an adverb in ISL.

Key words: tense, aspect, the perfect, Israeli Sign Language, sign language aspectual systems

1. Introduction

In this paper I focus on a sign glossed as ALREADY in Israeli Sign Language (ISL), and I will examine its function in the language. ALREADY occurs quite frequently in past time contexts, and therefore it might be suggested that it marks past tense. My claim, however, is that ALREADY is not a past tense marker,[1] but rather a

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1. The use of the term "tense marker" in the present context might be somewhat problematic. It has been a matter of controversy whether **tense** must be realized as an inflectional category (as suggested by an anonymous reviewer), or whether it can also be realized as a free words, e.g., auxiliaries and particles. While the most straightforward tense systems are inflectional, morphological boundness is not in itself a necessary criterion (as pointed out in Comrie 1985: 11. See also Binnick 1991: 452). Additionally, in works describing the development of tense and aspect systems in various languages (e.g. Bybee, Perkins & Pagliuca 1994, Janzen 1995, Holm 1988, Arends, Muysken & Smith 1995) the term "tense marker" is used for forms which are markers

marker of the perfect aspect in ISL, which can occur with present, past and future time adverbials, and has the properties characteristic of perfect constructions in other languages. I will further show that the various uses of ALREADY together with other aspectual markers and time adverbials give rise to a rich aspectual system which is independent of the Hebrew aspectual system. Finally, the use of ALREADY in ISL is compared to the perfective marker (FINISH) in ASL, showing significant similarities yet important differences as well. It is suggested that these differences might be due to the relative youth of ISL, and to the different source for the aspectual marker: a verb in the case of ASL, and an adverb in ISL.

In order to examine the function of ALREADY and to provide evidence for my claim, it is necessary to explain the distinction between tense and aspect assumed here, and the role they play in the language. The paper is therefore organized as follows: in Section 2, the distinction between tense and aspect is described, with a special focus on the perfect constructions. Section 3 provides evidence for the claim that ALREADY is a marker of the perfect aspect, and not a past tense marker. In Section 4 the various properties and uses of ALREADY are examined, and are shown to be related to the core meaning of the perfect construction. Section 5 describes the distribution of ALREADY with respect to other aspectual markers in ISL, and in Section 6 I conclude by comparing the ISL perfect construction to similar constructions in other languages (mainly Hebrew and ASL), pointing out the theoretical significance of the similarities and differences between these languages.

2. Tense vs. aspect[2]

Tense and aspect are grammatical categories both of which are related to the concept of time, yet each encodes a different facet of this concept. **Tense** is the grammatical category which locates an event on the time line with respect to another point, called a reference point. The reference point of a sentence is the moment of speech in the unmarked case, or another point specified by the context. Thus a tense marker indicates the temporal relations which hold between the reference point and the situation denoted by the sentence. It may denote that

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that have originated as free words, and are in the process of becoming grammatical markers. In many cases, however, there is a stage in the development of the language at which the markers are not inflectional affixes. Since the present paper deals with a verbal system of a young language still in the course of developing, I find it useful to make the clear linguistic distinction between **tense** vs. **aspect,** without reference to the morphological form of the marker.

2.   The description of **tense** and **aspect** in this section is based mainly on Comrie (1976) and Smith (1991).

a situation took place at a specific point in time prior to a reference point, simultaneously to that reference point or subsequent to that reference point. If the reference point is taken to be the moment of speech, then these tense markers denote past tense, present tense or future tense respectively. This is represented graphically in (1):

(1)   -------------------------R------------------------>
                    S   S   S
                    (past)   (present)   (future)
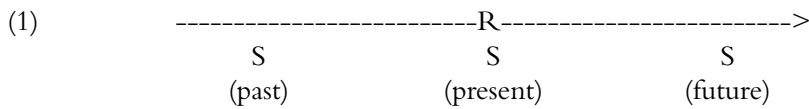
R — reference point (here: the moment of speech).
S — situation time.

The grammatical category of **aspect**, on the other hand, focuses on the internal temporal structure of an event. The main dichotomy in this category is between the perfective and imperfective aspects. The perfective aspect presents an event as a whole — consisting of both its initial and its end points (Smith 1991: 103). The imperfective aspect, on the other hand, focuses on the internal stages of the event (Comrie 1976: 24). The is illustrated graphically in (2) and (3) respectively (from Smith 1991: 95):

(2)   The perfective aspect: I   F
                                          ////////////

(3)   The imperfective aspect: I . . . . F
                                            ////////
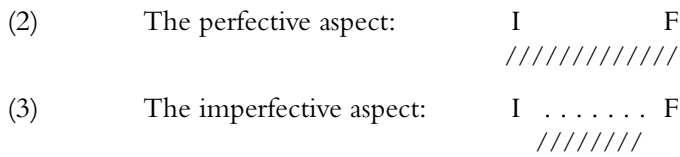
I — represents the initial point of the situation.
F — represents the final point of the situation.

The slashes indicate the span of the situation which is focused by the aspectual marker: the entire event including the initial and final points in the case of the perfective, and the internal stages of the event in the case of the imperfective.

A special aspectual marker is that of the so-called "perfect tenses". The perfect is a marked perfective aspectual marker, which differs from other aspectual markers in that it does not tell us something about the internal temporal structure of the event, but rather relates a situation to a preceding event (Comrie 1976: 52). Consider, for example, the following English sentences: (Comrie 1976: 52).

(4)   a.   I lost my keys.
      b.   I have lost my keys.

These two sentences have the same truth conditions, but they differ in a subtle way: Sentence (4b), the perfect, has the implication that the keys are still lost at the present moment, whereas (4a), the non-perfect, does not have such an implication

(ibid. p. 52). In other words, the perfect sentence presents an event from the point of view of the present, where in the resulting state of a preceding event is relevant for the present moment. Non-perfect sentences (e.g. (4a)) have the point of view of the past, making no statement about the relevance of that past event to the present moment.

Schematically, the perfect can be represented as follows:

(5)   . . . . I . . . . F . . . . (Reference Time)
                 /////////////////

That is to say, perfect constructions relate the situation that results from the final point of a preceding event to the reference time (in our case — the speech time). Thus, perfect constructions generally have the following characteristics:

I.   The situation is presented from the point of view of its final point; i.e., there is a strong emphasis on the final point of the situation.
II.   The final point of the situation precedes the reference time. In other words, perfect sentences locate an event prior to the reference time of the sentence, hence they denote anteriority.
III. The construction has the point of view of the state which resulted from that situation.

If the reference time of a sentence is the present moment (as in (4b)) the perfect construction denotes that the event occurred and was terminated prior to that moment, but that the results of that event are still relevant for the present moment. But the reference point need not necessarily be that of the present; it can be a past or a future reference time, as in (6a) and (6b) respectively (from Smith 1991: 147):

(6) a.   Last Saturday John had (already) arrived.
     b.   Next Saturday John will have already arrived.

These sentences convey the meaning that an event (John's arrival) is anterior and relevant to the reference time, whether in the past (6a) or the future (6b).

2.1. *Summary*

This section focused on the distinction between the grammatical categories of tense and aspect. Tense locates an event on the time line with respect to a reference point, whereas aspect focuses on the internal structure of the event, and presents it either as a whole (the perfective aspect), or as an event which is still taking place, focusing on its internal stages (the imperfective aspect). A special aspectual marker is the perfect marker, which relates the resulting situations of a preceding event to the reference time (R). The following section will examine the

function of the sign ALREADY in ISL with respect to the distinctions made in this section.

3.   The function of ALREADY

The sign ALREADY occurs quite often in past tense contexts, and is therefore often referred to as the equivalent of the Hebrew past tense. However, I claim that it is not a past tense marker, but rather an aspectual marker denoting perfect constructions. The following arguments provide evidence for this claim:

3.1. *ALREADY not restricted to past time*

ALREADY not only co-occurs with adverbials denoting past tense, but can also co-occur with time adverbials denoting present or future time:

(7)   I ALREADY EAT *NOW*.
           'I have just eaten now.'

(8)   *WEEK FOLLOWING* THEY $_{(dual)}$ ALREADY MARRIED.
           'Next week they will already be married.'

A marker denoting past tense necessarily co-occurs with adverbials denoting past time, and therefore is inappropriate in the contexts illustrated in (7) and (8).

3.2. *ALREADY relates prior resultant state to sentence reference time*

A comparison between sentences with and without ALREADY reveals a distinction very similar to the one found between English perfect and simple past sentences (illustrated by sentences (4a) and (4b) above): the perfect relates the state which results from a prior situation to the reference time of the sentence. Consider the following sentences:

(9)   I EAT.
           'I ate.[3]'

(10)   I ALREADY EAT.
           'I have eaten.'

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3.   Since in ISL verbs do not inflect for tense, this sentence could also have the reading of an event taking place in the present moment, i.e., 'I am eating (now)'. The context will make it clear whether the sentence denotes a past event or a present event.

Sentence (9) conveys the meaning that a situation of my eating took place in a point in time prior to that of the reference time of the sentence. Sentence (10), on the other hand, has the point of view of the present (i.e. the reference time of the sentence), and it denotes a state that resulted from the fact that an event of eating took place prior to the present moment. Thus, (10) but not (9) has the implication that I am not hungry right now, and only (10) is possible as an answer to a question such as 'are you hungry?', or in a context such as 'I'm not hungry now, I have (already) eaten.' In other words, the main point of view conveyed by ALREADY is that of "a present state (which) is referred to as being the result of some past situation" (Comrie 1976: 56), illustrated in the following examples as well:

(11)   INDEX$_3$ ALREADY ARRIVE.
            'He has just arrived.' (and he is still here).

(12)   I ALREADY EAT.
            'I have eaten.' (therefore I'm not hungry right now).

(13)   ROOM INDEX$_a$–I ALREADY CLEAN.
            'I have just cleaned this room.'(and it is clean, no need to clean it anymore).

3.3. *Wider distribution of ALREADY in dialogues*

ALREADY tends to occur much more in dialogues than in narrative texts. This is illustrated by (14) and (15):

(14)   I JERUSALEM INDEX$_a$ $_1$GO–TO$_a$ MEET FRIEND MY.
            'I went to Jerusalem and met my friends.'

(15)   I JERUSALEM INDEX$_a$ ALREADY $_1$GO–TO$_a$ ALREADY MEET FRIEND MY.
            'I have gone to Jerusalem and I have met my friends (there).'

Example (14) is appropriate in a context where I tell the story (the course of events) of my traveling to Jerusalem. But when ALREADY is added to the sentence (as in 15), it is understood to be part of a conversation.[4] For example, (15) is appropriate as an answer to a question such as 'When are you going to Jerusalem?' asked by a friend who knows I intended to go to Jerusalem, but did not know that this event had taken place already.

        If ALREADY were a past tense marker, it would be difficult to explain why it

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4.   My ISL consultants all agreed that sentence (15) is appropriate only as part of a conversation.

is quite rare in narrative texts, especially narratives describing events in the past. If, however, ALREADY is regarded as a perfect marker, this behavior finds a natural explanation. In dialogues, past events are frequently referred to from the point of view of their relevance to the moment of speech. Therefore, perfect constructions are very natural in such contexts, since their core meaning is the relevance of past situations to the moment of speech. Narrative texts, on the other hand, describe the course of events which took place in the past, without necessarily highlighting their relevance for the speech time. Hence perfect constructions are expected to be much rarer in such contexts.

Figure 1: The ISL sign ALREADY

3.4. *Summary*

Three properties were mentioned above as evidence for the claim that ALREADY is a perfect marker, and not a past tense marker: (a) ALREADY can co–occur with past, present and future time adverbials; (b) it relates a resultant state to a prior event; (c) it occurs much more in dialogues than in narrative texts. Having established the function of ALREADY in the language, let us further examine its properties and characteristics.

4. The properties and uses of the ISL perfect construction

As mentioned above, the span of the perfect includes both the final point of the prior event, and the state which follows it, relating it to the reference time of the sentence. The various uses and meanings of ALREADY can be shown to be related to that core meaning: in some of its uses the resultant state is highlighted, whereas other uses focus on the final point of the event, and hence present the situation as terminated/completed.

4.1. *Perfect of result*

As mentioned in Section 2.2, constructions with ALREADY convey the viewpoint of "a present state (which) is referred to as being the result of some past situation" (Comrie 1976: 56). This is called by Comrie "perfect of result". ISL has numerous manifestations of that use of the perfect, as exemplified by sentences (10)–(13) above.

4.2. *The experiential perfect*

Sometimes perfect constructions are used "to refer to a prior situation without precise specification of the time at which it occurred....they focus on the occurrence and/or experience of the prior situation rather than the situation itself." (Smith 1991: 149) An example of such use is given in (16):

(16)   YOU ALREADY EAT CHINESE?
            'Have you (ever) eaten Chinese food?'

In (16) the signer is interested in whether a situation of the addressee eating Chinese food took place at least once prior to the time of speech. The specification of the exact time at which it occurred is irrelevant. This is often referred to as the "experiential perfect."

4.3. *The "experiencer" perfect*

Very close to the "experiential" use of ALREADY, exemplified by (16) above, is the following use: ALREADY is very common in conversations where signer A tells of an event or a situation in the past which he/she experienced, and signer B responds by saying that he/she had experienced a similar event/situation. In such cases, B's response contains ALREADY. For example:

(17)   A: I LEG BREAK WEEK–AGO.
                   'I broke my leg last week.'
            B.   I ALSO LEG ALREADY BREAK.
                   'I have also broken my leg' (sometime in the past).

B's response implies that he had experienced the same situation sometime in the past, focusing on the occurrence of the situation, but not on the specification of the exact time at which this situation took place.

4.4. *The perfect as denoting a terminated situation*

As mentioned above, the span of the perfect constructions includes the final point of the prior situation, and the state following it. Sometimes the focus of the perfect

is the final point of the prior situation, i.e., it represents the situation as terminated or completed. Thus, perfect constructions strongly imply that the event/situation indicated by the sentence is terminated. This is exemplified below:

(18)   I ALREADY WRITE LETTER SISTER MY.
            'I have written a letter to my sister' (implying that the letter is written).

(19)   I DO-HOMEWORK ALREADY
            'I have done my homework' (i.e., I finished doing my homework).

(20)   I ALREADY LEARN EXAM.
            'I have studied for the test' (and finished studying; I'm prepared).

It can also occur as an answer to a question such as in (21):

(21)   _____q_____
            A: YOU LEARN YOU?
            B: ALREADY, ALREADY.
                    'Have you studied?' 'already, already!', meaning I have completed the task.

Note, however, that there is a distinction between a completed action and a terminated action: a completed action is naturally terminated, but not vice versa; one can terminate an action without completing it. For example, one can stop the activity of writing a letter, without completing the task of writing that letter (i.e. without finishing writing that letter). ALREADY indicates that an action is terminated rather than completed. Hence a sentence such as (18) above can occur in the following discourse, and no contradiction would result:

(22)   I ALREADY WRITE LETTER SISTER MY
            (…but I got tired and didn't finish it. I'll finish it later)

ISL has a different sign denoting the completion of an action, namely FINISH (ISL). Since this sign denotes a completed action, it would be inappropriate in a context such as (22) above. Thus, ISL has two distinct words for conveying the meanings of completion and termination. In this respect, ISL seems to differ from ASL: in ASL, many of the uses of ALREADY are expressed by the sign FINISH (Susan Fischer, personal communication).[5] FINISH (ASL) can function as an adverb meaning 'already' (Fischer & Gough 1972: 2–3), marking an event as perfective. But, unlike the ISL sign ALREADY, completion is part of the core meaning of FINISH (ASL), therefore it cannot occur in a context such as 'I wrote a letter, but

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5.   In British SL as well, a sign glossed as FINISH (BSL) has the function of indicating a perfective aspect, i.e. presenting a situation as completed. (Deuchar 1984: 100).

didn't finish it' (as in sentence (22) above). Moreover, it cannot co-occur with another ASL sign glossed as FINISH/END in the same sentence, since this would seem to cause redundancy (Fischer & Gough 1972: 8). ALREADY, on the other hand, can co-occur with FINISH (ISL), since they mark different aspects of the situation. Hence, the following sentence is fully grammatical:

(23)   I ALREADY HOMEWORK FINISH.
        'I have (already) completed my homework.'

Figure 2: The sign FINISH (ISL)

4.5. *ALREADY as a marker of sequence of actions*

A somewhat different use of ALREADY, but related to its use as marking an action as terminated, is when ALREADY is used in a sequence of actions. In such a context, ALREADY marks the action it precedes as 'occurring immediately after another action.' For example:

(24)   ('I went downtown, bought some clothes, came back home…')
        ALREADY I SIT I STUDY EXAM.
        '…and immediately I sat down to study for the exam.'

This sense of 'immediately' can be regarded as derived from the fact that ALREADY presents an action as completed/terminated. A completed action occurring within a sequence of other actions conveys a sense of rapidity, hence ALREADY is interpreted as marking the action as occurring right after, immediately following, the previous action.

4.6. *The perfect with habitual verbs*

Habitual verbs, which do not have an inherent end point, can co-occur with ALREADY. In such cases, the final point converges with the reference time of the sentence, meaning that the situation still persists on to the present moment, as in (25):

(25)   TWENTY YEAR I ALREADY SMOKE(habitual).
         'I have been smoking for twenty years.'

This sentence denotes a habitual event that started twenty years ago, and since no termination point is mentioned in the context, the implication is that the final point of this event converges with the time of speech, hence the event still pertains, i.e., it implies that I still smoke. However, this sentence is not incompatible with an explicit mention of a termination point, for example in a context such as '…but last week I decided to stop smoking'. In such a context, the situation denoted by ALREADY+the verb in sentence (25), pertained up to the explicitly mentioned reference point 'last week.'

4.7. *ALREADY's negative counterpart ZERO*

ALREADY has a negative counterpart ZERO.[6] ZERO denotes that the non-occurrence of a situation is relevant to the reference time of the sentence. For example:

(26)   (I can't go to the movie) I EAT ZERO.
         'I haven't eaten yet.' (I'm still hungry).

(27)   (All my friends are talking about the new film but…) I SEE ZERO.
         'I haven't seen it yet' (and therefore I can't say anything about it).

Figure 3: The sign ZERO 'not yet'

6.   There is another sign in ISL glossed as ZERO, which means 'not at all'. Though the two signs are quite similar, both formationally (they have the same hand configuration (F) and same location (neutral space)), and semantically (both are negative markers) there are clear differences between them in the movement, the shape of the mouth, and the precise meaning which they convey: 'not yet' vs. 'not at all'. In the following examples, the gloss ZERO refers only to the sign meaning 'not yet'. I use the gloss ZERO rather than NOT-YET since ISL has another sign, an adverb, glossed as NOT-YET. The distinction between ZERO and NOT-YET is quite subtle. However, the distribution of these signs indicates that it is ZERO which is the negative counterpart of ALREADY.

4.8. *Summary*

In this section I have described the various properties and uses of the perfect construction in ISL, and showed that they are related to the core meaning of the perfect, namely that of presenting a situation as a result of some prior action, the consequences of which are relevant to the reference time of the sentence. Many of these uses share similar properties with perfect constructions in other languages.[7]

5. The distribution of ALREADY with respect to other aspectual markers and adverbials

5.1. *ALREADY and aspectual markers*

Though the perfect construction presents a situation/event as terminated and possibly completed, it is not incompatible with aspectual markers which focus on the internal stages of a situation. ISL has a morphological aspectual modulation which denotes a durational event. The co-occurrence of ALREADY and the durational modulation conveys a compositional aspect, namely that a situation took place over a long stretch of time, has been terminated, and is relevant from the point of view of the reference time of the sentence:

(28)   I ALREADY STUDY(durational) EXAM.
          'I was engaged in studying for a long time, I have finished studying'
          (and I'm prepared for the exam).

Interestingly, ALREADY can co-occur with a durative adverbial meaning 'for a certain stretch of time':

(29)   BOOK INDEX_a–I ALREADY READ THREE-DAY.
          'It took me three days to read this book.'

The meaning of this construction is composed of the meanings of each of these markers: the durative adverbial (THREE-DAY) focuses on the duration of the event, while ALREADY presents the event as terminated; it focuses on the final point of the event. Hence the sentence conveys simultaneously the termination and possible completion of the event and the time it took to reach this point. This could be paraphrased in English and Hebrew as 'It took me three days to read the book.'[8]

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7.   For a survey of the different uses of the perfect in various languages, see Comrie (1976: 52–65).

8.   The English translation is somewhat inaccurate, as it necessarily implies that the action has been completed (as was pointed out by an anonymous reviewer). The ISL sentence denotes the termination of the action, implying its completion as well, if the context does not imply

5.2. *ALREADY and time adverbials*

ALREADY can co-occur with time adverbials denoting past, present or future tense. When ALREADY co-occurs with an adverbial denoting a reference point in the past, the construction conveys the meaning of past perfect, that is, the occurrence of an event prior to a point in the past. This is illustrated in the following sentences:

(30)   MOVIE INDEX$_A$ YEAR-AGO I ALREADY SEE.
         '(As of) last year, I had (already) seen that movie.'[9]

(31)   (I went out, and when I returned home I saw that…) ALREADY SOMEONE COME-HERE.
         '…that somebody had already been here.'

When ALREADY co-occurs with a future time adverbial, it presents an event in the future as completed. But, since this event hasn't taken place yet (as it will occur in the future), presenting it as completed conveys a sense of promise, of undertaking an obligation:

(32)   A: 'I will send you an invitation.'
         B: LATER I ALREADY ANSWER.
                'Later on I will have answered' (i.e., I promise to answer).

(33)   ROOM INDEX$_a$–TOMORROW ALREADY CLEAN.
         'By tomorrow this room will have been cleaned.' (I promise to clean it by tomorrow).[10]

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otherwise. However, within specific contexts it can convey the sense of termination without completion (as discussed in Section 4.4 above).

9.   This sentence can also have the reading of "perfect of result," i.e., 'I have already seen this movie (and it was) last year.' This reading is the preferred one as a reply to a question such as:
       'I saw this wonderful movie last week. Have you seen it yet?'
       This reading of sentence (30) suggests that the present perfect construction in ISL is not incompatible with a past time adverbial, unlike English.

10.   It seems that there are restrictions on the occurrence of ALREADY in sentences denoting future time reference. For example, ALREADY can occur much more easily in sentences containing nouns and adjectives rather than verbs (only when the sentences denote future time):
       (i)   ★ROOM INDEXa TOMORROW I ALREADY CLEAN
                   'I will have cleaned it by tomorrow.'
       This is in contrast to sentence (33), which contains an adjective, and is fully grammatical. These restrictions need to await future research.

5.3. *Summary*

In this section I examined the distribution of ALREADY with respect to various aspectual markers and time adverbials. The combination of ALREADY with all these various markers gives rise to a rich aspectual system, which consist of the following:

a.   present perfect (ALREADY + present time adverbial or no time adverbial at all).
b.   past perfect (ALREADY + a past time adverbial, or past time context).
c.   future perfect (ALREADY + a future time adverbial, or future time context).
d.   durative perfect (ALREADY + durative time adverbial).

6.   The ISL perfect construction in a broader context

As has been demonstrated in the previous section, ISL has a rich aspectual system. This system consists of the perfect marker ALREADY, various aspectual modulations (mainly durational and iterative/habitual), and combinations of these. Interestingly, the perfect aspect differs from the other aspectual markers in ISL in an important way. The perfect is expressed by a periphrastic construction, that is, by a function word. The other aspects are expressed by morphological means, i.e., by modulation of the form of the verb (e.g. by reduplication). ISL is not unique in expressing the perfect construction by means of a function word that developed from a content word. Other sign languages (e.g. ASL and BSL) have also developed a perfect/perfective marker which is related, both semantically and phonologically, to a free lexeme.[11] However, the source lexeme is different: in the case of ISL, it is an adverb (ALREADY). In the case of ASL and BSL, it is a verb (FINISH). It has been pointed out that a verb meaning 'finish,' or 'to be finished' is a very common source for a perfect/perfective aspectual marker in languages in general.[12] Adverbs such as 'already,' however, are much less common. ISL then, is somewhat unusual in having an adverb as the source for its perfect construction. Two questions then arise: (a) What is the origin of this aspectual marker? (b) Does the difference in the source lexeme in ISL vs. ASL and BSL have other implications as well? In order to shed some light on these issues, I present a brief comparison between the ISL perfect and parallel constructions in other languages, namely,

11.   See Fischer & Gough (1972), Friedman (1975) and Janzen (1995) among others with respect to ASL, and Brennan (1983) and Deuchar (1984) for BSL.

12.   See for example Bybee, Perkins & Pagliuca's (1994) cross-linguistic study of the development of aspectual systems. Fischer (1978) and Arends et al. (1995) cite the verb 'finish' as one of the common sources for the perfect/perfective aspect in creoles.

Hebrew and ASL. While the answers to these questions are necessarily speculative at this early stage of the investigation, the discussion to follow will offer a broader perspective concerning the theoretical significance of the analysis presented here.

6.1. *Hebrew 'kvar'*

One possibility concerning the origin for the ISL perfect construction is that it is borrowed from Hebrew, the spoken language in its vicinity.[13] This possibility might seem plausible, since Hebrew uses the adverb 'kvar' ('already') to convey the sense of the perfect. Hence, there are certain contexts where both ISL ALREADY and Hebrew 'kvar' can occur, with very similar meanings. For example, in the following Hebrew sentence, 'kvar' adds a sense of the perfect aspect to the sentence, in a very similar fashion to the use of ALREADY in sentences (10)–(13).

(34)   Kvar   ra'iti   et   ha-seret   ha-ze.
             already see-PAST 1SG.ACC the-movie the-this
             'I have already seen this movie.'

Moreover, the mouthing accompanying the ISL sign ALREADY is '(k)va(r),' which might be taken as an indication that indeed the ISL marker is borrowed from Hebrew. However, I argue that the aspectual system of ISL is independent of that of Hebrew aspectual system, since there are many cases in which the functions and uses of ALREADY and 'kvar' are not equivalent. A thorough comparison between the use of 'kvar' in both languages is beyond the scope of this paper, but a few examples which highlight these differences are presented here.

(a)   'kvar' cannot occur in several contexts in which ALREADY is felicitous. For example, it is excluded from contexts denoting the experiential perfect (sentence (16)), or the "experiencer" perfect (sentence (17)), repeated here for convenience.

(16)   YOU ALREADY EATCHINESE?
             'Have you (ever) eaten Chinese food?'

(17)   A: I LEG BREAK WEEK–AGO.
                 'I broke my leg last week.'
          B.   I ALSO LEG ALREADY BREAK.
                 'I have also broken my leg' (sometime in the past).

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13.   Hebrew verbs inflect for tense (past, present and future). Hebrew also has a periphrastic construction denoting a habitual event in the past (the verb 'to be' (past) + a verb in the present tense). It does not have aspectual inflection, nor does it have a grammaticalized perfect construction.

(b)   In certain contexts, 'kvar' denotes the **delay** of the completion of an action, rather than a complete action. Recall the conversation in sentence (21), repeated here for convenience, where ALREADY is used as an answer emphasizing the termination of an action:

(21)   _____q_____
           A: YOU LEARN YOU?
           B: ALREADY, ALREADY.
                   'Have you studied?' 'already, already!', meaning I have completed the task.

Interestingly, a similar conversation in Hebrew would have a totally different meaning: 'kvar' as an answer to a question such as 'have you studied?' means 'not yet, but soon, (I'll do it) in a minute.'

(c)   The occurrence of 'kvar' with certain time adverbials yields very different interpretations compared to the equivalent sentences in ISL. Sentence (29), repeated here, exemplifies the co-occurrence of ALREADY with a durative adverbial meaning 'for a certain stretch of time'. As pointed out above, in such a construction ALREADY retains its core meaning as denoting the termination of an event.

(29)   BOOK INDEX$_a$–I ALREADY READ THREE-DAY.
           'It took me three days to read this book.'

In Hebrew, on the other hand, 'kvar' + a verb in the present tense + a durative adverbial conveys the meaning of an incomplete action:[14]

(35)   'ani kvar   kore   'et   ha-sefer ha-ze
           I   already read-present-MASC ACC the-book the-this
           šloša yamim
           three days
           'I have been reading this book for three days (and haven't finished it yet).'

These examples highlight the fact that the Hebrew word 'kvar' is not always associated with the termination or completion of an event, and therefore cannot be analyzed as a marker of the perfect. Thus, the ISL perfect marker cannot be regarded as being imported directly from Hebrew, as Hebrew does not have a fully grammaticalized perfect marker. Rather, the origin for the ISL construction is more likely to be an internal development in the language. This hypothesis is further supported by the fact that similar developments have been attested in other

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14.   If the verb is in the past tense, the sentence is ungrammatical in Hebrew.

languages, many of which are unrelated, especially other signed languages (e.g. ASL and BSL) and creoles.[15]

6.2. *ASL aspectual marker* FINISH

As mentioned earlier, ISL and ASL resemble each other in that in both languages the perfect/perfective aspect is conveyed by periphrastic constructions, in which the aspectual marker is cognate to a content word with related meaning (see references in note 11). In ASL, this marker is the sign FINISH, which expresses many of the uses of ALREADY (ISL). However, there are some noticeable differences between the two:

(a) There is a difference in meaning. I mentioned (in Section 4.4) that ASL FINISH has as part of its core meaning the notion of completion. Hence it cannot occur in a context such as 'I wrote a letter, but didn't finish it' (unlike ISL ALREADY as in sentence (22) above). Nor can FINISH co-occur with another sign glossed as FINISH/END (ASL) in the same sentence, since this would seem to cause unacceptable redundancy (Fischer & Gough 1972: 8). Additionally, FINISH cannot co-occur with habitual verbs, which do not have an inherent endpoint. Thus, in a sentence such as (25), repeated here, ASL would use an auxiliary or an adverb glossed as SINCE or HAVE-BEEN.[16]

(25)   TWENTY YEAR I ALREADY SMOKE(habitual).
            'I have been smoking for twenty years.'

Thus, while the core meaning of ISL ALREADY is that of relating a present state to a past event, ASL FINISH seems to focus on marking the action as complete.

(b) FINISH fulfils a wide variety of functions in ASL. It can function as a main verb taking another verb as its complement, as a conjunction meaning "and then," and as an auxiliary marking various aspectual and tense distinctions (Fischer & Gough 1972; Janzen 1995). Janzen (1995: 68) points out that FINISH can function as an auxiliary denoting anteriority (perfect), perfective, and past tense. Moreover, there are differences in the articulation of the sign, which seem to correspond to particular semantic and grammatical distinctions.[17] ALREADY (ISL), on the other

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15.   For a comprehensive survey of the development of such systems, see Bybee et al. (1994).

16.   I am indebted to an anonymous reviewer for this point.

17.   Janzen (1995, 90) suggests that there are two forms of the sign FINISH. In the first, the movement of the sign is a path movement from one location in space to another. In the second, the movement is a local repeated twist. The two forms have slightly different meanings. The first denotes "…that an activity is unquestionably completed and won't be taken up again in the forseeable future….(In the second form) the activity has ended, but the same notion of absolute

hand, has a much more restricted array of functions in the language, all of which are related to the its core function as a perfect marker. Additionally, the sign seems to have just one phonological form.

Thus, ASL FINISH and ISL ALREADY exhibit some similarities, but some differences as well. Janzen (1995) describes FINISH in ASL as an instance of grammaticalization, by which the main verb FINISH gradually develops into a morpheme which is less lexical and more grammatical semantically and morpho-logically. Janzen claims that "…FINISH in ASL has a set of functions that form a chain along one grammaticalization path beginning with FINISH as a full verb and ending with a phonologically reduced proclitic past tense marker." Specifically, he suggests that FINISH follows a common grammaticalization chain, described in Heine (1993) and in Bybee et al. (1994), in which verbs such as *finish* gradually develop into the following markers:

(36)   Completive/resultative > perfect > perfective > past

He claims that FINISH in ASL follows this path, and its various uses correspond to different stages along this path of grammaticalization.

ISL perfect construction resembles that of ASL in that both use a functional element related to a content word as the aspectual marker. Hence, one might expect that ALREADY would follow the grammaticalization path in (36). However, as pointed out above, the uses and functions of ALREADY are more restricted than its ASL counterpart. It does not exhibit the variety of uses which correspond to all the different stages of the path in (36). There may be two explanations for this difference: (a) The grammaticalization of ALREADY is yet at an earlier stage of its development. It has reached only the second stage of the grammaticalization path in (41).[18] This explanation is supported by the fact that ALREADY is still a free word in ISL, unlike FINISH (ASL) which is cliticized to the main verb in some of its uses (Janzen 1995: 115–118). It should be pointed out that ISL is a much younger language than ASL, and hence the youth of the perfect marker might be a result of the youth of the language.[19] (b) The lexical source for the aspectual marker is different in the two languages: a verb in the case of ASL, and an adverb in the case of ISL. It may be that the grammaticalization chain of an adverb into

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finality is not conveyed." (ibid., p. 93).

18. Bybee, Perkins & Pagliuca (1994, 63), in their cross-linguistic study of the development of tense and aspect in language, regard perfect markers which denote only the perfect aspect (which they term "anteriority") as "young anteriors."

19. ISL developed with the emergence of the Deaf community in Israel, which began to form during the 1930s. Though not much is known about the early stages of the language, it cannot be more than seventy years old. See Aronoff, Meir & Sandler (in preparation) for a discussion about the interaction between the age of a language and its morphological structure.

an aspectual/tense marker follows a somewhat different path than that exhibited by a verb. Bybee et al. argue that "…paths from different sources tend to converge as grammatical meaning grows more general and abstract in later stages of grammaticalization." (Bybee et al. 1994: 15). The fact that ISL and ASL have two different sources for the perfect/perfective marker offers us a valuable opportunity to examine this claim.

7.   Conclusions

The study of the ISL perfect construction is of interest not only for its own sake, but also because it enables us to investigate some issues related to the development of such aspectual systems. The perfect in ISL resembles perfect constructions in other languages in the structural means used to encode this aspect. Yet the choice of the particular content word as the source for the aspectual marker is somewhat unusual cross-linguistically. Additionally, ISL is a young language. Therefore, ISL offers an opportunity to examine the interaction between the source word and the path which the grammaticalization process takes. It also allows us to study the effect that maturation has on the structure of this construction. Comparative study with other languages, signed and spoken, as well as a longitudinal study of the perfect in ISL are needed in order to gain better understanding about the interaction between these factors. I leave these challenges for future research.

Acknowledgments

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