CHAPTER III: METHODOLOGY

3.1 Introduction

Previous research on affective constructions has centered on explaining syntactic behaviors that seem unique to psych verbs. The current project began analysis by identifying affective constructions based on the events they denoted, rather than from any predetermined form. This cast a wider net so that the analysis includes not only psych verbs, but also constructions made up of multiple clauses, as well as constructed dialogue and constructed action that do not include affective lexemes.

While the overarching research question for this study asked what constructions ASL uses to describe affective events, several sub-questions guided the design of the elicitation and analysis processes. Since the pilot study indicated that stimulus-subject affective verbs are rare or nonexistent in ASL, this study specifically asked: Are there ASL affective constructions in which the trajector is elaborated by the stimulus, and if so, what is their form? As other previous research has suggested that experiencer-object affective verbs are rare in ASL, the current study asked: Are there transitive affective verbs in ASL, and if so, are any of these verbs experiencer-object? Finally, previous research on affective constructions has focused at the clause-level, but Cognitive Linguistics values investigating language in use, which exists in a discourses context. Therefore this study asked: What discourse-level constructions are used in describing affective events in ASL? The elicitation tasks for this project were designed to elicit data that could answer these questions, encouraging naturalistic language and targeting construals in which the stimulus is the primary focal participant. A judgment task was included to provide further insight on constructions that were hypothesized to be acceptable to varying degrees in ASL.

3.2 Consultants

Consultants for this study were invited to join through a recruitment email and flyer. The email was sent through Deaf organizations in the Washington, DC area and forwarded by members of those organizations to other potentially interested parties, and the flyers were posted at Gallaudet University. The recruitment specified that participants be Deaf adults who learned ASL before the age of three and currently use ASL as their primary language.

Nine native ASL signers participated. Each consultant filled out a brief demographic survey (see Appendix A) including information about their linguistic and educational backgrounds. Consultants ranged from 22 to 44 years old, 7 participants identified as female and 2 as male, 8 as White or Caucasian and 1 as Black. All consultants were raised by either Deaf or Coda parents and attributed their acquisition of ASL to their parents, and three attributed their ASL acquisition also to their school. On a scale of 0-10, ten being the highest level of ASL fluency, consultants rated themselves as a level 9 or 10, except one who chose a level 8 despite being the third Deaf generation of the family. This participant explained the reason for this rating is that the interpreters in the consultant's schools used ASL signs in English word order with English mouthing, which influenced the consultant's language. However, the affective constructions produced by this consultant did not pattern differently than data from the other consultants.

Because the pilot study indicated that English and ASL affective constructions differ greatly, consultants' rating of their own English fluency was also included. Most consultants rated themselves around a 7 on a ten-point scale, and almost all consultants also indicated introductory knowledge of at least one other language as well, including Spanish Sign Language, Chinese Sign Language, French Sign Language, Spanish, French, and Swedish. It is possible that consultants' other languages could influence the affective constructions they produced, but because only ASL was used in the interview, and because the results appear consistent, language interference seems not to have played a significant role in these data.

3.3 Elicitation

3.3.1 Elicitation Stimulus

This project sought to analyze naturalistic data. Because the goal was also to examine constructions that evoke a construal with focus on the stimulus of the affect, an elicitation stimulus was used: a four-minute film which aimed to construe focus on the stimulus of affective events. The film, which does not include any spoken or signed language, centers around a clown and a quarter. The clown shows the audience that she will prank passersby in a park. She uses crazy glue to affix a quarter to the sidewalk and then hides behind a tree as each victim of the prank spots the quarter and struggles to pick it off the ground. Each character has a unique affective response to the quarter, and then the clown jumps out from hiding, and each character responds uniquely to her as well.

The first woman to struggle with the quarter is confused, and when the clown jumps out to surprise her, she responds mildly, laughing along with the clown and heading on her way. The second woman is happy to see the quarter, but when the clown jumps out to surprise her, she is terrified and runs away in fear. The clown is inspired by this response and practices being frightening, preparing to scare the next person. A man approaches and is frustrated by the obstinate coin. When the clown attempts to scare the man, he finds her boring. The fourth character is very angry at the coin, and when the clown tries to scare her, she threatens the clown to a physical altercation. The clown, in turn, runs away in fear. Finally, the girl who the clown frightened returns and gets revenge on the clown. The girl surprises the clown by apparently lifting the quarter off the ground (she has in fact brought her own decoy quarter), and then she sprays the clown with a can of Silly String. The closing shot shows the clown's chagrin at the turn of events. This storyline includes quite a number of affective events: the coin serves as an inanimate stimulus of joy, confusion, frustration, and rage, while the clown and other characters serve as animate stimuli prompting amusement, fear, inspiration, boredom, anger, surprise, and chagrin. Figure 13 shows screenshots illustrating some of the affective scenes in the film.





Figure 13. Screenshots from the film used as elicitation stimulus.

3.3.2 Deaf Interviewer and ASL Model

The elicitation sessions for this project were run by an Deaf interviewer, funded through a small research grant from the Gallaudet Research Institute (GRI). Prior to recruiting consultants, the interviewer was trained one-on-one with the primary researcher, and then she practiced on three volunteers who did not meet the native requirement, but are fluent in ASL. The practice sessions were observed and feedback was provided in meetings after each session, and the interviewer made notes for herself to ensure the same directions were given and same processes were followed in each elicitation session.

One of the activities consultants completed was a judgment task on sentences signed by an ASL model, who was also hired with funds from the GRI grant. The ASL model is a Deaf native ASL signer who is an interpreter and an actor. Despite having expert control of her language, she struggled to produce the constructions that were hypothesized to be unacceptable in ASL (explained below), which seemed to support the hypotheses even as the judgment task was being created.

The model was filmed in the same type of chair and in the same room as the elicitation sessions so that the videos for judgment appeared similar to the consultants' own production setting. Figure 14 shows a screen shot from one of the videos used for the judgment task. Efforts were



Figure 14. Screenshot from elicitation stimulus for judgment task.

made to control non-target aspects of the constructions, such as where the model's eye gaze began and ended, the locations for surrogate spaces, and the facial expressions she made before and after the target construction. She signed multiple takes for each utterance, and the best sample for each of the 30 constructions for judgment was chosen. Additionally, the interviewer asked consultants for commentary along with their ratings, to help identify which aspects of the constructions influenced their judgments.

3.3.3 Elicitation Process

When consultants arrived, they were greeted by myself and the Deaf interviewer. After the consultant read and signed the consent forms, having a chance to ask any questions, I began the videocameras and left the room, and the Deaf interviewer ran the session.

Each step of the elicitation stimuli was included in a slideshow using the Apple software called Keynote and played on a laptop with a 13-inch retina display. The data

were recorded by three cameras. An iPhone5 recorded the consultant's whole signing space, while a camcorder was zoomed in to record intricacies of the signer's facial movements. An iPad filmed the interviewer, to include both sides of the conversation in the analysis. The recordings from each elicitation session were uploaded and synced in ELAN files for annotation.

To begin each elicitation, the interviewer explained that the consultant would first watch a short film and retell the whole story to the interviewer; second, they would watch clips from the film and describe each individually; finally, they would watch a woman sign sentences describing each clip and be asked to rate the ASL.

Narratives

After giving this overview, the interviewer explained that when the consultant was ready, tapping the spacebar on the laptop would start the film. The consultant was told to watch it through once just for entertainment, and then press the spacebar again to watch it a second time to aid memory for retelling it. After checking that the directions were clear, the interviewer left the room and checked in after four minutes to make sure technology was progressing smoothly. After another four minutes, the interviewer returned and asked the consultant to tell her about the film.

Clips

After the consultant's description of the film, the interviewer advanced the slideshow to show individual affective events from the film in six short clips and asked

the consultant to describe each clip individually. In three of the clips the stimulus is inanimate: the coin inspires confusion, excitement, and frustration. In the other three clips the stimulus is animate: the clown scares one woman and enrages another, and in the final scene, the woman surprises the clown. Each clip was about five seconds long and included one affective event. Each ended with two still screens first showing the experiencer's face indicating the target affect, and then a still shot of the stimulus, in hopes of foregrounding the stimulus in the consultant's mind.

The six clips were organized into three different orders to minimize priming effects. The order differed most specifically in whether the clip with a fear event appeared first, middle, or last, as the literature and pilot study suggest the sign FEAR/ SCARE may behave uniquely from other ASL affective lexemes. It was hypothesized that if FEAR/SCARE can appear in a stimulus-subject construction, it may be that consultants would produce subsequent affective lexemes in stimulus-subject constructions following the FEAR/SCARE clip. The data indicate that the clip order did not influence consultant productions.

Judgments

After the consultants described each of the six clips, the interviewer showed videos of the ASL model producing five constructions for each of those same six clips. During this task, each clip would play once. Then the five constructions describing the clip were played one at a time, and the interviewer asked for judgments on their acceptability on a five point scale (0-4). A score of 0 indicates that the construction is

judged not acceptable in ASL, or does not describe the affective event shown. A score of 4 indicates that the construction is a fully acceptable ASL construction describing the clip. The five construction types were ordered differently for each of the six affective events, and the order of the judgment clips were varied across consultants. No ordering effects were found.

Each time a consultant judged a construction as less than fully acceptable, the interviewer asked what was wrong with the proposed construction, and asked if the consultant could offer a better suggestion, or "fix" the construction. This added a qualitative aspect to this quantitative task, providing information on the reasoning behind judgments.

The sentences in (19-20) provide an example of each construction type that consultants judged as a description of each affective event. Two of the constructions, shown first in the listing here (19a) and (19b), were intransitive. The first expresses the experiencer as the subject of an intransitive affective verb. This was hypothesized to be the most common and acceptable construction. The second construction type expresses the stimulus as the subject. In the pilot study, intransitive stimulus-subject constructions identified the stimulus in a topic phrase and then referenced it again in subject position using a pronoun. Because the stimulus topic phrase and anaphor was the construction produced by native signers in the pilot study, the elicitation materials for this project followed that construction. The construction in (19c) was an affective verb construction with the experiencer in object position, and no subject. Previous studies on affective constructions have focused not on the subject of affective verbs, but rather on the object of the verb, identifying many languages as experiencer-object. This construction type was included to test the hypothesis that ASL verbs might only accept one argument.

19a) SV, SV<affect>: QUARTER STUCK GIRL CONFUSE

b) T<stim> S<stim-pro> V<affect>: <QUARTER>t PRO-X(quarter) CONFUSE

c) T<stim> V<affect> O<exp>: <QUARTER>t CONFUSE GIRL

The remaining two constructions that were included in the judgment task were transitive (20a-b). One placed the experiencer as subject, and the other placed the stimulus as subject. Both of these were hypothesized to be unacceptable in ASL, though other languages predominately include both arguments in affective clauses.

20a) S<exp> V<affect> O<stim>: GIRL CONFUSE QUARTER

b) S<stim> V<affect> O<exp>: QUARTER CONFUSE GIRL

The judgment activity was included to offer insight on constructions that participants did not produce spontaneously, but would accept as conventionalized, along with their intuitions as to what was missing from or wrong with each construction that was judged less than acceptable.

3.4 Coding and Analysis

3.4.1 Iterative Meaning-Form-Meaning Analysis

The videos of the elicitation sessions were synced in ELAN for annotation to allow efficient, repeated review so that the analysis relied on the video data rather than representative glosses. Spreadsheets were also used for identifying patterns and as a quick reference.

This project worked from the definition of affective constructions based on the meaning they denote, and sought the forms that convey that meaning. Therefore coding began by identifying constructions which designate a change in a character's emotional state. Constructions were not screened out based on any predetermined form. Some consultants' narratives included passages in which a character's overall demeanor was apparent in a surrogate blend accompanying a verb, such as characters smiling while walking through the park or the clown looking eager while hiding behind the tree. These constructions denoting a character's baseline affect were not included as they did not describe an affective event — an event in which an experiencer undergoes an internal change upon perceiving a stimulus.

After identifying the constructions which denoted affective events, the forms were examined, using the coding described below, and based on that analysis three constructional schema types were identified. The most frequent were constructions which include an affective predicate lexeme. Two other means of denoting an affective event also appeared frequently in these data: consultants made use of constructed action and constructed dialogue to index an affective change. These three schematic construction forms were then examined for the ways that they distinctly construe the affective events.

This dissertation asked what affective constructions ASL uses to describe affective events, and what construal each construction evokes. Starting the investigation from denoted meaning, three forms were identified, and then those forms were considered through a Cognitive Grammar lens to examine how each construction type differs in its construal of the events they reference. The form of each construction type was analyzed with reference to syntactic roles and the depiction therein. The next section explains the coding process for syntactic roles and depiction in these data.

3.4.2 Syntactic Roles

Affective constructions were glossed following conventions in Liddell (2003), and subjects, objects, and topics were identified also following Liddell's definitions. Subjects and objects are encoded as unmarked nominals preceding and succeeding the verb, respectively. The nominals were considered unmarked based on ASL prosodic marking of phrase boundaries, which are typically marked by a change in facial configurations, blinks, and pauses (Dachkovsky et al., 2013). The timing feature linked to the video in ELAN aided in identifying pauses, while the Facial Action Coding System (FACS) supported coding of facial and head movements. FACS designates a numeric value for each movement of the facial muscles and head, and I am a certified FACS coder. Topics are marked by raised brows, an upward head tilt, and an optional pause marking the closing phrase boundary (Liddell, 1980). If none of these phrase boundary markings occurred between a nominal and the verb, the nominal was identified as the verb's subject or object.

A handful of constructions (25) seemed to include serial verb constructions, which has been attested to in ASL (Supalla, 1990). Most of these constructions described either the woman who was afraid of the clown and ran away, or the clown fearing and running away from the angry woman. Nine of the constructions included more than one affective lexeme as the consultant listed a few synonyms describing the character's affect. Because ASL accepts subjectless and objectless clauses, two consecutive clauses may both be composed of only a verb, which could appear to be verb chains. However, these would typically be identifiable as separate clauses by prosodic marking, and thereby distinguished from serial verb constructions. In the cases of constructions in which two verbs formed one prosodic unit, the arguments were coded as shared by the verbs, following the common cross-linguistic pattern of serial verb languages (Aikhenvald, 2006).

There were also a small number (7) of affective constructions in which the consultant began the construction with the dominant hand, and then the dominant hand paused and that sign perseverated while the non-dominant hand produced an affective lexeme as either narrative or constructed dialogue before the dominant hand then continued signing. These instances were analyzed as two constructions: one construction on each hand, interacting, but distinct.

3.4.3 Depiction

Depiction plays a significant role in these constructions as signers used their bodies and the space around them to represent entities and events that were not physically present (Liddell, 2003; Dudis, 2007). Thumann (2010) investigated the means that signers use to mark the start of, or shift between, instances of depiction. She notes features such as "directing signs toward locations, shifting the torso or head position, changing the direction of eye gaze, and changing facial expressions" (Thumann 2011:52). These features supported the coding in identifying when an instance of depiction, most frequently a surrogate blend, was used.

Surrogate blends were categorized as to the parts of the signer's body that were included in the blend. Dudis (2004) explains how a signer can partition the body so that several blends are maintained simultaneously. He provides two distinct examples of a signer depicting a motorcyclist driving up a steep hill. In one depiction, the signer's face and hands blend with the motorcyclist's face and hands in a full upper-body blend. In a different depiction of the same event, the signer's face depicts the |motorcyclist's face| while the signer's hands blend to represent the |motorcycle| riding on the |hill|. This illustrates how the body can be partitioned so that multiple aspects of a blend can be activated and managed by the multiple articulators available in ASL. In analyzing the data for the current project, after an affective construction was identified as incorporating some kind of depiction, the signer's face, eye gaze, body position, and each hand were examined to identify what body partitioning, if any, was used in that instance. This helped distinguish between constructions with full surrogate blends, in which the character's inner thoughts were reported as constructed dialogue, and those with the body partitioned in the blend, so that the face depicted the character's |face| and the hands were not used in the blend, but narrated about the internal affective change.

3.5 Summary of Methodology

Chapter III has described the collection and analysis of these data. The elicitation processes for this study were designed to elicit naturalistic data while also targeting constructions that evoke a construal of affective events with focus on the stimulus. The elicited narratives allowed for analysis of language in use at the discourse level, while descriptions of the clips aimed at eliciting isolated affective constructions. In the judgment task, consultants provided their native intuition assessments about the acceptability of construction types that they may or may not have produced themselves. By asking for an explanation of the reasons why constructions were judged unacceptable, qualitative data was collected to deepen our understanding of ASL structure.

Because the goal of this analysis was to examine utterances that denote affective events, the data set was not limited to individual clauses, but rather was open to including symbolic assemblies made up of more than one clause. The data were also not limited to utterances that used lexemes to reference affective changes, but also included depiction that indexed affective events. Coding and analysis in ELAN enabled repeated consideration of the data itself, while spreadsheets provided a means for identifying patterns at a more schematic level. Chapter IV reports on those patterns with illustrative examples of the construction types identified for all affective event types denoted in the data. Affective events denoting fear appeared in some unique construction types in addition to those described for the other affective lexemes. The unique uses of FEAR/SCARE are reported and discussed in Chapter V.

CHAPTER IV: RESULTS

4.1 Introduction

This project's overarching research question asks what constructions ASL uses to describe affective events, that is those which profile an event in which an experiencer undergoes an internal change upon perceiving a stimulus. Consultants' narratives of the film plot and descriptions of the isolated affective event clips were analyzed to answer this question, and consultants' judgments of proposed constructions provide further evidence of acceptable and unacceptable affective constructions in ASL. This chapter reports the various forms of the affective clauses found in these data and consultants' perspectives on proposed constructions that did not appear in the data.

These data indicate that ASL predominately encodes affective events in two intransitive clauses: the first clause establishes the state or action of the stimulus, and the second clause encodes the experiencer's affective response¹. The focus of this project is the second, the affective clause, and three construction types were identified. Consultants produced 184 affective constructions in their narratives and while describing the affective event clips from the elicitation film. Table 1 illustrates that in almost half of these constructions (89) the affect was profiled by a lexeme, while the other half of the constructions indicated the experiencer's internal change through surrogate blends serving as icons and indexes (Jakobson, 1963) of affective changes. Because previous

¹ The exception to this multi-clause construction is seen with the sign FEAR/SCARE, which is described in Chapter V.





studies primarily focused on syntactic forms associated with specific affective lexemes, they have not included discussion of depicted affective changes. These data were elicited to reflect naturalistic language, allowing ASL users to describe affective events in whatever constructions they chose, and half of the utterances that consultants used to denote affective events depicted the affective changes rather than explicitly naming them with lexical expressions. The large number of constructions indicates highly conventionalize constructional schemas, and so these are reported here.

Consultants produced affective constructions both while retelling the film plot in a narrative and while describing film clips in affective constructions with little surrounding discourse. As seen in Table 1, consultants produced 111 affective constructions in their narratives. The majority of constructions produced in the narratives used either affective lexical predicates (42) or constructed dialogue (40), each accounting for a little over a third of the affective constructions in the narratives. The remaining constructions, a little over a quarter of the constructions in the narratives indexed affect through constructed action (29).

Of the 73 affective constructions that consultants produced while describing the clips, the great majority encoded the affective change with affective predicates, accounting for almost two-thirds (47/73) of the affective constructions in the clip descriptions. Just over ten percent referenced the affect through constructed dialogue (9/73), and about a quarter used constructed action (17/73).

In each construction type, the signer's facial expression indicates what kind of affect the experiencer felt through non-manual marking that precedes the production of the affective lexeme, constructed action, or constructed dialogue. In these data, it appeared that there is a continuum between affective facial expressions serving as either a surrogate blend of the |experiencer's face| or a kind of affective prosodic marking. On one end of the continuum, the signer's eye gaze looks at the |stimulus|. The eye-gaze shift, along with head movement and change in facial expression, indicates enactment of a surrogate blend, and the facial configuration depicts the |experiencer's face|. In contrast, if the eye gaze looks steadily to the addressee, the facial expression functions as affective prosody without a blend. In these data, consultants' eye gaze sometimes shifted between the two spaces (the |stimulus| and the addressee) several times in succession, and so the affective facial expressions seem to serve either or both functions, along the continuum between affective facial expressions are surrogate blend. In any event, the affective facial

expression was produced prior to the affective lexeme, constructed action, or constructed dialogue, and spanned across the affective clause.

The following sections first report further on constructions which included affective lexical predicates, such as psych verbs, and then subsequent sections report on constructions which indicated affective change through constructed action and dialogue.

4.2 Profiled Affective Change: lexical predicates

These data included 89 constructions with affective lexical predicates (See Table 2). Over half (52/89) of these affective constructions were subject-verb clauses, while a bit under a half (36/89) were subjectless clauses, one of which identified the experiencer in a topic phrase, forming a topic-verb affective clause. In all but one case (with FEAR/



Table 2. Affective lexical predicates.

SCARE), the subject of the affective verb encoded the experiencer of the affect. In both the narratives and individual clip descriptions, consultants used subject-verb clauses more frequently than subjectless clauses, but as seen in Table 2, there was a higher proportion of subject-verb clauses used in the narratives than in the descriptions of the clips. In the narratives, consultants produced 27 subject-verb clauses out of the total 42 clauses with an affective lexeme, almost two-thirds of the constructions. While describing the clips, consultants produced 25 subject-verb clauses out of the total 46, just over half of the constructions.

Consultants varied in sign choice for denoting events of anger, confusion, chagrin, and frustration. For example, Figure 15 illustrates three examples of signs used to denote events of anger, and three used to denote events of embarrassment. In total, consultants



FRUSTRATED

BLOW-TOP

SICK-OF-IT





ABASHED

CHAGRINED-DOWN

CHAGRINED

Figure 15. Top row: signs denoting types of anger. Bottom row: signs denoting types of embarrassment. (See Appendix B for full list of affective lexemes in these data.)

produced nearly 30 different lexemes (See Appendix B for a list of affective lexemes by gloss and screen shot).

In both the subject-verb and subjectless clause construction types used with affective lexemes, the affective facial expression is produced prior to and spanning across the affective lexeme, as previously mentioned. In the 52 subject-verb clauses, the affective facial expression begins after the subject is signed and spans across the remainder of the affective clause, as illustrated in Figure 16. Beneath the screen shots illustrating the sign production, lexical items are represented by glosses, blends are described by their |referent|, and if the consultant used body partitioning in a blend, its presence is notated with an X. A line following each element indicates its span in the construction, and vertical bold lines indicate clause boundaries. The segments are labeled with letters for ease of discussion, and the glosses of the relevant clause are bolded.

The participant here is describing an affective event at the end of the film when the clown approaches to scare a girl, who turns around and reveals a quarter in her hand. The clown is confounded that the girl has been able to pick the glued coin off the ground. In the construction denoting this event, the signer enacts a surrogate blend after the subject, which in this case is a pronoun indexing the clown, and the |clown's| facial expression continues across the verb. In Figure 16, the first frame (a) shows the consultant completing the preceding clause with a blend of the stimulus: the |girl| holding the |quarter| up to the |clown| who is included in the blend in the space away from the camera. As the consultant begins the second clause, he makes eye contact with the addressee. While he produces the pronoun, the subject of the affective verb, he points to a

	(a)	(b)	(c)	(d)
	12			
		Contraction of the second seco		
Partitioned:				Х
Blend:	girl and quarter		clown	clown's face + signer's hands
Gloss:		PRO-X ^{→clown}		MIND-TWIST
Translation:	She revealed the quarter.	She (the clown) was confounded.		

Figure 16. Construction with an affective lexical predicate: Subject-Verb.

space representing the |clown| from the |girl's| vantage point, but does not depict the girl's face or body. Then, between the subject (PRO-X) and the verb MIND-TWIST, he uses his face and upper body in a surrogate blend with the |clown|, furrowing his brows, shifting the eye gaze and head to the right toward the space established in the blend to represent the |stimulus|, and producing a gesture of confusion. Finally, the signer's body is partitioned so that the signer's face depicts the |clown's face| in the blend, while the signer's hands are not included in the blend. The hands produce the affective lexeme MIND-TWIST, denoting the character's change in affect, in this case from anticipation of amusement to surprise and confusion.

The 36 subjectless clauses, including the one topic-verb construction, followed a similar pattern, with the exception that there is no manually produced subject during which the affective facial expression is not produced. For example, Figure 17 illustrates three clauses, ending with the affective clause, that a consultant used to describe a scene in which a character is confused when the quarter will not lift off the ground easily. In the

	(a)	(b)	(c)	(d)
		Non of the second secon		
Partitioned:	X			
Blend:	woman's face			woman
			ground perseverates	5
Gloss:	<pre><woman>t PRO-2</woman></pre>	X ^{→ woman} KNEEL	<quarter>t</quarter>	
Translation:	The woman	knelt down.	And the quarter, sh	he tried to pick up.



Figure 17. Affective lexical predicate in a subjectless clause.

first clause, the character who experienced confusion is identified by the sign WOMAN in the topic phrase (a). In the predicate (b) the signer's face depicts the |woman's face| as she blithely kneels to pick up the coin. While the signer produces a topic for the second clause (c) identifying the stimulus with the sign QUARTER, the |woman's face| blend is deactivated by a change in eye gaze and head direction. The non-dominant hand perseverates, continuing to depict the |ground| established in the sign KNEEL, and the predicate of the second clause depicts the woman trying to pick up the quarter (d). The affective clause follows, beginning with the surrogate blend of the |woman's| confused facial expression in (e). In the blend, the |woman| opens her mouth slightly in an expression of surprise and confusion, and after closing it the expression of confusion continues as the signer produces the lexeme PERPLEXED in (f-g).

Both participants of this affective event are made salient in the preceding clauses in the topic phrases: WOMAN and QUARTER. The primary focal participant of PERPLEXED is identified through the surrogate blend with the woman during the production of the affective lexeme. That is, even though the affective clause does not include a subject, the blend with the experiencer maintained during the production of PERPLEXED through the signer's downward eye gaze and head position, her hand movement depicting the woman's hand, and the confused facial expression makes it clear that the experiencer of that affect is the woman, rather than a personified quarter.

Over half of the constructions that consultants produced in describing affective events used affective lexical predicates to profile the experiencer's affect, either with or without a subject. In the remaining affective constructions, discussed next, the affect was not profiled lexically, but rather a depiction of the experiencer's external manifestation of internal response indexed the affective change.

4.3 Indexing Affective Change: surrogate blends

In the 95 constructions that denoted an affective event without an affective lexical predicate, consultants depicted the experiencer's response through a surrogate blend. As



Table 3. Affective constructed action and constructed dialogue.

Table 3 shows, 46 of the depicted responses depicted the experiencer's facial expression and body movements through constructed action alone, and in the other 49 constructions the blend included constructed dialogue to represent the experiencer's assumed internal thoughts.

Depiction without an affective lexical predicate was used more often in the narratives of the film plot than in the descriptions of the clips. Of the 69 instances in the narratives, over half (49) used constructed dialogue to index the experiencer's affective change. In contrast, while describing the isolated clips from the film, consultants produced affective constructed action in 17 constructions, and whereas only 9 included constructed dialogue. In both types of depiction, some utterances lexically specified the character before enacting the surrogate blend while in other instances, the identity of the experiencer was not lexically encoded in the affective clause, but was identifiable through

the blend. The experiencer was less frequently specified by a lexeme with affective constructed action, and more frequently specified with a lexeme with affective constructed dialogue, reported next.

4.3.1 Constructed Action

Of the 46 utterances which denoted an affective event through affective constructed action alone, 29 were produced in narratives and 17 in the clip descriptions. As seen in Table 4, of the 29 constructions in the narratives, almost half (13) explicitly encoded the depicted character as the subject preceding the blend by using pronouns or lexical items such as CLOWN or MAN. The remaining 16 instances of affective constructed action in the narratives did not explicitly identify the character immediately preceding the blend, but rather the character was identifiable through the discourse context and





depiction of the experiencer's reaction with a change in consultant eye gaze and facial expression. In the clip descriptions, the great majority of the constructions (12/17) encoded the experiencer prior to the depiction: 3 times with a pronoun, and the other 9 times with lexical items such as GIRL, CLOWN, and WOMAN.

The construction in Figure 18 illustrates the construction type in which a surrogate blend depicts an experiencer's reaction in a subjectless clause, without a sign introducing the character in the blend. In this instance, the consultant does not specify the identity of the character with any lexical item like WOMAN. Rather, after describing the clown hiding and waiting for her first prank victim, the consultant uses an upright-human classifier (the "1" handshape) denoting the experiencer-to-be walking through the park and sighting the quarter. Though the experiencer was never given a name, she was made salient in the discourse through this depiction in the clauses preceding the affective clause.

	(a)	(b)	(c)	(d)	(e)
		C.	C. C	History	VEN
Partitioned:					
Blend:	experi	encer pulling co	in: expression mor	phs from content	nent to confusion
Gloss:					
Translation:	[She] happily	, tried to pick up	the coin, and then sh	ne was confused wh	nen it was stuck.

Figure 18. Constructed action with no encoded experiencer preceding depiction.

At the start of the affective clause (a), the signer's facial composition is in a neutral expression as she blinks after the preceding clauses. Then she enacts a blend with the experiencer, looking downward at the |quarter| and trying to pick it up (b). The signer's hand lifts as if the |quarter| had indeed come off the ground (c), indicating what the |experiencer| expected, but then returns down to indicate that the coin has not budged (d). As the blend continues, the signer's face changes dramatically from an expression of contentedness (d) to confusion (e), indicating an internal affective change in the experiencer. Of the 46 constructions in which consultants depicted external manifestations of internal affective changes with constructed action like this, nearly half (21) did not explicitly name the experiencer directly prior to the surrogate blend. In contrast, constructions that indicated an internal change through constructed dialogue, discussed next, identified the speaker in the blend in a higher proportion.

4.3.2 Constructed Dialogue

Of the 49 constructions that used constructed dialogue to depicting an affective event, 35 encoded the identity of the character thinking the internal dialogue as the subject. The other 14 constructions were subjectless clauses, without the depicted character being encoded in the clause (See Table 5). Overall there were much fewer instances of affective constructed dialogue in the clip descriptions (9) than in the narratives (40), but the frequency of subjectless clauses was proportional in both elicitation tasks, constituting about a third of the data in each.



Table 5. Affective constructed dialogue.

Experiencer Encoded as Subject No Encoded Experiencer

When the depicted character, the thinker of the internal dialogue, was not lexically encoded, the identity was made apparent through a surrogate blend. The consultant created a blend with the experiencer through a change in eye gaze and head direction toward the |stimulus|, and a change in facial expression corresponding to the affect expressed by the dialogue. For example, the construction in Figure 19 illustrates the construction type in which character's presumed internal dialogue is depicted to index their affective response to the stimulus. As is prototypical of ASL affective constructions, the first clause denotes the action or state of the stimulus. In this case the stimulus, the clown, is identified in the topic phrase, and the predicate depicts her dancing at the woman who is trying to pry the coin off the ground. The affective clause opens with the subject, WOMAN, signed without a blend, and then the consultant moves her torso back and to her right, looking to her left at the |clown|. Her hands are still in the blend

	(a)	(b)	(c)	(d)	(e)	(f)
	S.	Res a				R
Partitioned:						
Blend:		clown trying to scare woman —		woman	internal dialogue —	woman —
Gloss:	<clown>t</clown>		WOMAN		GOSH	
Translation:	The clown tr	ied to scare her.	7	The woman we	as like, "Ugh.	"

Figure 19. Constructed dialogue with an encoded experiencer preceding the depiction.

depicting the woman's hand trying to pry up the coin, and her facial expression denotes aggravation. This character in the film fixated on the quarter, rather than displaying a significant response to the clown. The consultant encoded this subtle reaction with constructed dialogue of one sign, the interjection glossed GOSH, seen in Figure 19. In the film there was no language, so it is clear that any dialogue is not intended as a direct quote. In this and other constructed dialogue instances, the eye contact with the |stimulus| in the blend is broken, adding evidence that the interjection is meant as an internal exclamation, rather than discourse directed to the |stimulus|.

The most common sign produced as constructed dialogue was a sign glossed PSHAW, with 11 tokens. This sign, illustrated in Figure 20 is produced with all fingers gently flexed and spread. It begins with the wrist extended or neutral and often as the wrist flexes, the following sign's handshape begins assimilating onto the end of PSHAW.



Figure 20. Gestural sign glossed as PSHAW

This sign may be considered a gesture of dismissal that non-signing Americans also use as a co-speech gesture; however, because this sign appeared in the same construction types as other instances of constructed dialogue, the instances of PSHAW in these data were analyzed as constructed dialogue. Additionally, despite the fact that none of the actors in the elicitation film produced any gesture similar to this sign, 8 of the 9 consultants produced this sign at least once, suggesting it is a conventionalized form for users of the language.

Most participants used all three construction types, though to varying degrees. The tables below illustrate each consultant's use of lexical affective predicates (Table 6a), constructed action (Table 6b), and constructed dialogue (Table 6c) while retelling the plot in a narrative and while describing affective clips from the film. All of the consultants made use of constructions with affective lexeme predicates in both the narratives and clip descriptions. All except for one consultant (#3) produced affective constructed action in either their narratives or while describing the clips. All consultants produced affective constructed dialogue in their narratives, while three did not use constructed dialogue in describing the clips. Consultants who most frequently used constructed action to depict experiencer's external manifestation of the internal affective change also produced a higher number of affective constructions overall.

4.4 Prospective Attending Sign (PAS)

Recall that the conceptual base of affective events is a complex process including two sub-events: first the experiencer perceives the stimulus, and then the experiencer undergoes an internal affective change. Each of the construction types discussed thus far profiles or indexes the internal affective change in the experiencer. A little over a quarter



Figure 21. The prospective attending sign (PAS)

of the affective constructions (50/184) also included a sign that encodes the experiencer's attention to the stimulus preceding the encoded affective response. This sign is often glossed LOOK-AT and is illustrated in Figure 21.

Though the purpose of glosses is not to represent the meaning of signs, designating an English phrase to represent the form of a sign is likely to direct one's mind toward associating that sign with a meaning and function similar to the English phrase. In this case, the sign serves a grammatical and denotative function distinct from the English verb construction *to look at*, and so to avoid conflating the two languages' meanings, this sign will be glossed as: PAS, representing the label "Prospective Attending Sign." It



Table 6a. Affective Lexical Predicates by Consultant





Table 6c. Affective Constructed Dialogue by Consultant



references an experiencer's act of attending to an object or event and seems to serve a prospective grammatical function of introducing the encoding of an affective change, often through constructed dialogue, similar to the English word *like* to denote frustration or annoyance as in (21):

21) She was like, "Ugh."

The grammatical class of this sign is not yet clear from these data, so further research is needed to clarify it as a verb, auxiliary verb, prefix, clitic, or other.

The sign PAS was included in 50 of the 184 total affective constructions produced by consultants (See Table 7). In constructions produced in the narratives, a third (37/111) included PAS, while in descriptions of the clips PAS was included in less than a fifth of the



Table 7. Proportion of constructions with the attending sign.

constructions (13/73). This may be partially due to the fact that PAS most frequently combined with constructed dialogue, which was relatively rare in the clip descriptions (9 out of 26). Table 8 shows the breakdown of construction types that included PAS in the narratives and clip descriptions. As mentioned, almost half of the tokens of PAS (24/50) appeared with constructed dialogue. The other half of the PAS tokens were split evenly between affective constructed action (13/50) and with predicate affective lexemes (13/50). In narratives, consultants combined PAS with constructed dialogue nearly twice as much as either of the other two construction types.

Just as individual preference varied across consultants with regard to which construction types were used the most, some consultants used PAS much more frequently than others, as Tables 9a-c show. Four of the consultants (1, 4, 5, and 6) produced the vast



Table 8. Construction types with PAS in each task



 Table 9a. PAS with Affective

Table 9b. PAS with Affective ConstructedAction by Consultant







majority of the PAS tokens, while the other five produced PAS in only a few constructions in their narrative and clip descriptions. The only consultant (#2) who did not combine PAS with constructed dialogue produced PAS only twice, with constructed action, once in the narrative and once in the clip descriptions. Consultant #4 produced PAS more than any other consultant, most frequently in the narrative (9/12), with constructed dialogue 7 times with a lexeme and constructed action once each. This same consultant used PAS three times while describing the clips, once with a lexeme, and twice with constructed action. This consultant did not produce any affective constructed dialogue in the clip descriptions. While future research is needed to further clarify motivations behind

these constructions, Chapter VI discusses construals that may be evoked by PAS that could play a part in consultants' choice to include or exclude it in various construction types.

The Figures 22 through 24 present examples of PAS in each construction type. The first exemplifies how PAS combines with an affective predicate lexeme, potentially as a light verb or serial verb. In the constructions shown in Figure 22, the consultant was describing the scene at the end of the film in which the frightened girl returns and exacts revenge on the clown. When the girl sprays the clown with Silly String, the clown is surprised and subdued. In the construction in Figure 22, the affective clause begins with the subject CLOWN (a). Then as the consultant produces PAS (b), her eyes shift toward the | girl|, creating a blend with the clown. The signer uses body partitioning so that the signer's face depicts the backward movement of the |clown's head| and the look of shock on the |clown's face| in (b-d), while the hand is not included in the blend.



Figure 22. PAS with an affective lexical predicate.

The hand signs PAS, encoding the clown's perception of the girl. Then the clown's affective change is identified with the affective lexical predicate ABASHED. The blend with the signer's face begins after the subject and spans the rest of the affective construction.

In affective constructions that denote affective events through constructed action, PAS first appears with a body-partitioned blend, and then a full-body surrogate blend is used. Figure 23 illustrates an example of PAS used with affective constructed action. This construction describes an event in which the clown attempts to scare a woman, but she is not impressed at the clown's antics. The consultant begins the clause by identifying the experiencer as the subject, with WOMAN in (a). Then the signer shifts the eye gaze from the addressee to the |clown| in (b), beginning a blend with the |woman's face|. As with the lexical predicate construction illustrated in Figure 22, the body is partitioned so that the signer's hand produces PAS while his face is in a blend depicting the experiencer's face. The film did not include any language, and none of the characters produced a gesture that



Figure 23. PAS with constructed action.

looks like the sign PAS, so it is clear that in (c) the signer's hand is not depicting the experiencer's hand. After PAS, the consultant produces a gesture made by the character in the film, blending his whole upper-body with the experiencer, depicting the external manifestation of her internal annoyance with the clown.

The most common use of PAS was in combination with affective constructed dialogue. Figure 24 illustrates an example. In this the construction the consultant begins with a subject identifying the thinker of the constructed dialogue with the pronoun indexing the woman (a). Then PAS is produced in a blend in which the signer's face depicts the |experiencer's face|, as with the constructions illustrated in Figures 22 and 23. As the consultant produces the constructed dialogue depicting the experiencer's presumed internal thoughts, the consultant's eye gaze shifts between the addressee (24c) and an area toward, but not at, the |stimulus| in (e). The slightly downward eye-gaze in (e-f) is one that is often used when someone is thinking to themselves. Because the



Figure 24. PAS with constructed dialogue.

constructed dialogue is attributed to the experiencer, I have considered the signer's hands

during the production of the constructed dialogue to be included in the blend, depicting the experiencer's |hands| in the experiencer's mental conception. Thus, the partitioning of the body ends when PAS is finished, and then the whole upper-body is included in a blend for the remainder of the affective construction.

In all three construction types, PAS is produced with a body-partitioned blend in which the signer's face depicts the |experiencer's| facial reaction to the stimulus, while the hand is not included in the blend, but rather signs PAS, denoting the experiencer's mental action of attending to the stimulus. Then the hand either produces an affective lexeme, or enters the blend of the experiencer, depicting the experiencer's actions or thoughts. Chapter VI discusses the denotative meaning and grammatical function of PAS further and suggests roles it may play in the construal of affective events.

4.5 Production Tasks Summary

While previous studies have begun analyses by searching out certain forms, namely psych predicates, this study began analysis focused on the meaning of affective constructions, and identified three broad categories in consultants' narratives and clip descriptions. The most frequent construction type, composing half of the data, used lexical items that have been studied as psych verbs, while the other half of the data conveyed affective events through depiction of the experiencer's actions and supposed internal dialogue. Analysis of constructions that consultants produced partially answers the question of what constructions ASL uses to describe affective events. To further explore this question, this study also presented consultants with proposed affective constructions and asked for their native intuition as to the acceptability of the constructions.

4.6 Judgment Task

Consultants were asked to judge five construction types on a Likert-type scale. A score of 4 indicated full acceptability of the construction and a 0 indicated that the consultant found the construction fully unacceptable. Consultants reported their judgments to the interviewer who recorded them, and to gain a better understanding of the reasons behind the judgments, asked what was wrong with each construction that a consultant judged as unacceptable. Consultants were asked if they could suggest a means of improving poor constructions. This methodology shed a great deal of light on consultants' approaches to judgments, and the qualitative results are reported here to enrich the picture given by the quantitative judgments.

4.6.1 Quantitative Judgments

The overwhelming result of the judgment task indicated that consultants judged most of the suggested constructions as not reflective of natural ASL. Table 10 illustrates the average judgment score for each construction type. The only construction which received an average score higher than a 3 out of 4 was the same one that consultants predominantly produced in their own narratives and clip descriptions: an intransitive clause with an experiencer subject. The corresponding transitive construction, with an experiencer-subject and stimulus-object, averaged the second highest score of



Table 10. Average judgment scores for each construction type.

Cross-Verb Average

acceptability. Both constructions which encoded the experiencer as the object of an affective predicate, one with a stimulus-topic and the other with a stimulus-subject, were deemed unacceptable. Finally, the construction in which a stimulus was encoded in the topic and then reiterated as the subject was judged the least acceptable overall.

It is interesting that the topic-subject-verb construction with a stimulus topic and anaphor subject was judged least acceptable because consultants in the pilot study had produced a handful of this construction type. The difference may be in-part due to the types of predicates and stimuli involved. In the pilot study, consultants produced this construction type with FASCINATE, describing bears as fascinating, and MIND^MIX, describing math as confusing. Based on anecdotal evidence, the lexeme FASCINATE seems often to be used as an interjection or discourse marker following narratives, and it may be that MIND^MIX is used in a similar way. For example someone may relate either a story or a concept, then either the addressee responds with FASCINATE, or the speaker closes the monologue with FASCINATE as a summative conclusion about the narrative. These lexemes did not appear in the current project, so the use of affective discourse markers remains a valuable topic for future studies.

4.6.2 Qualitative Commentary

More telling than consultants' numerical judgments were their comments made while considering the proposed constructions. In assessing the constructions in which the stimulus was encoded both in a topic phrase and as the subject, consultants explained that the construction is acceptable in ASL, but that these utterances did not describe the situations shown in the film clip. The consultants in the pilot study produced the kind of construction type in (22a) to translate sentences like, *The quarter was frustrating*. In contrast, the consultants in this study made it clear that they interpreted the subject as the experiencer, explaining that quarters do not experience emotions. Similarly, but with an animate stimulus, consultants explained that the problem with constructions like that in (22b) was that it was not the clown who was angry or frightened, but rather the women with whom the clown interacted.

22a) <QUARTER>t PRO-Xquarter FRUSTRATE/CONFUSE/EXCITE
#As for the quarter, it was frustrated/confused/excited
b) <CLOWN>t PRO-Xclown PISS-OFF/FEAR
#As for the clown, she was angry/afraid.

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Consultants' interpretation of constructions like those in (22a-b), that the subject of the affective lexeme is the experiencer, exhibit the prototypical nature of ASL affective lexemes as experiencer-subject verbs.

Often consultants signed the constructions to themselves as they considered the acceptability. Two consultants changed the construction as they repeated it to themselves. Rather than a topic-subject-verb construction, these two consultants extended the prosodic topic marking over the pronominal and added a pause preceding the predicates FRUSTRATE and CONFUSE. The altered prosodic marking formed a construction in which the stimulus is established in a topic phrase, and the affective clause is subjectless. Subjectless affective clauses were not uncommon in the production data for this study, accounting for 36 of the 89 affective lexeme constructions. It is unsurprising that consultants unconsciously adjusted the production of the utterances proposed in the judgment task in order to form more acceptable constructions; that is, constructions that do not encode the stimulus as the subject of affective lexemes.

Consultants also adjusted both constructions in which the experiencer was the subject and the stimulus was the object, and in which the experiencer was the object. While considering these unacceptable constructions, consultants repeated the utterance to themselves, but added prepositions between the verb and object. For example, the utterances proposed for judgment followed the structure of that in (23a) and (24a), but consultants added #AT, WITH, #OF, or #THE as exemplified in (23b-c) and (24b).

- 23a) GIRL PISS-OFF CLOWN (original construction for judgment) **The girl angry clown*.
 - b) GIRL PISS-OFF #AT CLOWN (consultant-altered construction)**The girl angry at the clown.*
 - c) GIRL PISS-OFF #THE CLOWN (consultant-altered construction)**The girl was angry the clown.*

Consultant comments made it clear that their judgments appraised their own altered constructions, rather than those signed by the ASL model. For example, consultants who signed (23b) said they understood it, but that it seemed to align with English grammar more than ASL grammar.

The consultant who produced (24c) did not comment on its acceptability. Rather, she explained that this construction did not describe the event in the film because it was the clown who angered the girl, not the other way around. This indicates that the consultant interpreted the subject in (24c) as an agentive stimulus of the affective event, which is common in English affective constructions. This consultant identified as highly bilingual, and so she drew on her second language to create a more acceptable construction by code switching as evidenced by her inclusion of the English determiner #THE.

24a) <CLOWN>_t PISS-OFF GIRL (original construction for judgment) As for the clown, [it] angered the girl.

b) CLOWN PISS-OFF #AT GIRL (consultant-altered construction) *The clown was angry at girl.

Two consultants altered the topic-verb-object construction in (24a) to the subjectverb-prepositional phrase construction in (24b), not including topicalized prosodic marking, and adding #AT. Both consultants then interpreted the subject of the verb PISS-OFF as the experiencer, and explained that it was the girl who was angry with the clown, not the clown who was angry. This consistent interpretation of the subject as the experiencer accentuates the experiencer-subject nature of ASL affective lexemes.

Finally, these data highlight the potentially misleading nature of quantitative judgments. Judgment tasks must incorporate an opportunity for consultants to explain the reasons behind their assessment. For example, when consultants judged a construction as unacceptable, the low judgment scores were often followed by an explanation that more information was needed, such as why the character was frustrated/surprised/confused by the quarter. These comments indicate that the consultants are judging the utterance as unacceptable not from a syntactic perspective, but from a pragmatic, or logical, point of view. This also speaks to language's natural state being in discourse rather than isolated sentences.

Additionally, while creating the elicitation stimulus for this project, we tried to control for a number of factors, in order to focus the analysis on word order. However, consultants consistently judged constructions as unacceptable related to depiction rather than syntax. The utterance in Figure 25 illustrates one utterance that, based on word order identified in this project, would be expected to elicit a high judgement score. However, because the model was not signing naturally, but rather under explicit directions regarding word order, non-manual marking, and sign choices, the production is not typical of her signing. The affective facial expression in this example is uncommon because the half-furrowed brows (FACS AU1+4) and tightened lips and neck (AU20+21) are not typically associated with excited facial expressions. Consultants commented that the affect did not fit the scene in the film, and so they designated it a lowered judgment score.



Figure 25. Sample construction used for judgment task.

Consultants repeatedly explained that there were wrong or not enough facial expressions, that the role shifting was not natural, or that the character's action, such as struggling with the quarter, needed to be included in the construction to make the meaning clear. These qualitative data give a much more clear picture of the native intuition than the quantitative data alone, and offer guidance for future studies that choose to use judgment tasks.

CHAPTER V: FEAR AND SCARE

The results reported so far have described the constructions that consultants used for over two dozen different affective lexemes in ASL. The sign often glossed FEAR or SCARE, illustrated in Figure 26 appeared in the constructions already described, as well as two others in which the other affective lexical predicates did not occur. Previous studies have accounted for this difference by claiming that this sign FEAR/SCARE is not a psych verb, but rather an action verb (Kegl, 1990; Meir et al., 2006), and this may be a correct evaluation. However, because the definition of affective constructions followed for this study includes any construction which denotes affective events, this sign was included in the current analysis.



Figure 26. FEAR/SCARE

As with the other types of emotions, some affective constructions that referenced fear did not include an affective lexeme, but rather the experiencer's internal change was indexed through depiction. Table 11 illustrates the construction types that consultants used to reference fear, whether to denote a real or imagined fear event or in a relative



clause. Consultants produced 68 constructions referencing fear, 60 of which included the lexeme FEAR/SCARE with either the experiencer or stimulus encoded as subject. The remaining 8 denoted an affective event through constructed action or constructed dialogue. The sign FEAR/SCARE was by far the most frequent affective lexeme in these data, which is unsurprising since fear was the most common emotion displayed in the elicitation film plot. Perhaps due to the elicitation process, in addition to being the most frequently used affective lexeme, FEAR/SCARE also appeared in constructions types that consultants did not produce with other affective lexemes. Fifteen of these referred to an imagined fear event, and 7 appeared in a relative clause identifying the girl who was afraid of the clown. This chapter reports on the construction types consultants used while referencing fear.

Table 11. Construction types that referenced fear

5.1 Fear events

The majority of constructions in these data that referenced fear (46/68) denoted affective events, similar to the other affective lexemes in these data. As can be seen in Table 12, consultants did not make use of constructed dialogue to depict characters' experience of fear, with one exception. One consultant produced an instance of constructed dialogue in a blend with the clown, depicting the clown's surprised face with constructed dialogue exclaiming that the girl was afraid.

Consultants much more frequently used the affective lexical predicate FEAR/ SCARE rather than affective constructed action in denoting fear events. In constructions with FEAR/SCARE that consultants produced in narratives, 17 were in the same construction types reported for the affective lexical predicates: a stimulus clause followed



Table 12. Constructions denoting fear events.

by an intransitive affective clause in which the experiencer elaborates the trajector role, as in Figure 27. In this example the consultant is describing the scene in which the clown jumps out to surprise a girl, but rather than laughing, the girl screams and runs away. The first clause is composed of the subject CLOWN and a predicate depicting the clown jumping out from hiding. The affective clause follows, encoding the experiencer with the subject GIRL and the affective lexeme FEAR/SCARE. This two clause construction was also used with 14 of the 18 uses of FEAR/SCARE in the clip descriptions.



Figure 27. SCARE/FEAR in the stimulus-clause, subject-verb affective clause construction.

The remaining three instances of FEAR/SCARE in the narratives and four instances

in the clip descriptions differed with respect to trajector and landmark roles. Two consultants produced intransitive stimulus-clauses, as in (25a). One of these consultants

also used the construction in (25b), encoding the experiencer as the object of FEAR/SCARE

to explain that the clown did not scare the man.

Then the clown tried to scare [the person].
b) NOT SCARE PRO-X→|man| NOT LITTLE-BIT NOTHING
The man was not scared in the slightest.

The three utterances that used the construction types demonstrated in (25) were the only constructions denoting fear events with a stimulus subject or an experiencer object in narratives. The remaining four stimulus-subject instances of FEAR/SCARE in the clip descriptions are described in the next section that reports on constructions used to denote imagined fear events. In constructions referring to a character's imagination of a fear event, rather than the event itself the stimulus was regularly encoded as the subject, or the experiencer as the object.

5.2 Imagined fear events

The second unique construction type that consultants used with FEAR/SCARE references a fear event in an indirect way. This construction type combines FEAR/SCARE with another lexical predicate such as TRY, WANT, PLAN, WHY^NOT or READY, and describes the clown's desire or intent to scare people. Six different consultants produced 14 tokens of this construction type. The fifteenth construction type appeared only once; in this isolated construction the consultant signed CLOWN WANT TRICK WITH FEAR, combining WANT not with FEAR, but rather with the action verb TRICK. The concept of fear was included as a noun in a prepositional phrase elaborating on the concept of tricking people. This construction evokes a similar conceptualization to the others

referencing the clown desiring to scare people, though the consultant seemed to hesitate after producing TRICK. This hesitation, and the fact that this construction type only appeared once suggests it may not be a conventionalized construction. The other 14 constructions referencing imagined fear events were similar to one another in form.

As Table 13 shows, six of the constructions encoded the stimulus as the subject, while the other eight were subjectless clauses, the clown being salient from the preceding discourse and depiction. Three of the clauses with a stimulus subject were intransitive. In these, consultants identified the clown as the subject, and then after producing FEAR/SCARE, began a blend depicting the clown attempting to scare someone. These clauses were like the stimulus clauses that preceded affective clauses elsewhere in the narratives or clip descriptions, such as those shown in Figures 16 and 27. The difference being that



Table 13. Constructions evoking multiple mental spaces.

in these cases of constructions evoking an imagined fear event, there is no affective

clause following it with an experiencer subject. However, given the film plot and narratives, it is clear that the desire of the clown was for an internal affective change of fear in her imagined victims. This indicates that consultants used FEAR/SCARE in these intransitive constructions not only to reference the clown's actions, but the result of an affective change in the perceiver of those actions, the experiencer.

The other three stimulus-subject clauses were transitive, encoding the experiencer as the object of FEAR/SCARE. Figure 28 illustrates an example of the construction type in which FEAR/SCARE combines with another lexeme and includes both a stimulus subject and experiencer object. In this example the consultant describes the scene after the clown unsuccessfully tries to scare the angry woman. The clown practices making scary faces, hoping to scare the next person. The consultant did not accompany the construction with an affective facial expression, which was uncommon in these data. The non-affective expression could have been related to distraction as he was checking notes that he had



Figure 28. SVO construction with FEAR/SCARE.

taken while watching the film, or it could indicate that this construction type was

borrowed from English, since this consultant identifies as bilingual. When he looked away from his notes and back at the addressee, he restated the same information, elaborating on the clown's actions through depiction before moving on in the narrative.

Four of the subjectless clauses were composed of only verbs and constructed action, with no encoded subject nor object, similar to the subjectless clauses seen with other affective lexical predicates. The remaining four subjectless clauses included an experiencer object. Figure 29 illustrates an example of an experiencer-object subjectless clause with FEAR/SCARE. In this part of the film being described, the clown has just attempted to scare the man, who has rejected her antics and walked away. The consultant encoded the clown's affective response to the man using an affective constructed dialogue clause with a subject pronoun identifying the clown. Then he depicted the clown returning to her hiding place behind the tree with renewed determination. The clause with FEAR/SCARE begins with constructed action of the clown practicing her



Figure 29. Experiencer-object subjectless clause with FEAR/SCARE.

intimidation techniques (29a). Then the clause is subjectless, with the two verbs TRY and

FEAR/SCARE, followed by the experiencer-object PEOPLE.

In the narratives and clip descriptions, consultants produced 14 constructions that combined FEAR/SCARE with another verb, indicating the clown's desire for an affective event. These constructions do not directly denote an affective event in which an experiencer's perception of a stimulus leads to an internal affective change. Rather, this construction type profiles the clown's act of wanting, intending, or planning. The clown's desire is for an affective event to occur in which she is the stimulus and other people are the experiencers. The two predicate lexemes combine to evoke a semantic conception which includes a fear event conceived in the mind of a conceived person. Figure 30 draws on Fauconnier's (1985, 1997) mental space theory to diagram the mental spaces evoked by constructions like those in Figures 28 and 29. In the mental space, the clown conceives a desire space. In the desire space, the clown envisions herself frightening



Figure 30. Mental spaces evoked by imagined fear event constructions.

another person. In this way, the construction indirectly references a fear event. Of the 67

clauses that reference fear, 14 encoded a fear event imagined by a character rather than one witnessed by a consultant. Combined with the 38 constructions directly denoting fear events with the FEAR/SCARE, therefore, 52 of the 59 constructions with FEAR/SCARE reference events, either real or imagined.

5.3 Adjectival relative clause

The remaining 7 tokens of FEAR/SCARE in these data appeared in relative clauses identifying the girl who was first scared of the clown and then who returned at the end of the film and sprayed the clown with Silly String. Though this construction type was only produced seven times, each of these instances was produced by a different consultant, indicating it may be somewhat conventionalized in the language community. Figure 31 illustrates one example.

As the consultant came near to concluding her narrative, she told of the frightened girl returning. The clause begins with a complex subject, and during the relative clause FEAR/SCARE ESCAPE, the consultant tips her head up and squints her eyes. Then at the end of the relative clause, she lowers her chin and opens her eyes back up to produce the predicate, #BACK. The non-manuals she and other consultants used while referencing this character with FEAR/SCARE have previously been identified as marking relative clauses in ASL (Liddell, 1980). Each of these constructions began with identifying the final approaching character as WOMAN or GIRL and then followed with the relative clause. Five of the seven consultants began the relative clause with the relative pronoun typically

		(a)	(b)	(c)
--	--	-----	-----	-----

			Res
NMM:			
Gloss:	THAT	SAME	GIRL
Translation:		That same girl,	



Figure 31. FEAR/SCARE in a relative clause describing returning character.

glossed WHO while the other two marked the phrase boundary with a pause. After the relative clause, consultants continued the narration, describing the character's approach. These constructions demonstrated quite a bit of variability in word choices and prosodic marking, potentially indicating a lack of conventionality in this construction. However, almost every consultant produced some form of this relative clause. Both of the consultants who did not produce a similar construction did not include this scene in their narratives; one ended the narrative after the angry woman scared the clown, while the other did not identify the final girl as the same character from earlier in the film. While FEAR/SCARE was the only affective lexeme to appear in a relative clause in these data, that is likely due to the fact that the girl who was scared was the only character, aside from the

clown, who appeared in more than one scene. It is reasonable to hypothesize that the same construction types seen here with FEAR/SCARE would be used with other affective lexemes if other characters returned in the film. Future studies can investigate the extent to which affective lexemes are selected to identify characters.

5.4 FEAR/SCARE Summary

The majority of constructions that consultants used to refer to fear were similar to those used with other affective lexemes. However, FEAR/SCARE stood out in these data in that it also accepted stimulus subjects and experiencer objects, which none of the other lexemes did. The other unique constructions in which FEAR/SCARE appeared may have been due to the elicitation stimulus film itself, rather than something unique to FEAR/ SCARE. The constructions with the unique syntactic forms varied greatly and call for further research investigating the degree to which these construction-types are conventionalized in the ASL community, and how the various forms evoke various construals. If the unique constructions seen in these data are highly conventionalized, this could indicate potential linguistic transfer from English, since a large percentage of ASL users are bilingual; alternatively, the seemingly special encoding might reflect a particular regard for the emotion of fear, as a key emotion for survival. Further investigation into affective signs in ASL may reveal to what extent these constructions are unique to FEAR/ SCARE and offer evidence toward the source of the apparently unique characteristics of this sign.