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## Rendering Depiction: A Case Study of an American Sign Language/English Interpreter

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## Rendering Depiction: A Case Study of an American Sign Language/English Interpreter

### Cover Page Footnote

First, I thank Dr. Emily Shaw for her steady guidance throughout this project. I also thank Dr. Brenda Nicodemus, whose counsel was indispensable in the development of this study. I wish to thank James LaHaye, the signer in the American Sign Language source text, as well as Joyce LaHaye, Dr. Keith Cagle, and Mary Luczki, who assisted me in ensuring the accuracy of my transcriptions of the American Sign Language source text. I am indebted to Jenny Ogline, who assisted in the editing of this manuscript. Finally, I thank Roberto Santiago for his participation in this study.

# Rendering Depiction: A Case Study of an American Sign Language/English Interpreter

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## ABSTRACT

In this study, the work of an American Sign Language/English interpreter was video-recorded and then analyzed to describe the interpreter's rendering of American Sign Language depiction from American Sign Language into spoken English and from spoken English into American Sign Language. Results indicate that interpreters navigate the complex cognitive and linguistic task of rendering various types of American Sign Language depiction between both languages. The data also suggest that syntactic input may not be the only factor in an interpreter's decision-making processes when rendering depiction; rather pragmatic considerations appear to be a major contributing factor. This study serves as a primer to future investigations into examining the rendering of signed language depiction as a possible directional effect in bimodal interpreters.

## INTRODUCTION

Whether interpreters work into their native or non-native language is a concept known as *directionality* (Godijns & Hinderdael, 2005). Bimodal interpreters, who work between languages of different modalities (i.e., speech and sign) and learn a signed language in adulthood often report a preference to work from their native language into their non-native language (Nicodemus & Emmorey, 2013). This stands in contrast with standard practice among many unimodal interpreters, who work between languages of the same modality (i.e., speech), to work from their non-native language into their native language (Bros-Brann, 1976). While the work of unimodal and bimodal interpreters is similar, a number of issues may be raised due to differences in modality (e.g., constraints posed by differing phonological systems). One possible factor that may impact both the preference and skill of bimodal interpreters with regard to directionality is how they render *depiction*, a linguistic feature in which a signer or speaker makes a concept visible in some way other than through lexical items alone. Studies have shown that second language learners of American Sign Language, including many American Sign Language/English interpreters, experience challenges with depiction, both in comprehending it in an American Sign Language source text and in producing it in an American Sign Language target text (see Quinto-Pozos, 2005; Thumann, 2010; Wilcox & Wilcox, 1991). The linguistic and cognitive task of interpreting is complex and demanding (Christoffels & de Groot, 2005), as is rendering signed language depiction in both language directions.

Bimodal interpreters face the unique challenge of rendering signed language depiction between a signed and spoken language. In the situation in which American Sign Language and English is the language pair, interpreters must first comprehend the instances of depiction that are produced by American Sign Language users, process its meaning, and interpret this information

into a representative spoken English target message. Second, interpreters must comprehend the message conveyed by English speakers and then, as appropriate, accurately incorporate depiction into their interpretations.

In this study, I describe how American Sign Language/English interpreters render American Sign Language depiction in their work. Specifically, I focus on how frequently an interpreter renders depiction, which types of depiction they may render, and what factors may drive their decision-making processes. I provide a qualitative analysis of the work of one interpreter and discuss the implications of how he rendered American Sign Language depiction, and I also suggest possible factors influencing the interpreter's decision-making processes when rendering depiction. This study provides a first step in determining whether how an interpreter renders American Sign Language depiction in both directions may guide their directional preference and skill.

While it is possible that specific linguistic features and related cognitive aspects may be factors in determining the directionality preference and skill of interpreters, the ability to render this particular linguistic feature – depiction – has not yet been specifically examined. Before exploring how interpreters' actions and abilities may contribute to a directional effect, it is first necessary to understand what interpreters do.

## LITERATURE REVIEW

This section offers a review of the literature by defining and exploring key concepts in the study, including *depiction* and *directionality*. These concepts are integral to the design of this study.

### DEPICTION

American Sign Language users often employ what is sometimes called *role playing* or *role shifting* by laypersons and interpreting practitioners (Padden, 1986). Winston (1991) and Metzger (1995) describe such complex linguistic constructions as *constructed action* and *constructed dialogue*, following the work of Tannen (1989) in describing reported speech in spoken language constructions. An American Sign Language user may, for example, use constructed action to visually represent an individual flailing their arms, as in Figure 1. Similarly, a signer may utilize constructed dialogue to visually represent the dialogue in an exchange between two interlocutors, as in Figure 2.

Constructed action and constructed dialogue are just two of a number of types of *depiction* that occur in American Sign Language discourse (Dudis, 2007). Depiction has been defined as the ability of words or signs to “visually represent semantic components” (Dudis, 2007, p. 1). Dudis later expands the concept of depiction, defining it as “(a) any act in which one or a set of concepts are made manifest in the discourse setting, or (b) the product of this act” (2011, p. 4). On a more global level depiction in signed languages occurs when a signer visually represents a concept in some way (Thumann, 2010). Linguists studying signed languages continue to research and describe depiction in rapidly expanding research (see for example Dudis, 2011; Ferrara, 2012; Ferrara & Halvorsen, 2017; Lu & Goldin-Meadow, 2018; Rogers, 2012).

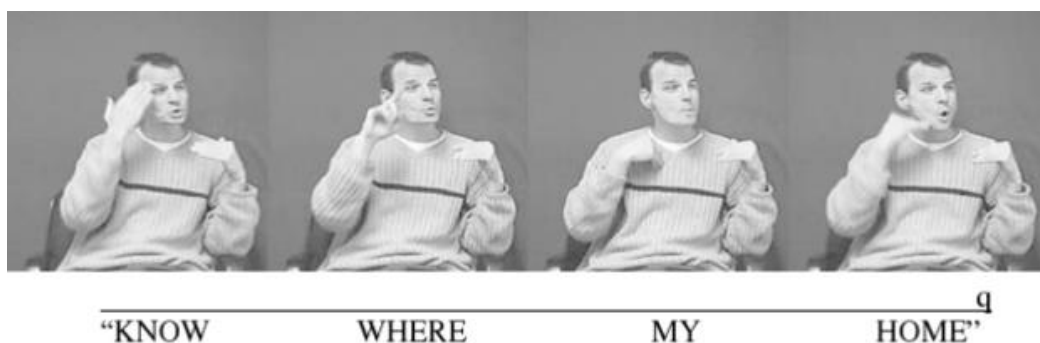
### Figure 1

*A signer produces constructed action by depicting an individual flailing both their arms (from Liddell, 2003, p. 156). Copyright © Scott K. Liddell 2003. Reproduced with permission of the Licensor through PLSclear.*



**Figure 2**

*A signer shifts their body and eye gaze toward an imagined interlocutor to depict one person asking a question of another (from Liddell, 2003, p. 159). Copyright © Scott K. Liddell 2003. Reproduced with permission of the Licensor through PLSclear.*



While depiction is not a linguistic phenomenon unique to signed languages (Dudis, 2011), this study focuses specifically on American Sign Language depiction. Users of spoken languages may also employ depiction when they use physical gestures with their hands and arms. In Figure 3, a speaker uses their right arm to depict an individual pouring a cup of tea. The speaker's use of spoken English is accompanied by the depiction they produce through gesture.

Anecdotally, many second-language learners of American Sign Language, including American Sign Language/English interpreters, report difficulty in mastering depiction, particularly its production. For second-language learners of American Sign Language, depiction is challenging to both comprehend and produce (Thumann, 2010). Studies have noted specific challenges with depiction that second-language learners of American Sign Language face, such as producing classifiers<sup>1</sup> and constructed action (Quinto-Pozos, 2005; Wilcox & Wilcox, 1991).

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<sup>1</sup>*Classifiers* were first described by Frishberg (1975) as “hand-shapes in particular orientations [used] to stand for certain semantic features of noun arguments” (p. 715). A *classifier predicate* refers to the entire sign when a classifier

### Figure 3

*By pulling back their right arm, a speaker depicts an individual pouring a cup of tea.*



In a repeated measures study, American Sign Language/English interpreters were asked to interpret two texts in both language directions on two separate occasions, twelve years apart (Rudser, 1986). The interpreters used a greater number of classifiers in their later interpretations, suggesting that an increased usage of classifiers may indicate a higher level of American Sign Language fluency. Similarly, a study of mothers with deaf children found that the mothers who were native signers used a greater variety of classifiers than did non-native signing mothers; the non-native signing mothers were also found to make more mistakes than the native signing mothers in their production when attempting to use classifiers (Lindert, 2001).

As the majority of American Sign Language/English interpreters are second-language learners of American Sign Language (Quinto-Pozos, 2005; Taylor, 2002), it is conceivable that many interpreters may also struggle to master aspects of depiction such as classifier production. Thus, to date, the literature on the comprehension and production of American Sign Language depiction by both native and non-native signers would suggest that interpreters who are non-native signers may also struggle with depiction.

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is used (Liddell, 1977). All classifier constructions are considered to be depictive and have been called *depicting verbs* (Liddell, 2003).

## TYPES OF DEPICTION

American Sign Language users frequently produce depiction in discourse. In an examination of an American Sign Language educational video series, it was found that native American Sign Language users produce depiction an average of 20.44 times per minute (Thumann, 2010). Such instances of depiction may take a variety of forms, categorized according to their linguistic structure (Dudis, 2007). To classify the various forms of depiction, I used a coding system developed by Dudis to identify and categorize instances of depiction into thirteen distinct types, described below.

### *Type A: Constructed dialogue*

Type A refers to constructed dialogue, described earlier. Constructed dialogue does not necessitate a conversation between two or more imagined characters. Constructed dialogue may also reflect one's own *inner speech* (Tannen, 1995), or internal thoughts, rather than something that was physically spoken or signed.

### *Type B: Constructed action*

Type B refers to constructed action, also described earlier. A signer may use classifiers when producing constructed action. Suppose a signer is narrating their experience in driving a vehicle. They might sign CAR, followed by turning their hands similar to the way one might handle a steering wheel, as in Figure 4. Such a construction is called a *handling classifier* (Dudis, 2007) as it is used to depict an individual handling a particular object, such as a steering wheel, with the hands.

### **Figure 4**

*In the left frame, a signer produces the sign CAR, followed by producing constructed action by employing a handling classifier in the second frame.* From "The Body in Scene Depictions," by P. Dudis in C. B. Roy (Ed.), *Discourse in Signed Languages*, 2011, p. 9, Gallaudet University Press. Copyright 2011, Gallaudet University Press. Reprinted with permission.



### *Type C: Object moving within a scene*

Signers often depict objects moving within a scene. Scene depictions must contain or have access to participants and a setting (Dudis, 2011). To depict an object moving within a scene, a signer might depict a droplet of water falling from a faucet. This could be depicted by the signer holding a downturned S-hand in front of their body, followed by flicking their index finger outward toward the ground, as in Figure 5.

#### **Figure 5**

*A signer depicts a droplet of water falling from a faucet by flicking their index finger toward the ground (from Dudis, 2004, p. 233).*



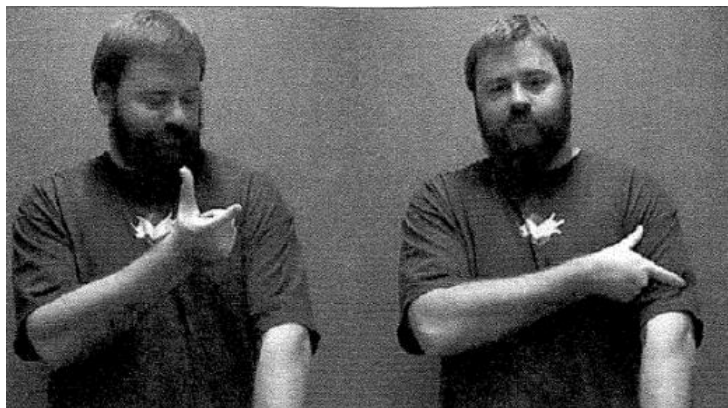
### *Type D: Non-moving object within a scene*

Signers may also make use of depiction to describe non-moving objects within a scene. A signer may produce this form of depiction when describing the location of a tattoo on an arm. This could be accomplished by placing an L-handshape classifier on the arm, thereby depicting a tattoo at a particular location via a contact root (Valli & Lucas, 1992), as in Figure 6.

#### **Figure 6**

*A signer produces an L-handshape classifier and places it on his arm to depict the location of a tattoo . From “The Body in Scene Depictions,” by P. Dudis in C. B. Roy (Ed.), *Discourse in Signed Languages*, 2011, p. 27, Gallaudet University Press. Copyright 2011, Gallaudet University Press. Reprinted with permission.*





Depiction of non-moving objects in a scene may also be accomplished via the use of *fictive motion*, in which a signer's movement does not correspond to actual movement, but rather the appearance of a stationary object (Talmy, 2000). A signer might use fictive motion to depict a line of trees in a forest. Starting with both hands in the 4-handshape configuration in front of their body, the signer could move their hands away from one another to the outside of their body, as in Figure 7. While each of their hands would physically move outward to depict the line of trees, the motion would be fictive in that it describes a *line* of trees, rather than *movement* of trees.

**Figure 7**

*A signer depicts a line of trees by moving their hands apart from one .* From “The Body in Scene Depictions,” by P. Dudis in C. B. Roy (Ed.), *Discourse in Signed Languages*, 2011, p. 31, Gallaudet University Press. Copyright 2011, Gallaudet University Press. Reprinted with permission.



***Type E: Entity associated with the signer's body***

Type E refers to depiction in which a signer depicts an entity associated with or connected to the signer's own body. Suppose a signer is narrating their experience riding a motorcycle. Through the use of a real-space blend<sup>2</sup>, the signer could then produce the 3:CL-VEHICLE-go-up-hill

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<sup>2</sup> For an in-depth review of conceptual, real-space and grounded blends, see Dudis (2002, 2004), Fauconnier and Turner (1996), and Liddell (1998, 2003).

classifier to depict the motorcycle moving up a hill, as in Figure 8. The 3:CL-VEHICLE classifier depicts the |motorcycle|<sup>3</sup> *associated* with the body of the |motorcyclist| aboard.

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<sup>3</sup> Grounded mental-space elements are conventionally noted with the use of |brackets| (see Dudis, 2002).

**Figure 8**

*A signer depicts a scene in which a /motorcycle/ associated with the body of the /motorcyclist/ moves up a /hill/ (from Dudis, 2004, p. 225).*



***Type F: Temporal aspectual form of a sign***

Type F refers to depiction in which a signer produces a sign in a temporal aspectual manner. Consider, for example, a signer who is recalling a conversation they had with another person. They might say that they got someone's attention and then explained something to them by signing TAP-SHOULDER to-EXPLAIN. When they sign a temporal aspectual form of the sign to-EXPLAIN, they shift their body slightly to the side, as in Figure 9. While this might at first appear to be an instance of constructed dialogue, it is not, as to-EXPLAIN serves to depict what they did in the exchange: explain something to another person.

**Figure 9**

*A signer produces the sign TAP-SHOULDER, then shifts their body and produces a temporal aspectual form of the sign to-EXPLAIN, depicting the act of explaining to another individual (from Dudis, 2007, p. 5).*



### *Types G, H, and I: Depiction outside signer's vantage point*

When signers produce depiction in discourse, they may depict scenes and objects from a variety of vantage points, or “the position from which a scene is viewed” (Langacker, 1987, p. 123). Signers may also produce depiction that occurs outside their own vantage point. When signers depict something outside their own vantage point, the resulting instance of depiction can be described as compressed (Type G), life-sized (Type H), or enlarged (Type I).

A signer might produce depiction of a compressed scene by depicting an [individual] watching [television] (Dudis, 2011). Using the *depicting space* (Liddell, 2003) in front of their body, the signer might use their index finger to represent the individual and place their open palm in front of the index finger to represent the television. Because an individual and television are both larger than an index finger and a palm, this depiction is compressed. Life-sized and enlarged instances of depiction outside the signer's vantage point are constructed in much the same way, with the only difference being related to the size of the depiction relative to their subjects. For example, were a signer to depict the structure of an [atom], the instance of depiction would be enlarged in that atoms are much smaller than the hands of the signer. Similarly, a signer could produce a life-sized instance of depiction by employing a flat palm to depict the screen of a [smartphone], as the palm of the signer's hand is roughly similar in size to that of a smartphone.

### *Type J: Planar depiction*

Another form of depiction produced by signers may be described as depiction that makes use of a metaphorical two-dimensional plane in the signing space. This has been described as a *calendar plane* (Engberg-Pedersen, 1993), but a signer may also use such a plane to depict a map or a hierarchy of categories (Dudis, 2011). Such depiction may be used to describe, for example, groups of individuals. Suppose a signer is describing graduating classes, from the class of 1981 to the class of 1986. The signer might refer to the class of 1981 by signing 81 toward the upper right of their signing space, as opposed to the citation location in front of their right shoulder, as shown in Figure 10. The signer could then exploit the two-dimension plane to describe the subsequent classes of graduates by producing the following numbers (82, 83, 84, 85, and 86) lower on the plane.

**Figure 10**

*Making use of the two-dimensional plane, a signer produces the sign 81 (referring to the [class of 1981/]) toward the upper right of their signing space (from Liddell, 2003, p. 203). Copyright © Scott K. Liddell 2003. Reproduced with permission of the Licensor through PLSclear.*



### *Type K: Timeline/linear depiction*

Signers may also make use of metaphorical timelines or other linear depictions in their signing space, referred to as a sequence line (Engberg-Pedersen, 1993). For example, a signer might exploit a metaphorical line in their signing space to refer to a “number of disciplines.” This might be accomplished by the signer producing the sign DISCIPLINE toward one side of the signing space and then replicating the sign several times while moving the production of the signs toward the other side of the signing space, as in Figure 12. This is considered to be depictive in that a metaphorical line has been exploited in front of the signer’s body.

### **Figure 11**

*A signer produces linear depiction by signing DISCIPLINE toward one side of their signing space and then replicating the sign several times while moving their hands across a metaphorical line in the signing space.*



### **TYPE L: BUOY**

Liddell (2003) writes:

Signers frequently produce signs with the weak hand that are held in a stationary configuration as the strong hand continues producing signs. Semantically they help guide the discourse by serving as conceptual landmarks as the discourse continues. (p. 223)

Liddell (2003) further describes three types of depictive buoys: list buoys, fragment buoys, and depicting buoys. Signers produce *list buoys* to refer to entities by pointing to fingers on their non-dominant hand. By way of example, a signer discussing two topics might use the TWO-LIST buoy to refer to an entity on each finger, as in Figure 12.

**Figure 12**

*A signer produces the TWO-LIST buoy to depict two entities and then refers to the first entity by pointing to the index finger of the TWO-LIST buoy (from Liddell, 2003, p. 224). Copyright © Scott K. Liddell 2003. Reproduced with permission of the Licensor through PLSclear.*



*Fragment buoys* are those which are “created on the fly from a fragment of a just produced sign” (Liddell, 2003, p. 249). Suppose a signer is giving a lecture about cultural differences between Deaf and hearing people. After signing CULTURE, the C-handshape of their dominant hand may remain in place momentarily, itself a fragment of the whole sign. While the C-handshape is still in place, they may point to it with their non-dominant index finger, as in Figure 13. This is a fragment buoy in that the buoy represents ‘culture.’

**Figure 13**

*A signer produces the sign CULTURE, with the C-handshape remaining in space. She then points to the C-handshape with her non-dominant hand (from Liddell, 2003, p. 249). Copyright © Scott K. Liddell 2003. Reproduced with permission of the Licensor through PLSclear.*



The final type of depictive buoys are called *depicting buoys*. They are so named because they may be produced by signers when depicting scenes. Suppose a signer is describing a scene in which a cat is lying on a fence. They may first depict the [fence] in the neutral space in front of their body by meeting both hands in the 4-handshape classifiers in front of their body and moving them toward the outside of her body. They might then use their dominant hand to sign CAT, while their non-dominant hand remains in place, depicting the stationary [fence]. The signer might use the

stationary 4-handshape to serve as a “conceptual landmark” (Liddell, 2003, p. 223) of the |fence| within the scene. They might then use a classifier to show the |cat| seated atop the |fence|, as shown in Figure 14. In the figure, a signer first depicts a |fence| by producing the 4-handshape classifier with both hands and moving her hands in the shape of a fence. The signer’s non-dominant hand remains in place, still producing the 4-handshape classifier. She then signs CAT and depicts the |cat| sitting on top of the |fence| by producing a classifier representing a seated animal in the final image.

**Figure 14**

*A signer depicts a |cat| seated atop a |fence| (from Dudis, personal communication).*

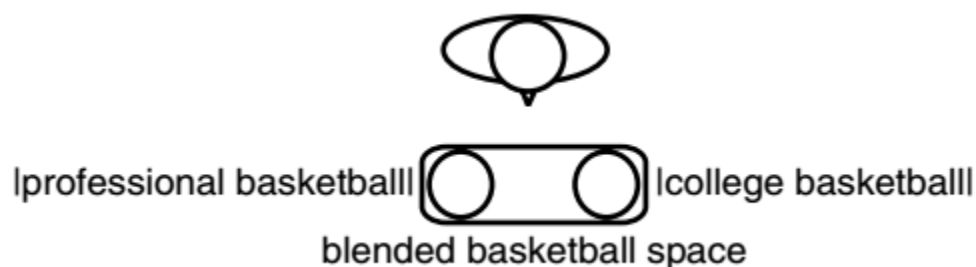


### *Type M: Token*

Tokens are non-topographical elements of blended space in front of a signer’s body (Liddell, 2003). A signer may produce tokens, for example, when contrasting two or more abstract topics. Suppose a signer is comparing and contrasting college basketball with professional basketball. When describing aspects of college basketball, they may move their signing space to the left side of their body, and they may move their signing space to the right side of their body when describing professional basketball, as illustrated in Figure 15. The location of each of these items represents a token space in that they are non-topographical elements used to organize discourse in space.

**Figure 15**

*A visual representation of the signing space of a signer discussing two topics: college basketball and professional basketball, one located in a token space to the left of the signer’s signing space, the other located to the right (from Liddell, 2003, p. 192). Copyright © Scott K. Liddell 2003. Reproduced with permission of the Licensor through PLSclear.*



In sum, each type of depiction described here has been identified as occurring in natural American Sign Language discourse. Signers regularly produce these forms of depiction in their daily conversations when communicating directly with other signers. However, depiction does not exist within a vacuum, appearing only when two signing individuals are communicating. Instances of depiction are also produced by signers when they communicate with non-signers through an interpreter. When this occurs, the interpreter must, of course, render the depiction in both directions between a spoken and signed language. Next, we explore directionality in interpreting, as well as how depiction may be relevant to interpreters with regard to directionality.

#### INTERPRETING AND DIRECTIONALITY

Scholars and practitioners of interpreting are actively engaged in discussions regarding the preference and quality of interpretations dependent upon the direction in which interpreters work. Some have argued that interpreters should only work into their native language, in order to create more effective and natural interpretations (Donovan, 2003; Seleskovitch, 1968). On the other hand, Marmaridou (1996) has argued the assumption that interpreters produce higher quality interpretations when working into a native language should be challenged and empirically examined rather than assumed to be true. It has been argued that interpreters perform better when working into their second language, as it is easier for interpreters to comprehend source messages in their native language (Denissenko, 1989).

According to Christoffels and de Groot (2005), researchers have yet to identify a clear directional effect in interpreting. Studies that examine directionality in unimodal interpreters have yielded conflicting results. Some research has suggested that interpreters produce superior interpretations when working from their native language into their non-native language. For example, in a study of interpreting students working between English and Finnish, participants produced more accurate interpretations of complex texts when working into their non-native language (Tommola & Helevä, 1998). Similarly, a study of Korean/English interpreting students indicated that the students made a greater number of errors when working into their native language (Lee, 2003). When working into a non-native language, students were more likely to commit presentation-related errors, such as producing prosodic abnormalities.

Other studies have suggested that interpreters perform better when working from their non-native language into their native language. In a study of French/English interpreters, participants were presented with both 'easy' and 'difficult' texts, classified according to linguistic complexity. The 'difficult' texts included relative clauses and included longer main clauses than the 'easy' texts. The interpreters omitted more information from the 'difficult' texts when interpreting from their native language into their non-native language (Darò, Lambert, & Fabbro, 1996). Similarly,



results from a study of German/English interpreting students indicated that the students produced more accurate interpretations when working into their native language (Färber, 2002). The results of these studies are conflicting, as they point to no clear directional effect or universal in unimodal interpreters.

What about directionality and directional preference in bimodal interpreters? It has been speculated that because it requires greater cognitive effort to produce language than to understand it, both unimodal and bimodal interpreters might be expected to prefer to interpret into their native language (Nicodemus & Emmorey, 2013). Anecdotally, many bimodal interpreters have reported a preference for working from their native (spoken) language into their non-native (signed) language. As of yet, scholars have been unable to elucidate clear determining factors – whether cognitive, linguistic, or otherwise – for the apparent discrepancy between the directional preferences of unimodal and bimodal interpreters. The results of a survey of unimodal and bimodal interpreters about their directional preferences confirmed anecdotal reports, indicating that while unimodal interpreters exhibited a preference to work into their native language, bimodal interpreters preferred to work into their non-native language (Nicodemus & Emmorey, 2013). Results also indicated that this discrepancy is not caused solely by differences in interpreters' educational experience or variations in language fluency. A study of bimodal interpreters in the Netherlands yielded similar results (van Dijk, Boers, Christoffels, & Hermans, 2011), giving further strength to Nicodemus and Emmorey's (2013) suggestion that effects of modality and linguistic features may contribute to differences in language direction preference between unimodal and bimodal interpreters.

There is conflicting evidence between van Dijk, Boers, Christoffels, and Hermans (2011) and Nicodemus and Emmorey's (2015) results with regard to the quality of interpretations, which was measured by evaluating a number of features such as propositional accuracy and articulation quality (flow, production speed, and prosodic quality). While Nicodemus and Emmorey (2015) found that interpreters produced higher quality interpretations when working from their non-native language (American Sign Language) into their native language (English), van Dijk, Boers, Christoffels, and Hermans (2011) found that interpreters produced higher quality interpretations when working from their native language (Dutch) into their non-native language (Sign Language of the Netherlands).

Differences in language modality may also be relevant in directional preference in bimodal interpreters. Gile (2005) argues that cognitive load, rather than simply language fluency, may be the primary factor in determining an interpreter's directionality preference. Citing a number of language-specific factors that may have an impact on cognition and interpreting with regard to language direction, Gile questions whether the lexicon of a language may impact processing capacity requirements of interpreters. Specifically, a particular lexicon may allow speakers to overtly reference an entity, as opposed to paraphrasing or explaining. Due to the complexity of American Sign Language depiction, examining whether interpretations from American Sign Language into spoken English require a greater processing capacity and cognitive effort for an interpreter may provide insight into the greater cognitive processes involved in interpreting. An interpreter who is presented with a signed utterance that includes depiction may be required to paraphrase or explain the meaning of the utterance when rendering their spoken language interpretation. For example, a signer may use various depicting signs to describe the appearance of some object, requiring the interpreter to render an explanation of the original signed description

into spoken English. This would require a greater processing effort on the part of the interpreter (Gile, 2005). Similarly, Gile (2005) questions whether interpreting from a “more concise” into a “less concise” language may require greater capacity requirements, in that an interpreter must produce a greater number of words in their interpretation. American Sign Language depiction is sometimes produced with relatively few signs, but the interpreter may render the meaning using more English words. For example, examine the American Sign Language utterance below which is produced by just two signs but which may result in an English interpretation containing numerous words.

American Sign Language source message:	“CAR 3:CL-VEHICLE-go-up-hill”
English interpretation:	“The car went up the hill.”

According to Gile (2005), producing this type of non-verbatim interpretation potentially requires greater cognitive processing effort because the interpreter has used a greater number of words in their target language production than in the source language message.

An interpreter’s cognitive load related to lexical retrieval and cognates has also been explored (Swabey, Nicodemus, Taylor, & Gile, 2016). Because signed and spoken languages do not share a similar phonological system, there are no cognates between English and American Sign Language. A lack of cognates at an interpreter’s disposal may complicate the interpreting process, effectively contributing to a greater cognitive effort. Although spoken and signed languages differ in modality, particular linguistic structures in American Sign Language – including depiction – may impact the cognitive load of the interpreter (Swabey, Nicodemus, Taylor, & Gile, 2016)

While it is clear that a number of potential factors may impact the directional preference of interpreters, as well as the quality of their interpreting work in both language directions, a definitive cause has yet to be identified explaining directional asymmetries between unimodal and bimodal interpreters. Is it possible that the directional preference and quality of bimodal interpreters may be impacted by the instances of signed language depiction they face? First, it is necessary to understand what interpreters do when they are faced with depiction.

## RENDERING DEPICTION

What is known about how interpreters render depiction? In one study of bimodal interpreters in Australia, Goswell (2011) investigated interpreters’ use of “role shift” (i.e., constructed dialogue) when interpreting from spoken English into Australian Sign Language (Auslan), the dominant signed language in Australia. The results indicated that both native and non-native Auslan signers produced frequent instances of constructed dialogue when interpreting from spoken English into Auslan. In Goswell’s (2011) study, a native deaf Auslan signer rated the participants’ interpretations for clarity. The evaluation of the clarity<sup>4</sup> of each interpretation did not correlate with the frequency of constructed dialogue. This finding suggests that while interpreters may frequently produce depiction (e.g., constructed dialogue) when interpreting, an increase in the

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<sup>4</sup> Goswell (2011) does not describe any particular measure used to evaluate clarity. Instead, a native Auslan signer commented about the participants, noting “who was more comfortable to watch, easier to follow and understand” (p. 19).

frequency of depiction does not necessarily imply a higher quality interpretation, as judged by native signers.

In a study of American Sign Language/English interpreters, Armstrong (2005) found that native American Sign Language users produced a significantly greater amount of constructed dialogue in their English-to-American Sign Language interpretations than did non-native American Sign Language users. A similar study conducted in Australia yielded contrasting results: there was no significant difference in the amount of constructed dialogue used in interpretations produced by native and non-native Auslan users (Goswell, 2007). The results of each of these studies show that both native and non-native signers incorporate constructed dialogue in their spoken-to-signed language interpretations. Although quality of output was not considered or measured in these studies, native signers may use more constructed dialogue than their non-native signing peers, suggesting a potential advantage afforded to native users of a signed language. It is also possible that constructed dialogue and other forms of depiction produced in interpretations by native signers may be of higher quality than the depiction produced by non-native signers.

Finally, in addition to the cognitive processing effort interpreters exert, bimodal interpreters face unique challenges when attempting to render signed language depiction into a spoken language. For example, when signers produce constructed dialogue, interpreters must also render this information into a spoken language. In the Netherlands, Roodhooft (2011) examined the work of Flemish Sign Language/Dutch interpreters. The results indicated that interpreters often struggled to correctly interpret constructed dialogue from Flemish Sign Language into spoken Dutch. It is also possible that forms of American Sign Language depiction may not be neatly rendered into spoken English by interpreters in a way that conveys all the linguistic information. Consider a signer who depicts a coffee mug with a handle in a unique shape. While the signer may readily depict the shape of the handle in American Sign Language, an interpreter may struggle to render this visual information into English, resulting in under-specificity or implicitness in the English rendition. A possible interpretation of the signed message, such as, “The handle is oblong,” may not convey the amount of detail described in the signed message. This is referred to as *interlingual impoverishment*, a:

...process [that] crucially involves a shift toward implicitness in L2 [that is, the target language], where (at least) part of the content which had been linguistically coded by the L1 [that is, source language] utterance is now recovered pragmatically by the L2 addressee through a process of enrichment. (Sequeiros, 1998 p. 145)

But what linguistic or other factors may lead an interpreter to render American Sign Language depiction in a particular way when interpreting into English? Similarly, why might an interpreter choose to depict – or not depict – when working into American Sign Language?

#### **DEPICTING: A COGNITIVE OR CONTEXTUAL BASIS?**

By employing a cognitive grammar framework, we can speculate about when an interpreter working into a signed language may choose to produce depiction. One possible explanation lies in the syntactic input of the source language. A *trajector* is defined as “the entity construed as being located, evaluated, or described,” and is “characterized as the primary focus within the profiled relationship” (Langacker, 2008, p. 70). Conversely, a *landmark* is described as occurring when “some other participant is made prominent as a secondary focus” (Langacker, 2008, p. 70).

Consider a situation in which an English speaker says, “My friend was sitting next to me.” In this example, “My friend” is the trajector, as the |friend| is of primary focus. An interpreter working into American Sign Language might then render the message by manipulating their signing space to depict the |friend| in a particular location.

In a study examining the “process of depiction” (White, 2011, p. 8) in American Sign Language/English interpreting, it was found that interpreters consistently produced constructed action and constructed dialogue in their interpretations, even when the English stimuli included neither. Additionally, a number of source text ‘triggers’ have been identified as potentially leading an interpreter to produce constructed dialogue (Goswell, 2011). Such triggers include, for example, direct and indirect reported speech, an agent being affected by emotion, and passive clauses without an agent. While source text triggers may result in an interpreter producing constructed dialogue, Goswell (2011) notes that they are not obligatory, in that interpreters do not *always* produce constructed dialogue when such triggers exist in the source language.

Challenging the long-held notion that syntactic requirements dictate expansion when working from English into American Sign Language, Janzen and Shaffer (2008) argue interpreters make so-called linguistic expansions when working between English and American Sign Language for pragmatic, and not grammatical, reasons. Leaning on the work of Gumperz (1982) and Gile (1995), they argue that *contextualization*, “a cooperative principle that aids in the co-construction of shared meaning” (Janzen & Shaffer, 2008, p. 349) is a major factor in how an interpreter makes linguistic decisions. Just as Goswell (2011) found that source language input alone does not determine an interpreter’s decision to produce constructed dialogue, contextualization may also play a role in how an interpreter renders other forms of signed language depiction in both language directions. Suppose a deaf person is describing a dinner table. They might sign TABLE and then proceed to depict the table as a flat surface covered in several dishes and pieces of flatware. When rendering this message into spoken English, an interpreter might consider the pragmatic needs of their listener, who is surely aware that a dinner table would be flat. For this reason, the interpreter may choose to omit information about the flat surface by saying, “There are a number of plates and pieces of flatware on the table.”

It is apparent that bimodal interpreters face the unique challenge of rendering signed language depiction in both language directions. What remains unclear is why and how interpreters render various forms of depiction, as well as whether this process may lead to a directional effect. When interpreting into a signed language, how do interpreters decide when to render depiction? Conversely, when interpreting into a spoken language, what influences the way an interpreter may choose to render depiction produced by signers? Prior to data collection, I hypothesized that non-native American Sign Language users would employ similar depiction types when interpreting that occur in discourse from native American Sign Language users. Further, I predicted that instances of depiction from the non-native signer would be less frequent and that some depiction types would be used less frequently or would not be rendered, potentially indicating a challenge for interpreters who are not native American Sign Language users.

## METHODS

The project was approved by the Gallaudet University Institutional Review Board (IRB). This analysis was a qualitative case study of one participant, who interpreted two pre-recorded stimuli

videos (*source texts*) in the simultaneous mode. One source text was presented in American Sign Language and the other was presented in spoken English.

## **PARTICIPANT**

An expert American Sign Language/English interpreter (*the participant*) was recruited for participation in this study. Criteria for participation included: 1) holding a generalist national interpreting certification recognized by the Registry of Interpreters for the Deaf, and 2) having at least ten years' professional interpreting experience across a variety of fields (e.g., medical, legal, mental health). These requirements are similar to the characteristics of participants deemed as expert interpreters in other studies of American Sign Language/English interpreters (see for example Nicodemus & Emmorey, 2015; White, 2011). Additionally, the participant was required to be a native English speaker and have acquired American Sign Language after adolescence. Because early and late bilinguals may have differing levels of fluency with regard to depiction (Goswell, 2011), this study focused on the work of late bilinguals.<sup>5</sup> The participant was contacted and recruited via email through the researcher's professional network in the Washington, D.C. metropolitan area.

The participant was compensated \$25.00 for participation in the study, an amount that reflected a professional standard for interpreting rates. The length of the data collection was approximately 30 minutes in total, including the completion of informed consent, a demographic background information form (See Appendix), and interpreting the American Sign Language and English source texts.

The participant indicated in the demographic background information form that he was a second language user of American Sign Language, having begun learning the language at the age of 17. He had 18 years of experience as a professional American Sign Language/English interpreter and rated his own American Sign Language fluency at 7/10. He indicated a general directional preference to interpret from his second language (American Sign Language) into his first language (spoken English).

## **MATERIALS**

The stimuli consisted of two videos retrieved from YouTube<sup>6</sup>: one in spoken English and one in American Sign Language. Both the English and American Sign Language source texts required the participant to render instances of depiction. The American Sign Language source text video contained instances of depiction produced by a native signer. The English source text included

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<sup>5</sup> For the purposes of this study, late bilinguals are defined as those individuals for whom exposure to American Sign Language occurred after adolescence.

<sup>6</sup> American Sign Language source text: "Story in ASL: James and His 1968 Oldsmobile"

<https://www.youtube.com/watch?v=3P1yQiisefs>

English source text: "The Time I Set My Engine On Fire - Worst Car Stories"

<https://www.youtube.com/watch?v=zCa2eKvFpZI>

content allowing the participant to create depiction while interpreting into American Sign Language.

Each source text was approximately five minutes in length and centered around the general topic of vehicles. One source text was 3 minutes and 5 seconds in length and presented in spoken English. In the source text, a male speaker provided a narrative about a road trip he participated in across the United States. He described a number of mishaps along the way, including experiencing engine problems when stopping to refuel his vehicle. The other source text, presented in American Sign Language, was 5 minutes and 38 seconds in length. In this source text, a male signer provided a technical description of repairs and maintenance he had performed on a family vehicle.

## **PROCEDURES**

The participant was scheduled to meet with the researcher at a designated data collection site. The participant first completed an informed consent form and a video release form. The participant then completed a demographic background information form, supplying information about his education, age at onset of American Sign Language acquisition, self-reported language fluency, language directionality preference, and other details regarding his professional experience as an interpreter. The researcher then provided the participant with contextual and relevant information about the stimuli materials in order to allow the participant to prepare for the interpreting tasks.

The researcher showed the first 30 seconds of the English source text to the participant to familiarize him with the style, content, and language use of the speaker. The researcher then instructed the participant to simultaneously interpret the remainder of the video without pausing it. The researcher left the room while the participant's interpretation was video recorded. Because each source text was approximately five minutes in length, the participant was not offered a break before being instructed to interpret the American Sign Language source text. After the participant completed his interpretation of the English source text, the researcher played the first 30 seconds of the American Sign Language source text for the participant. The researcher again instructed the participant to simultaneously interpret the remainder of the video without pausing it. Again, the researcher left the room while the participant's interpretation was video recorded. Following the completion of data collection, the researcher debriefed the participant on the context and aim of the study.

The data were transcribed and coded using the linguistic annotation software ELAN. Instances of depiction were identified and classified according to Dudis' (personal communication) classification system of American Sign Language depiction types. While the classification system is descriptive in nature and not exhaustive, it is a valuable tool for analyzing and identifying patterns in depiction usage.

## **RESULTS**

### **FREQUENCY**

Depiction was used more frequently by the signer in the American Sign Language source text than in the participant's American Sign Language rendition of the English source text. In total, the signer in the American Sign Language source text produced a total of 101 instances of depiction (approximately 18 instances per minute). The participant produced a total of 42

instances of depiction in his American Sign Language production (approximately 14 instances of depiction per minute). Although the American Sign Language source text and participant's American Sign Language interpretation of the English source text cannot be objectively compared due to differences in content, a rough comparison of the two indicate the signer in the American Sign Language Source text produced depiction approximately 28% more frequently than the participant. While this may be influenced by the content of each source text (i.e., the American Sign Language source text was more technical, while the English source text was more narrative), the difference suggests that native signers may use depiction more frequently in discourse than do non-native signers when interpreting.

#### **TYPES OF DEPICTION PRODUCED**

Although the content, presentation, and style of the English and American Sign Language source texts were not controlled, interesting differences in depiction usage between the signer and the participant did occur. Some types of depiction appeared in only the American Sign Language source text. Conversely, one type of depiction appeared in only the participant's English-to-American Sign Language interpretation. Each instance of depiction produced by the signer and the participant was identified and coded according to Dudis' classification system, as presented in Table 1.

**Table 1***Instances of Depiction in the Data*

<u>Type</u>	<u>Instances in ASL source text</u>	<u>Instances in English-to-ASL interpretation</u>
A: Constructed dialogue	4	3
B: Constructed action	24	11
C: Object moving within a scene	13	20
D: Non-moving object within a scene	34	1
E: Entity associated with signer's body	5	4
F: Temporal aspectual form of a sign	0	0
G: Compressed depiction outside signer's vantage point	5	2
H: Life-sized depiction outside signer's vantage point	8	0
I: Enlarged depiction outside signer's vantage point	0	0
J: Planar depiction	0	1
K: Timeline/linear depiction	2	0
L: Buoy	6	0
M: Token	0	0
Total	101	42

**TYPE A: CONSTRUCTED DIALOGUE**

The participant utilized constructed dialogue when interpreting from English into American Sign Language to depict dialogue between two interlocutors. In one such case, the presenter in the English source text described a problem that occurred with his engine when driving with his mother. He said, "I told my mom, like, 'Don't worry, this has happened before.'" To render this in American Sign Language, the participant shifted his body to one side and signed, "ME HEY+ NOT WORRY HAPPEN BEFORE." Following this phrase, the participant realigned his body to a neutral, forward-facing position, thus ending the instance of constructed dialogue, shown in Figure 16.



**Figure 16**

*The participant produces constructed dialogue by shifting his body to the side, depicting a conversation between two individuals.*



While the participant did produce constructed dialogue to convey a conversation described in the English source text, only the signer in the American Sign Language source text depicted inner speech through constructed dialogue. In one instance of inner speech in the American Sign Language source text, the signer had just described opening the hood of his vehicle to perform an inspection. Upon seeing the engine and recognizing the problem, he signed, OH-I-SEE, shown in Figure 17. It is understood that the signer did not physically produce the sign OH-I-SEE when inspecting his vehicle; rather, the sign serves to externalize and depict his inner thoughts at the time of the inspection.

**Figure 17**

*The signer produces inner speech by using the sign OH-I-SEE.*



Such expressions of inner speech produced by the signer were not rendered into spoken English by the participant. Similarly, the participant never produced inner dialogue when interpreting from English into American Sign Language.

#### **TYPE B: CONSTRUCTED ACTION**

When interpreting from English into American Sign Language, there were numerous instances in which the participant produced constructed action. In one case, the participant depicted a person lifting the hood of a vehicle, as shown in Figure 18.

**Figure 18**

*The participant depicts the manual action of lifting the hood of a vehicle.*



It is interesting to note that in the above example, the English input did not specifically reference an individual lifting the hood. This was implied, as the English presenter stated, “I went to fill up the oil.” Despite this implication in the source text, the participant’s American Sign Language rendition referenced an individual raising the hood, a necessary action before adding oil. The decision to depict in American Sign Language may not have been driven solely by the English source language input. Rather, the participant contextualized in his rendition by including, through constructed action, information about lifting the hood of a vehicle. The participant’s own contextualization, in which he understands that the hood must be lifted before checking the oil, may have resulted in his production of the scene in which he depicted the action of lifting the hood.

The participant also utilized constructed action by means other than manual signing, as indicated in the following example. The presenter in the English source text described stopping to fill up his vehicle’s gasoline and oil tanks and said, “I was kind of watching the, uh, gas pump and kind of not watching the oil go into the engine...” The participant’s American Sign Language rendition included constructed action when he directed his eye gaze to the side, effectively not “watching the oil,” as shown in Figure 19. The “oil go[ing] into the engine” is depicted simultaneously.<sup>7</sup>

The signer in the American Sign Language source text produced constructed action a total of 24 times. On several occasions, the signer utilized constructed action to depict himself driving a vehicle. This was accomplished by using a handling classifier. In one case, the signer depicted himself using his hands to grip and handle a steering wheel, as shown in Figure 20. He stated that he drove for approximately five miles when he experienced a problem with his vehicle.

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<sup>7</sup> The participant depicted this with his right hand in Figure 6. The participant used the Y-handshape classifier to represent the whole entity of the bottle of oil (Type C depiction).

**Figure 19**

*The participant produces constructed action to depict himself “not watching the oil” by turning his head to the side, away from where the [oil] is being filled.*

**Figure 20**

*The signer produces constructed action to depict himself operating a vehicle.*



It is interesting to note that the participant did not explicitly render this instance of constructed action (the act of driving) into spoken English, choosing instead to say, “And I got about five more miles...” The participant may have considered the pragmatic implications of his utterance to a listener, who would assume that the act of driving had occurred. When an English listener knows a speaker is discussing a vehicle and says, “And I got about five more miles,” the listener is likely to understand that the speaker means that they *drove* about five more miles. For this reason, the participant may have chosen not to explicitly interpret linguistic information about the act of driving, deeming it pragmatically unnecessary for a listener.

Another example of the participant rendering American Sign Language depiction into English in a summarized or generalized manner occurred when the signer described the master cylinder of a vehicle. In an instance of constructed action, he stated that he re-clamped the cap back on the master cylinder in two places, as shown in Figure 21.

**Figure 21**

*The signer depicts clamping a cap on the master cylinder in two places.*



This was interpreted into spoken English by the participant as “...make sure they were on there nice and tight.” Of interest in this case is the fact that the participant did not specify the terms ‘cap,’ ‘clamp,’ or any other applicable term. The word ‘they’ was used in order to generalize the information contained in the American Sign Language message. There are a number of possible reasons the participant may have produced this generalized rendition of the source message. The decision to use a more general term (‘they’ vs. ‘cap’) may be because the participant was unfamiliar with the relevant terminology in English. Another factor may be that the signer in the American Sign Language source text did not deliberately specify terminology in this case. That is, the signer did not fingerspell or specify terms such as ‘cap,’ ‘lid,’ or ‘clamp.’ Despite this, the depiction produced by the signer in the American Sign Language source text is explicit in that it clearly represents some sort of *cap* being *clamped* in *two* places, information which was not conveyed in the participant’s English rendition. Regardless of the factors at play, the participant’s English rendition was less explicit than the source message, and the interpretation can be considered to have been impoverished. A listener would need to employ Sequeiros’ (1998) pragmatic “process of enrichment” to understand that the terms ‘they’ and ‘tight’ were referring to a ‘cap’ being tightly ‘clamped.’ These examples illustrate that American Sign Language depiction in the source text may lead to an interpreter rendering an impoverished translation in spoken English.

#### **TYPE C: OBJECT MOVING WITHIN A SCENE**

Nearly half of all American Sign Language depiction produced by the participant in his interpretation was Type C, depiction in which a signer describes a moving object within a scene. One such example occurs when the signer depicted a fire extinguisher being used. He depicted the movement of chemicals being sprayed out of the nozzle of a fire extinguisher, as demonstrated in Figure 22.

**Figure 22**

*The participant depicts the movement of chemicals being released from a fire extinguisher, with his right hand moving in a circular motion.*



This form of depiction was also produced by the signer in the American Sign Language source text. While narrating the work he performed on his car, the signer described placing a cap on an open reservoir. The downward movement of the cap is depicted by the signer as he uses the B-handshape classifier of his right hand to depict the cap, as shown in Figure 23.

**Figure 23**

*The signer depicts the motion of a cap being placed facedown.*



#### **TYPE D: NON-MOVING OBJECT WITHIN A SCENE**

The signer in the American Sign Language source text often utilized a form of depiction in which he described the appearance of a physical object. In one case, the signer was describing the inside of his engine and then fingerspelled “E-X-H-A-U-S-T H-E-A-D-E-R,” followed by using the 4-handshape and the 1-handshape to describe the appearance of an exhaust header. Using fictive motion, the signer moved his hands to depict the stationary exhaust header, as shown in Figure 24.

**Figure 24**

*The signer uses fictive motion with the 4-handshape and then 1-handshape to depict the shape of an exhaust header.*



The concept of an exhaust header was not rendered into spoken English by the participant. It is possible that the participant did not understand the fingerspelled term and thus omitted entirely the concept of an exhaust header in his interpretation. Even so, the interpreter did not render *any* information about the exhaust header, such as its shape, into spoken English.

When working from English into American Sign Language, the participant also utilized this form of depiction. In one case, the speaker in the spoken English source text described a mechanic looking at a vehicle's engine. The speaker reported the mechanic as having said, "Half your engine was melted." The participant moved his hands to depict the physical appearance of a melted engine, as shown in Figure 25. While his hands moved to produce this instance of depiction, the melted engine would not have been in motion.

**Figure 25**

*The participant employs fictive motion in order to depict a melted engine.*



Coding the data revealed that the signer in the American Sign Language source text used this form of depiction with much greater frequency than the participant when working from English into American Sign Language. This may be due to differences in content, as the American Sign Language source text was technical in nature and focused primarily on physical aspects of vehicle maintenance. The English source text, on the other hand, was primarily a narrative and included less information about physical aspects of a vehicle.

### TYPES G, H, AND I: DEPICTION OUTSIDE THE SIGNER'S VANTAGE POINT

Overall, depiction occurring outside of the signer's own vantage point was produced more often by the signer in the American Sign Language source text than by the participant when working from spoken English into American Sign Language. Such instances of depiction accounted for approximately 5% of depiction produced by the participant and approximately 12% of depiction produced by the signer in the American Sign Language source text.

One instance where the signer in the American Sign Language source text depicts something outside his own vantage point occurred when he discussed opening the hood of a vehicle. Figure 26 shows the signer using two B-handshape classifiers to depict the front end of a vehicle. He then lifted his left hand in the air, which represented the lifting of the vehicle's hood. The interpreter rendered this into spoken English as, "And I decided to pop 'em open." While the signer's use of depiction indicated that the event had occurred outside his own vantage point, the English rendition did not convey any information about the signer's vantage point. In other words, the participant did not say, for example, "And I decided to pop 'em open outside my view," or "And I decided to pop 'em open, even though I couldn't see."

**Figure 26**

*The signer depicts, outside his own vantage point, the hood of a vehicle being opened.*



Another example of this form of depiction appeared when the signer described a problem with his vehicle's brakes that occurred while driving. He said that he looked within the vehicle and noticed brake fluid had forcefully shot from within the mechanism itself. This event would not have been visible to the signer, as it occurred while he was still operating the vehicle. The event would have taken place outside his own vantage point. The signer depicted this event, as shown in Figure 27, by moving one hand outward and opening it into the 5-handshape. This was rendered by the participant as "In the mechanism, there was brake fluid or something in there." As in the previous example, information about the signer's vantage point in the American Sign Language depiction was not conveyed by the participant in the English rendition.

**Figure 27**

*The signer depicts an event outside his own vantage point in which brake fluid is shot from within the engine.*



#### **TYPE J: PLANAR DEPICTION**

In one case, the participant made use of the signing plane to demonstrate a spatial relationship and movement between two locations. The speaker in the English source text described a past experience on a trip, opening with, “I was taking a trip to Washington, D.C. I grew up in Tennessee...” This was rendered into American Sign Language by the participant as, “DRIVE-to T-E-N-N TO D-C WASHINGTON D-C.” In this case, the participant first utilized the sign DRIVE-to across the metaphorical plane, moving the sign from the left side of his signing space to the right side. The participant then established |Tennessee| (T-E-N-N) at a particular point to the left of the signing space in front of his body. He then signed TO and established |Washington, D.C.| (D-C WASHINGTON D-C) to the right. The sequence of these signs is shown in Figure 28.

**Figure 28**

*The participant signs ‘DRIVE-to’ along a plane from the left side of his signing space to the right side, followed by signing ‘T-E-N-N’ on the left side of the plane and ‘D-C WASHINGTON D-C’ on the right side of the plane.*



The participant used the verb ‘DRIVE-to’ before establishing the locations in space. The native American Sign Language user did not produce this type of depiction in the American Sign Language source text; however, it worth questioning whether native signers typically first produce verbs or the locations in such instances of planar depiction.



### TYPE K: TIMELINE/LINEAR DEPICTION

On two occasions, the signer in the American Sign Language source text produced depiction using the metaphorical timeline in the signing space. This type of depiction was not present in the participant's English-to-American Sign Language interpretation. One instance of the depiction of a metaphoric timeline occurred in the American Sign Language source text when the signer stated that his car was a family vehicle, first owned by his grandfather. He then depicted the car as having been passed down over time. This was accomplished by signing PASS-DOWN across a metaphorical timeline from the left to right side of the signer's signing space, as shown in Figure 29.

**Figure 29**

*The signer signs PASS-DOWN along a metaphorical timeline from the left to right in the signing space.*



### TYPE L: BUOY

Throughout his interpretation from English into American Sign Language, the participant did not make use of any depictive buoys. The signer in the American Sign Language source text did produce both list buoys and depicting buoys. He produced a TWO-list buoy when describing two tasks he needed to perform on his car, as shown in Figure 30. The signer referenced each task by pointing to his index and middle fingers, which each represented one of the tasks.

While the participant's rendition into English did include the two tasks to be completed on the vehicle, he did not specifically reference the list buoy in his interpretation. That is, he did not state that there were *two* tasks to be completed. It is possible that the list buoy was viewed by the participant as a way to organize discourse in American Sign Language and was deemed unnecessary in the English interpretation. Regardless, the target language rendition was impoverished in that it is less specific than the source language message.

**Figure 30**

*The signer references the first and second of two items in a TWO-list buoy.*



In addition to producing list buoys, the signer also produced a depicting buoy when describing his work on the vehicle's master cylinder. He first depicted the [master cylinder] by placing a C-handshape classifier with his dominant hand in front of a downturned B-handshape classifier with his non-dominant hand. He then grounded the B-handshape ([the master cylinder body]) in place and continued his narrative with his dominant hand while discussing the master cylinder, describing various features of it, including removing a cap and noticing a low fluid level. While the signer produced these signs, the [master cylinder] remained in place via the depicting buoy produced by the downturned B-handshape classifier, as shown in Figure 31. In the figure, the signer produces a depicting buoy (the downturned B-handshape classifier created with his non-dominant hand) representing the [master cylinder body] and proceeds to continue making his utterance with the buoy grounded in place.

To review, these examples of different types of depiction not only corroborate previous scholarship demonstrating that bimodal interpreters render depiction in both language directions, but they also make it clear that both native signers and interpreters may make use of a number of different types of depiction, as described in Dudis' classification system. While their frequency of usage varied, the vast majority of depiction types were produced by both the signer in the American Sign Language source text and the participant in his English-to-American Sign Language work.

**Figure 31**

*The signer depicts a |master cylinder| and continues his utterance around the grounded buoy.*



## DISCUSSION

In the initial analysis phases of this study, I had selected numerous sentences from both source texts in order to evaluate the participant's rendering of depiction. I originally selected sentences from the English source text to be evaluated according to the participant's production of depiction. However, there were instances in the data in which the participant did *not* depict, despite my own assumption that he would. For example, when the presenter in the English source text described a trip he had taken, he added, "I had my mom in the car as well." In this case, the |mom| is the trajector of the sentence; that is, she is of primary focus. It is conceivable that such a construction would allow for an interpreted instance of depiction, where the physical space of the car was construed with two individuals: the driver and the driver's mother. Despite this, the participant did not use depiction in this case. Instead, he signed: "WITH MOM NOW." While the information contained in both languages is similar, the participant did not depict a mother sitting in a car with her son. A purely syntactic examination of the source language input could lead to the assumption that depiction would be present in the participant's target language output. Along the same vein, recall the example in which the participant depicted the raising of the hood to check the oil, despite the English syntax not containing any apparent triggers for depiction. This example indicates that an interpreter may create depiction when the syntax of the source language does not suggest doing so is necessary. Thus, by taking a pragmatic view we see that an interpreter's contextualization may influence the decision of whether or not to depict when interpreting into American Sign Language; contextualization may also drive the decision of whether or not to include information within American Sign Language depiction when interpreting into English.

There were a number of limitations to this exploratory study. A primary limiting factor lies in the stimulus materials used. While the source text videos were controlled for length and general

theme (approximately five minutes and about vehicles), they were both public videos retrieved from the Internet and were not controlled for specific content, style, or any other linguistic factors. Additionally, using pre-recorded videos as source texts poses two problems: a) videos do not allow for an interpreting participant to use various discourse management tactics and strategies (e.g., asking a participant for clarification), and b) videos may present visual limitations (e.g., a three-dimensional signed language being displayed in a two-dimensional format on a screen). In addition, data was limited to the work of one participant at one moment in time. The results obtained may not be generalizable to the larger community of American Sign Language/English interpreters.

As depiction is challenging for second-language learners not only to both produce and identify (Thumann, 2010), my identification of the depiction in these data may not be accurate. Likewise, my coding of the instances of depiction according to Dudis' classification system may not be free of errors. A research team with native American Sign Language users with linguistic training might achieve inter-rater reliability and greater credibility in the coding and analytical process. Further, since this research was conducted, Dudis (personal communication) has noted that he continues to revise his classification system and continues to devise novel ways of classifying depiction types that may be more user-friendly.

On a global level, the comprehension and production of signed language depiction is a challenge unique to bimodal interpreters. It complicates the issue of directionality because interpreters may not be equally proficient in rendering depiction in both directions. This was a descriptive study that examined the frequency and types of depiction rendered by the participant, but it did not evaluate the accuracy or efficacy of the participant's work. To truly assess how an interpreter renders depiction as a possible directional effect, it would be necessary to evaluate both a) an interpreter's production of American Sign Language depiction when working from English and b) an interpreter's rendering of American Sign Language depiction when working into English. Such a task could be accomplished by allowing native English and native American Sign Language users to evaluate an interpreter's rendering of depiction, focusing on a) accuracy between source and target text and b) articulation quality in the target language. Such a study could investigate a larger pool of interpreters and test for numerous variables. It would be revealing to compare late and early bilinguals, deaf and hearing interpreters, and novice and expert interpreters.

## CONCLUSION

This study has shed light on how an American Sign Language/English interpreter may render American Sign Language depiction in both directions. I have shown that numerous factors – both linguistic and pragmatic – may be at play when an interpreter makes decisions about how to render American Sign Language depiction. Additionally, the data demonstrate that interpreters must render a wide variety of forms of depiction in both directions, which further complicates the interpreting process. The old interpreting adage seems to hold true when it comes to rendering depiction: *it depends*. The rendering of depiction – and its very production – is a complex linguistic and pragmatic process that further situates interpreters as active producers of discourse.

The results of this single case study indicate that American Sign Language/English interpreters render various depiction types in both language directions. Further, the results raise additional questions about depiction quality, frequency, and the strategies and tactics interpreters employ to render depiction in both language directions. While this study was not an attempt to

directly identify a directional effect in interpreting, it informs our understanding of the work interpreters perform. Further research into the efficacy of depiction rendering by interpreters and the decisions interpreters make when rendering depiction would lead to a deeper understanding of the interpreting process as a whole, as well as potentially lead to identifying and describing depiction rendering as a possible directional effect in bimodal interpreting.

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## Appendix

### *DEMOGRAPHIC BACKGROUND INFORMATION FORM*

Name/Participant ID#: \_\_\_\_\_

#### Interpreting experience:

Do you have any degrees in interpreting? \_\_\_\_\_

If so, at which level (e.g., BA, MA)? \_\_\_\_\_

For how many years have you been a professional interpreter: \_\_\_\_\_

Please list any interpreting certifications you hold: \_\_\_\_\_

Do you prefer to interpret from: (circle one)

English to ASL

OR

ASL to English

#### Language experience:

At what age did you start learning ASL? \_\_\_\_\_

Please rate your own fluency in ASL: \_\_\_\_\_

(0 = not fluent, 10 = native-like fluency)