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## **A Particle of Indefiniteness in American Sign Language**

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# A Particle of Indefiniteness in American Sign Language\*

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*We describe here the characteristics of a very frequently-occurring ASL indefinite focus particle, which has not previously been recognized as such. We show that, despite its similarity to the question sign “WHAT”, the particle is distinct from that sign in terms of articulation, function, and distribution. The particle serves to express “uncertainty” in various ways, which can be formalized semantically in terms of a domain-widening effect of the same sort as that proposed for English ‘any’ by Kadmon & Landman (1993). Its function is to widen the domain of possibilities under consideration from the typical to include the non-typical as well, along a dimension appropriate in the context.*

## 1. Introduction

In this article, we describe a focus particle that occurs with great frequency in American Sign Language (ASL) in indefinite contexts. This particle has not been previously identified as such in the ASL literature. Although its articulation is similar to that of the generic question sign conventionally glossed as “WHAT”, the two signs are distinguishable in terms of articulation, function, and distribution. Here we discuss the characteristics of this particle and the kinds of contexts in which it occurs. It serves to express “uncertainty” in a variety of ways. In the final section, we address the semantics associated with this particle and propose that it has a domain-widening effect comparable to that proposed by Kadmon and Landman (1993) for *any* in English. This ASL particle functions to widen the domain of possibilities under consideration along some contextually determined dimension.

## 2. Background about American Sign Language

Despite the difference in modality, signed languages have the same fundamental organization as spoken languages. Neidle et al. (2000) have argued that the basic hierarchical structure of American Sign Language (ASL) is as illustrated in Figure 1, and thus is completely comparable to what has been proposed for spoken languages.

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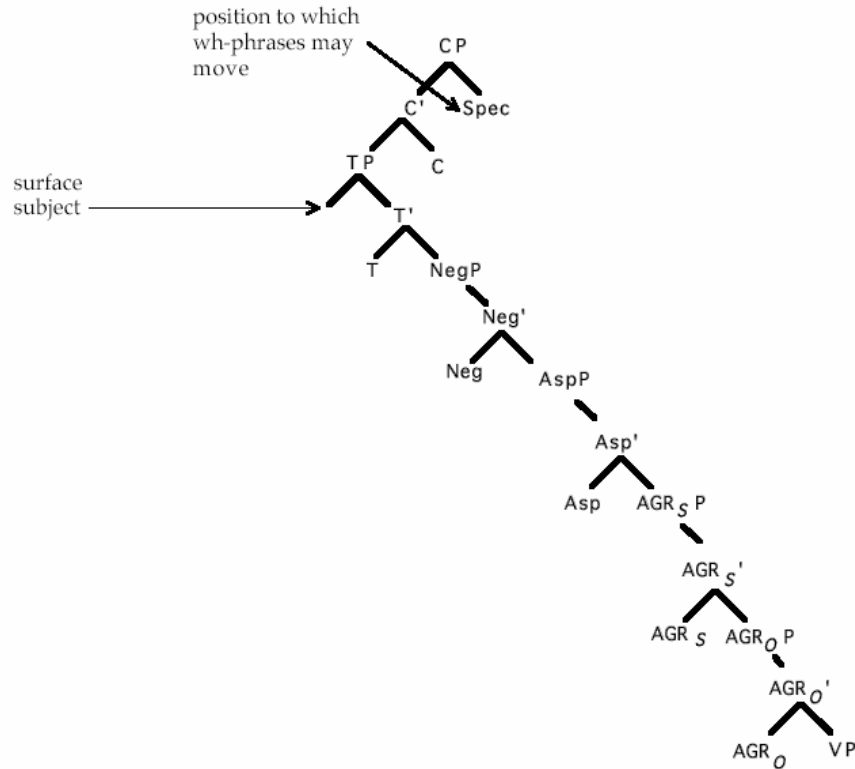


Figure 1. Skeletal structure of CP in ASL

## 2.1. Nonmanual Correlates of Syntactic Features

One particularly interesting characteristic of signed languages is the use of nonmanual expressions (gestures of the face and movements of the head and upper body), which extend over phrasal domains, to express grammatical information. This is one important use (of many) for nonmanual expressions in signed languages.

Neidle et al. (2000:43-45) have proposed the following generalizations for the distribution of nonmanual syntactic markings:

- Nonmanual syntactic markings are frequently associated with syntactic features residing in the heads of functional projections.
- The nonmanual marking may spread over the c-command domain of the node with which it is associated (reflecting relations at Spell-Out).
- Spread of the nonmanual marking is optional if manual material is available locally. However, in the absence of such manual material, the marking spreads obligatorily so that it may be articulated simultaneously with manual material.
- The intensity of the nonmanual marking is greatest at the node of origin and decreases as distance from that node increases.
- As in the manual channel, perseveration (maintenance of a particular articulation that will recur) is found with nonmanual expressions.

## 2.2. Question Constructions

Question constructions have been the subject of some controversy in the literature, with respect to both the facts and analysis.<sup>1</sup> Neidle et al. (2000:chapter 2) discuss possible contributing factors to the conflicting reports in the literature, some related to methodological problems in eliciting grammaticality judgments from native signers. The fact that most of the constructions reported in the literature on ASL syntax are given only in gloss form (using the nearest equivalent English translation for each ASL sign) makes it difficult to evaluate claims and conclusions about ASL data. To avoid this problem, the American Sign Language Linguistic Research Project (ASLLRP) has made available digital video examples, signed by native signers of ASL, illustrating the constructions we discuss in this paper and others. These can be obtained on CD-ROM and at our Web site <<http://www.bu.edu/asllrp/>>.<sup>2</sup>

For simplicity of exposition here, we will focus on those sentences that have a single wh-phrase.<sup>3</sup> The wh-phrase (e.g., WHO, WHERE, WHEN, etc.) may surface either *in situ* or at the right periphery of the clause. There is a distinction between the two positions in terms of interpretation: when the wh-phrase is at the right periphery, it is necessarily interpreted as focused.<sup>4</sup> The distribution of the nonmanual marking characteristic of wh-questions (labeled as ‘whq’ and consisting of a cluster of properties, including furrowed brows, squinted eyes, and a slight side-to-side headshake)<sup>5</sup> also differs.<sup>6</sup> If the wh-phrase is *in situ*, the wh-marking obligatorily spreads over the entire CP. In contrast, when the wh-phrase occurs at the right periphery, spread of the marking over the rest of the CP is not required. This provides the basis for an argument (Neidle et al., 2000) that the final wh-phrase is in a right-peripheral Spec, CP: the wh-phrase provides manual material local to the +wh feature of C, so spread of the nonmanual +wh marking over the c-command domain of C is not obligatory.

Wh-constructions are illustrated in (1)–(8). Glossing conventions for representing ASL sentences are explained in the Appendix. For further details about conventions used for annotation, see Neidle (2002).

<sup>1</sup> See, e.g., Petronio and Lillo-Martin (1997) for different claims about ASL questions from those presented by Neidle et al. (1997, 2000, e.g.) and summarized in this section.

<sup>2</sup> The distribution of nonmanual markings has been carefully analyzed using SignStream, a program designed to facilitate the linguistic analysis of visual language data by providing tools for on-screen display and analysis of linguistic information alongside of the actual video. SignStream is distributed on a non-profit basis to students, educators, and researchers, and the coded data are also publicly accessible. See <<http://www.bu.edu/asllrp/SignStream/>>. For further information about the Center for Sign Language and Gesture Resources, through which we have been collecting and distributing high quality video data (four synchronized views) plus linguistic annotations thereof (Neidle, ed., 2000), see Neidle, Sclaroff and Athitsos (2001) and <<http://www.bu.edu/asllrp/csigr/>>.

<sup>3</sup> As discussed in Neidle et al. (2000:197 fn.10), multiple wh-questions are generally disallowed, except when the wh-phrases are strongly D-linked (Pesetsky 1987). However, there are constructions that involve more than one occurrence of a wh-phrase associated with a single questioned argument: an initial wh-phrase (which we have analyzed as a kind of topic) followed by a clause that contains a wh-phrase either *in situ* or at the right periphery.

<sup>4</sup> Thus, for example, the sentences in (5)–(8) have a presupposition that there was someone who was seen or who arrived, analogous to English sentences with intonational focal stress on ‘who’ in ‘*Who* arrived?’ or ‘*Who* did John see yesterday?’. See Neidle (in press) for an analysis in terms of leftward focus-movement followed by rightward wh-movement—subject to Relativized Minimality (Rizzi, e.g., 1990, in press)—in the derivation of sentences where the wh-phrase surfaces at the right periphery.

<sup>5</sup> See, e.g., Baker and Cokely (1980), Baker and Padden (1978), or Baker-Shenk (1983).

<sup>6</sup> This distinction was first observed by Lillo-Martin and Fischer (1992).

**Wh-phrases *in situ***

- (1)  $\overline{\text{JOHN SEE WHO YESTERDAY}} \text{ whq}$   
 ‘Who did John see yesterday?’

Hyperlinks: Example 1

<a href="#">Lateral view</a> (1.1MB)	<a href="#">Front view</a> (1.2MB)	<a href="#">Close-up</a> (1.5MB)
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- (2)\* JOHN SEE  $\overline{\text{WHO}} \text{ whq}$  YESTERDAY

- (3)  $\overline{\text{WHO ARRIVE}} \text{ whq}$   
 ‘Who arrived?’

Hyperlinks: Example 3

<a href="#">Lateral view</a> (580K)	<a href="#">Front view</a> (636K)	<a href="#">Close-up</a> (912K)
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- (4)\*  $\overline{\text{WHO ARRIVE}} \text{ whq}$

**Wh-phrases at the right periphery**

- (5)  $\overline{\text{JOHN SEE } t_i \text{ YESTERDAY}} \text{ whq}$   $\text{WHO}_i$   
 ‘*Who* did John see yesterday?’

Hyperlinks: Example 5

<a href="#">Lateral view</a> (964K)	<a href="#">Front view</a> (980K)	<a href="#">Close-up</a> (1.3MB)
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- (6) JOHN SEE  $t_i$  YESTERDAY  $\overline{\text{WHO}_i} \text{ whq}$   
 ‘*Who* did John see yesterday?’

Hyperlinks: Example 6

<a href="#">Lateral view</a> (932K)	<a href="#">Front view</a> (964K)	<a href="#">Close-up</a> (1.3MB)
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- (7)  $\frac{\quad}{t_i \text{ ARRIVE } \text{WHO}_i} \text{whq}$   
 ‘Who arrived?’

Hyperlinks: Example 7

<a href="#">Lateral view</a> (528K)	<a href="#">Front view</a> (497K)	<a href="#">Close-up</a> (648K)
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- (8)  $\frac{\quad}{t_i \text{ ARRIVE } \text{WHO}_i} \text{whq}$   
 ‘Who arrived?’

Hyperlinks: Example 8

<a href="#">Lateral view</a> (465K)	<a href="#">Front view</a> (428K)	<a href="#">Close-up</a> (670K)
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There is something interesting about (7) as signed in the video illustrating this sentence (in particular, with respect to the non-dominant hand); this is not annotated here and we will return to discuss it in section 3.5.

## Wh-signs

One of the common wh-signs is conventionally glossed as “WHAT”. This sign involves a side-to-side shaking of the hands in front of the chest, with a 5 handshape (all five fingers extended), palms facing upward, as in the following sentences:

- (9) JOHN BUY  $t_i$  YESTERDAY  $\frac{\quad}{\text{“WHAT”}_i} \text{whq}$   
 ‘What did John buy yesterday?’

Hyperlinks: Example 9

<a href="#">Lateral view</a> (811K)	<a href="#">Front view</a> (619K)	<a href="#">Close-up</a> (840K)
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- (10)  $\frac{\text{JOHN LOVE “WHAT”}}{\quad} \text{whq}$   
 ‘What does John love?’

Hyperlinks: Example 10

<a href="#">Lateral view</a> (840K)	<a href="#">Front view</a> (619K)	<a href="#">Close-up</a> (619K)
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The sign glossed as “WHAT” can also occur in a sentence-final tag with a construction that contains a different wh-sign, as shown in (11).<sup>7</sup>

- (11) JOHN SEE  $\frac{\text{whq}}{\text{WHO “WHAT”}}$   
 ‘Who did John see, who?’

Hyperlinks: Example 11

<a href="#">Lateral view</a> (625K)	<a href="#">Front view</a> (570K)	<a href="#">Close-up</a> (954K)
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### 3. Discovery of a Previously Unidentified Particle

The construction illustrated in (12) and (13) involves a sign, glossed here as ‘*part:indef*,’ that is similar to the final sign in (9)–(11), but critically different from it.

- (12)  $\frac{\text{whq}}{\text{JOHN SEE WHO YESTERDAY part:indef}}$   
 ‘Who did John see yesterday?’

Hyperlinks: Example 12

<a href="#">Lateral view</a> (708K)	<a href="#">Front view</a> (709K)	<a href="#">Close-up</a> (990K)
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- (13)  $\frac{\text{whq}}{\text{IX WHO POSS CAR (2h)part:indef}}$   
 ‘Whose car is that?’

Hyperlinks: Example 13

<a href="#">Lateral view</a> (161K)	<a href="#">Front view</a> (119K)	<a href="#">Close-up</a> (129K)
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In this construction, the final sign is articulated with the same handshape as “WHAT” (i.e., a 5 handshape, palms facing upward), but it involves a single outward movement, rather than side-to-side shaking of the hands. In the corresponding video examples, the particle is signed with one hand (the dominant hand) in (12), but with both hands in (13), as indicated by the notation ‘(2h).’ Here this is due to the preceding sign being one-handed (YESTERDAY) or two-handed (CAR). However, there are many variations that are possible as to whether this

<sup>7</sup> There are two other ASL signs (which occur less frequently than “WHAT”) that can be used with the meaning of the English word ‘what’: #WHAT, a loan sign in which the English word is rapidly fingerspelled w-h-a-t, and another sign, often glossed as ‘WHAT’ (with single rather than double quotation marks), which is produced by brushing the index finger of one hand across the fingers of the other, open 5 hand. There are some differences in the distribution of these signs that have yet to be fully described (see Neidle et al., 1997:262 and fn. 24).

particle is signed with the dominant hand, the non-dominant hand, or both (potentially held over differing domains).

Given the similarity of the articulation, and the fact that this particle occurs frequently in wh-questions, it is understandable why it might have been confused with the sign “WHAT” by researchers (including ourselves) in the past. However, this indefinite particle (unlike the wh-sign “WHAT”) can occur in *non-wh* contexts.

### 3.1. Distribution: Occurrence in Non-wh Constructions

The particle just described can occur in a wide variety of contexts, the unifying characteristic of these contexts being some degree of uncertainty. Along with wh-constructions of the type shown in (12) this particle can occur in yes-no questions involving some kind of indefiniteness, whereas the wh-sign “WHAT” would be ungrammatical in yes-no questions.

- (14)  $\frac{\text{IX-2p SEE SOMETHING/ONE}}{\text{y/n part:indef}}$   
 ‘Did you see something (or someone)?’

Hyperlinks: Example 14

<a href="#">Lateral view</a> (151K)	<a href="#">Front view</a> (108K)	<a href="#">Close-up</a> (142K)
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- (15)  $\frac{\text{STUDENT BUY MANY BOOK}}{\text{y/n (2h)part:indef}}$   
 ‘Did (the) student buy many books?’

Hyperlinks: Example 15

<a href="#">Lateral view</a> (239K)	<a href="#">Front view</a> (173K)	<a href="#">Close-up</a> (219K)
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The sign glossed as ‘SOMETHING/ONE’ can be used to mean either ‘something’ or ‘someone’. The meaning conveyed by the particle is not reflected in the English translation of these sentences, as there is no natural way in English to convey this. The semantics associated with this particle will be discussed in section 4. For now, we will simply observe that this particle occurs with great frequency in yes-no questions. Note that it would not be acceptable to replace the particle in (14) and (15) with “WHAT”.

This particle also occurs frequently in negative constructions, as illustrated in (16) and (17).

- (16)  $\frac{\text{MOTHER SHOULD NOT BUY CAR}}{\text{neg (2h)part:indef}}$   
 ‘Mother should not buy a car.’

Hyperlinks: Example 16

<a href="#">Lateral view</a> (286K)	<a href="#">Front view</a> (265K)	<a href="#">Close-up</a> (266K)
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- (17) IX-1p      NEVER    SEE    JOHN    POSS    CAR    part:indef      <sup>neg</sup>  
 ‘I’ve never seen John’s car.’

Hyperlinks: Example 17

<a href="#">Lateral view</a> (1.1MB)	<a href="#">Front view</a> (1.1MB)	<a href="#">Close-up</a> (1.5MB)
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Again, replacing the indefinite particle with the sign “WHAT” in these sentences would result in ungrammaticality.

The indefinite determiner SOMETHING/ONE used in the yes-no question in (14) is also sufficient to license the indefinite particle even in affirmative sentences. When the particle occurs with the indefinite determiner/pronoun, it may appear in any of several positions (and sometimes in more than one position), as illustrated in (18)–(26). The interpretation differs a bit depending on where the particle occurs (as we have attempted to show with the English translations, although, as mentioned earlier, these translations do not completely reflect the meanings). The particle in (19) is initially signed with two hands, after which the non-dominant hand retains the position of the particle throughout the articulation of the sign SOMETHING/ONE on the dominant hand; the non-dominant hand then participates in the articulation of the two-handed sign BOAT that follows.

- (18) SOMETHING/ONE    (2h)part:indef    BOAT    SINK    CAPECOD    IX  
 ‘Some (kind of) boat sank (off) Cape Cod (over there).’

Hyperlinks: Example 18

<a href="#">Lateral view</a> (292K)	<a href="#">Front view</a> (208K)	<a href="#">Close-up</a> (281K)
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- (19) part:indef    SOMETHING/ONE    BOAT    SINK    CAPECOD    IX      [d]  
 part:indef-----      [nd]  
 ‘Some (kind of) boat sank (off) Cape Cod (over there).’

Hyperlinks: Example 19

<a href="#">Lateral view</a> (278K)	<a href="#">Front view</a> (199K)	<a href="#">Close-up</a> (264K)
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- (20) SOMETHING/ONE STRANGE (2h)part:indef ARRIVE HERE  
 ‘Something strange (of some sort) arrived here.’

Hyperlinks: Example 20

<a href="#">Lateral view</a> (183K)	<a href="#">Front view</a> (131K)	<a href="#">Close-up</a> (157K)
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- (21) SOMETHING/ONE part:indef STRANGE ARRIVE  
 ‘Something (or other) strange arrived.’

Hyperlinks: Example 21

<a href="#">Lateral view</a> (220K)	<a href="#">Front view</a> (159K)	<a href="#">Close-up</a> (192K)
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- (22) SOMETHING/ONE BOAT SINK CAPE COD (2h)part:indef  
 ‘A/some boat sank (off) Cape Cod (I think).’

Hyperlinks: Example 22

<a href="#">Lateral view</a> (250K)	<a href="#">Front view</a> (183K)	<a href="#">Close-up</a> (246K)
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- (23) SOMETHING/ONE STRANGE ARRIVE (2h)part:indef  
 ‘Something strange arrived (I think).’

Hyperlinks: Example 23

<a href="#">Lateral view</a> (224K)	<a href="#">Front view</a> (162K)	<a href="#">Close-up</a> (198K)
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- (24) SOMETHING/ONE BOAT (2h)part:indef SINK CAPE COD  
 ‘A boat (or something) sank (off) Cape Cod.’

Hyperlinks: Example 24

<a href="#">Lateral view</a> (951K)	<a href="#">Front view</a> (974K)	<a href="#">Close-up</a> (1.4MB)
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- (25) SOMETHING/ONE (2h)part:indef BOAT SINK NEAR CAPE COD (2h)part:indef  
 ‘Some boat or other sank near Cape Cod (I think).’

Hyperlinks: Example 25

<a href="#">Lateral view</a> (218K)	<a href="#">Front view</a> (305K)	<a href="#">Close-up</a> (298K)
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- (26) SOMETHING/ONE (2h)part:indef STRANGE ARRIVE (2h)part:indef  
 ‘Something (or other) strange arrived (I think).’

Hyperlinks: Example 26

<a href="#">Lateral view</a> (201K)	<a href="#">Front view</a> (147K)	<a href="#">Close-up</a> (182K)
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The English translations given above represent the situation where SOMETHING/ONE refers to an inanimate entity (although, as previously mentioned, it can also be used with the meaning of ‘someone’). As we see, when the particle is used sentence-finally, it often indicates uncertainty about the proposition as a whole, whereas when it modifies a determiner or pronoun internal to the clause, it indicates uncertainty with respect to the noun phrase with which it is associated.

This particle also frequently occurs in other constructions that involve uncertainty, such as sentences that contain non-factive verbs such as ‘guess’ and ‘think’ as in (27) and (28), or adverbials such as MAYBE, as in (29).<sup>8</sup>

- (27) THINK JOHN SICK part:indef  
 ‘(I) think that John is sick.’

Hyperlinks: Example 27

<a href="#">Lateral view</a> (827K)	<a href="#">Front view</a> (794K)	<a href="#">Close-up</a> (1.2MB)
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- (28) SEEM TEACHER LIKE MOVIE (2h)part:indef  
 ‘It seems that the teacher likes the movie.’

Hyperlinks: Example 28

<a href="#">Lateral view</a> (972K)	<a href="#">Front view</a> (983K)	<a href="#">Close-up</a> (1.4MB)
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- (29) MAYBE TEACHER WILL LIKE MOVIE (2h)part:indef  
 ‘Maybe the teacher will like the movie.’

Hyperlinks: Example 29

<a href="#">Lateral view</a> (830K)	<a href="#">Front view</a> (839K)	<a href="#">Close-up</a> (1.2MB)
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It is also interesting to note in passing the similarity in articulation between the indefinite particle and the sign MAYBE. MAYBE is articulated with the same handshape as *part:indef*: the hands are extended, with a 5 handshape, palms facing upward; one hand is raised slightly as the other hand is lowered slightly, and then the hands reverse those motions. There are other signs with

<sup>8</sup> In addition to the particle shown in these examples at the end of the sentence, it is also possible to have a second occurrence of the particle immediately following the verb THINK or SEEM (sometimes with a pause after the particle).

similar meaning and handshape; for example, the sign meaning ‘approximately’ is articulated with the same handshape, palm facing forward, and a slight circular movement.

Two additional examples taken from stories by Mike Schlang illustrate the use of the particle with the verbs HOPE and WISH:

- (30) IX-1p HOPE [pointing at hand] neg  
 NOT BECOME fs-DRY [d]  
 part:indef----- [nd]  
 ‘I hoped that my hand wasn’t getting dry.’

Hyperlinks: Example 30

<a href="#">Front view</a> (848K)	<a href="#">Close-up</a> (548K)
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- (31) WISH IX-1p-pl-2 CAN WATCH TOGETHER (2h)part:indef  
 ‘I wish that the two of us could watch together.’

Hyperlinks: Example 31

<a href="#">Front view</a> (1MB)	<a href="#">Close-up</a> (728K)
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In summary, then, this particle can occur in sentences entailing some degree of uncertainty or tentativeness, whether this is expressed through verbs or adverbs.

In addition, the particle may occur in situations where the uncertainty expressed relates to the discourse context, rather than to some specific element present in the sentence itself. In the literature, the particle occurring in such contexts has frequently been glossed as ‘WELL’. However, we believe that most (if not all) occurrences of the discourse particle WELL actually involve this same particle of indefiniteness.

- (32) JOHN LIKE CAR AND BOOK (2h)part:indef  
 ‘John likes cars and books (it seems).’

Hyperlinks: Example 32

<a href="#">Lateral view</a> (235K)	<a href="#">Front view</a> (216K)	<a href="#">Close-up</a> (195K)
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- (33) FATHER MUST GIFT CAR JOHN (2h)part:indef  
 ‘Father must give the car to John.’

Hyperlinks: Example 33

<a href="#">Lateral view</a> (266K)	<a href="#">Front view</a> (238K)	<a href="#">Close-up</a> (261K)
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The implicit uncertainty in (33) seems to be in regard to whether father will really do it. That is, it is significantly less than certain that father will give the car to John.<sup>9</sup>

Although many occurrences of the particle traditionally glossed as ‘WELL’ can be understood as involving this particle of uncertainty, it is not clear whether all instances can be analyzed in this way. There also seems to be a kind of emphatic use of this discourse-level particle to mark a transition between topics. In the vast majority of these cases, some type of uncertainty may indeed be involved, but it is unclear how to succinctly characterize its distribution with respect to discourse structure.

Many occurrences of this particle are found in excerpts of several stories distributed by DawnSignPress that we have annotated using SignStream. These annotations are available on CD-ROM, and we would invite readers to observe the use of this particle in the specific discourse context of stories, such as Freda Norman’s “Dead Dog” story. One example is provided here:

(34) POSS-1p Classifier:“pet carrier, open door” #DOG

Classifier:“close door and pick-up” MISSING (2h)part:indef  
‘My pet-carrier with my dog in it is missing!’

Hyperlinks: Example 34

[Frontview\(4MB\)](#)

Here the uncertainty presumably relates to how this could have happened.

There is also another kind of discourse use of this particle, involving a stressed production of *part:indef*, separated from the rest of the sentence by a marked prosodic break, as illustrated in (35) and (36). In question contexts, this emphatic articulation of the particle conveys a stronger request for a reply than when the particle is articulated without stress. (The particle is, in this case, accompanied by certain other nonmanual markings associated with questions, such as wide eye aperture, raised or lowered eyebrows—depending on the type of question—and a forward lean of the body.) This particle (like its unstressed counterpart) can be used in yes-no questions, unlike the sign “WHAT”.

y/n

(35) SEE SOMETHING/ONE !(2h)part:indef!  
‘(Well?!) Do you see someone?’

Hyperlinks: Example 35

<a href="#">Lateral view</a> (724K)	<a href="#">Front view</a> (718K)	<a href="#">Close-up</a> (981K)
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<sup>9</sup> As pointed out by Lana Cook (personal communication), this would include the situation where father died and, therefore, where it has become impossible for him to give the car to John. What is crucial is that there is at least the *possibility* that father will not give the car to John.



- (38) 

	_____		whq		
	MOTHER	BUY	CAR	WHY <sup>^</sup> part:indef	[d]
				part:indef-----	[nd]

‘Why did mother buy a car?’

Hyperlinks: Example 38

<a href="#">Lateral view</a> (998K)	<a href="#">Front view</a> (1MB)	<a href="#">Close-up</a> (1.4MB)
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- (39) 

	_____		whq		
	MOTHER	BUY	CAR	FOR-FOR <sup>^</sup> part:indef	[d]
				part:indef-----	[nd]

‘What did mother buy a car for?’

Hyperlinks: Example 39

<a href="#">Lateral view</a> (891K)	<a href="#">Front view</a> (899K)	<a href="#">Close-up</a> (1.2MB)
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- (40) 

	_____		whq		
	MARY	ARRIVE	HOW <sup>^</sup> part:indef		

‘How did Mary arrive?’

Hyperlinks: Example 40

<a href="#">Lateral view</a> (730K)	<a href="#">Front view</a> (738K)	<a href="#">Close-up</a> (1MB)
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In (37) through (39), the wh-signs are articulated solely with the non-dominant hand, which finishes off with an articulation of the indefinite particle; the articulation of the indefinite particle on the non-dominant hand begins at the same time as the wh-phrase (i.e., before the particle is signed on the dominant hand), and continues through the articulation of the particle on the dominant hand. In (40), however, since HOW is a 2-handed sign, both hands articulate the wh-sign followed by the particle.

Sometimes, the movement associated with the indefinite particle is very subtle. For instance, there are cases where it is unclear whether or not the wh-sign (“WHAT”) is followed by this particle. Frequently the movement associated with the particle may be subtler on one hand than on the other. Sometimes, in fact, when the non-dominant hand has not been actively engaged in signing (but may, for example, be resting on the lap of a seated signer), there is nonetheless a small yet detectable outward turning of the palm on the non-dominant hand as the dominant hand produces this particle.

In addition to its ability to cliticize, the particle is also capable of undergoing perseveration in an utterance. Perseveration (maintenance of a handshape that will be used again) is a fairly general phenomenon in ASL; for instance, it occurs frequently with classifiers. Manual perseveration of the non-dominant hand in the production of the sign “WHAT” was first noted by Neidle et al. (1994). It was observed that, in constructions involving two instances of

“WHAT” (see note 3), the non-dominant hand may retain the handshape for “WHAT” between two occurrences of the sign. Sentence (41) illustrates this phenomenon.

				whq		
(41)	“WHAT”	JOHN	BUY	YESTERDAY	“WHAT”	[d]
	“WHAT”	-----			“WHAT”	[nd]
	‘What did John buy yesterday?’					

Neidle et al. (2000:118, ex. 23)

Hyperlinks: Example 41

<a href="#">Lateral view</a> (866K)	<a href="#">Front view</a> (896K)	<a href="#">Close-up</a> (1.2MB)
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As in those cases involving “WHAT”, the particle may also exhibit perseveration by the non-dominant hand throughout part or all of the utterance, as shown in (42) and (43).

(42)	part:indef	SOMETHING/ONE	part:indef	WOMAN	ARRIVE	part:indef	[d]
	part:indef	-----				part:indef	[nd]
	‘Some woman or other arrived (I think).’						

Hyperlinks: Example 42

<a href="#">Lateral view</a> (847K)	<a href="#">Front view</a> (740K)	<a href="#">Close-up</a> (1.3MB)
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(43)	part:indef	WOMAN	part:indef	ARRIVE	part:indef	[d]
	part:indef	-----			part:indef	[nd]
	‘Some woman arrived (I think).’					

Hyperlinks: Example 43

<a href="#">Lateral view</a> (780K)	<a href="#">Front view</a> (686K)	<a href="#">Close-up</a> (1.2MB)
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### 3.3. Nonmanual Correlates

There are nonmanual expressions that typically occur with expressions of uncertainty. As observed by MacLaughlin (1997, p. 119), nouns, verbs, and adjectives conveying some degree of uncertainty—including the sign SOMETHING/ONE, which functions as determiner or pronominal—are frequently associated with a tensed nose, lowered brows, and sometimes also raising of the shoulders. These same expressions frequently occur with the indefinite particle, although the eyebrows are sometimes raised (typical of focused constituents).

We have also observed that this particle frequently occurs with a sudden shift in eye gaze to the left or right, as shown in Figure 2 with respect to sentences (24) and (21), discussed earlier and repeated here as (44) and (45).



- eyegaze:left
- (44) SOMETHING/ONE BOAT (2h)part:indef SINK CAPECOD  
 ‘A boat (or something) sank (off) Cape Cod.’

Hyperlinks: Example 44

<a href="#">Lateral view</a> (951K)	<a href="#">Front view</a> (974K)	<a href="#">Close-up</a> (1.4MB)
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- eyegaze:right
- (45) SOMETHING/ONE part:indef STRANGE ARRIVE  
 ‘Something (or other) strange arrived.’

Hyperlinks: Example 45

<a href="#">Lateral view</a> (220K)	<a href="#">Front view</a> (159K)	<a href="#">Close-up</a> (192K)
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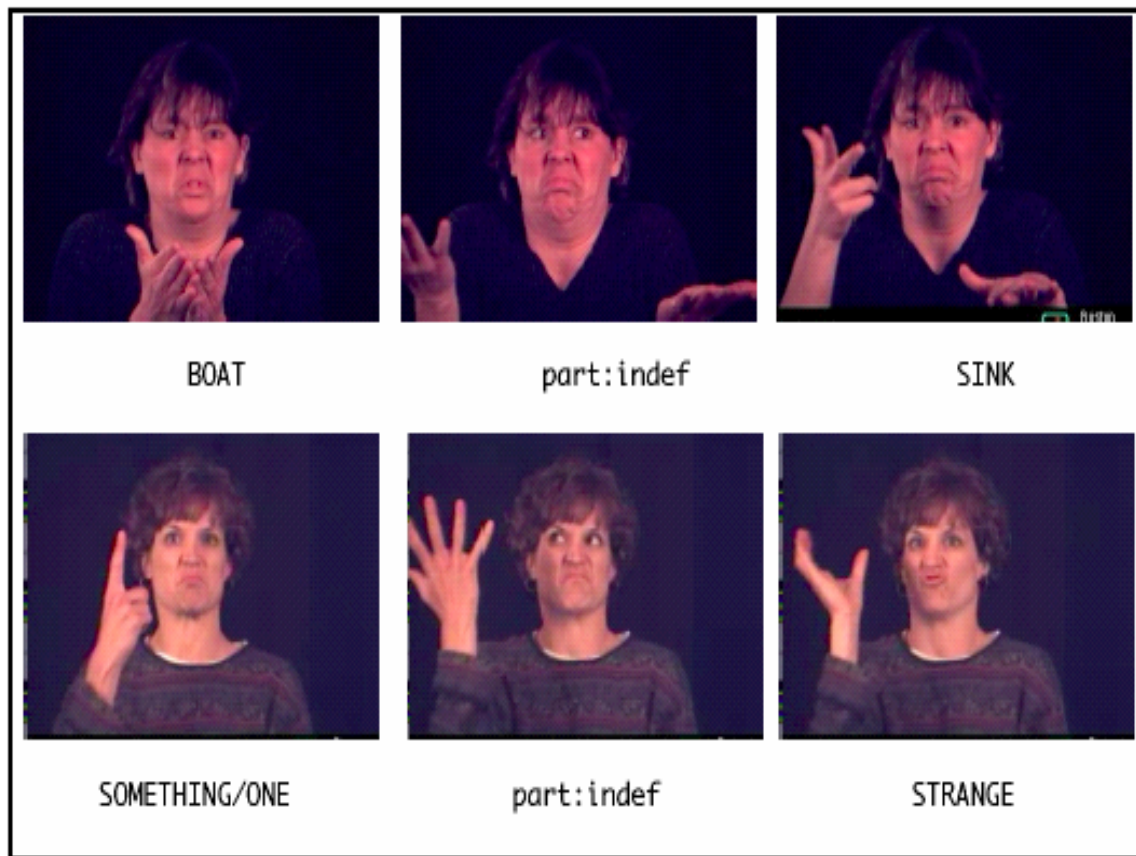


Figure 2. Eye gaze occurring with part:indef

This eye behavior remains to be studied carefully, but there is a definite pattern that has emerged from our data.





- (53)  $\overline{\text{JOHN SEE YESTERDAY WHO}} \quad \text{whq} \quad (2h)\text{part:indef} \quad (\text{wh-moved object})$   
 ‘Who did John see yesterday?’

Hyperlinks: Example 53

<a href="#">Lateral view</a> (937K)	<a href="#">Front view</a> (920K)	<a href="#">Close-up</a> (1.3MB)
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In some cases, the particle may be articulated on one hand while the wh-phrase is articulated with the other, as occurred in sentence (8), repeated here as (54):

- (54)  $\overline{t_i \text{ ARRIVE WHO}_i} \quad \text{whq} \quad [d]$   
 $\text{part:indef} \quad [nd]$   
 ‘Who arrived?’

Hyperlinks: Example 54

<a href="#">Lateral view</a> (528K)	<a href="#">Front view</a> (497K)	<a href="#">Close-up</a> (1648K)
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### 3.6. Summary Thus Far

We have identified a previously overlooked particle in ASL that occurs with great frequency in question constructions and sentences that involve some kind of indefiniteness. This particle occurs with a precise distribution and interacts phonologically with other signs, as discussed in section 3.2.<sup>10</sup>

## 4. Semantics of the Indefinite Focus Particle

In this section, we will attempt a more rigorous statement of the contribution of *part:indef* to the meaning of the utterance. We note at the outset, however, that our conclusions will necessarily be tentative, as the full range of contexts in which the *part:indef* particle can appear requires further systematic exploration.

Let us consider first the cases in which *part:indef* appears with indefinites. Here, the effect of *part:indef* seems to be to extend the domain of reference to beyond the typical, resulting in a “widening” reminiscent of that proposed by Kadmon and Landman (1993) for English *any*. That is, whereas (55) simply asserts that a boat sank near Cape Cod, (56) (repeating (18)) asserts that

<sup>10</sup> In Emmorey (1999), this particle is considered to be a gesture and glossed as ‘/well-what/.’ Although it is not entirely obvious how the distinction between sign and gesture should be defined, even by the criteria provided by Emmorey, *part:indef* does seem to pattern with linguistic signs (rather than gestures) by virtue of systematicity of form, distribution, and meaning.

some (perhaps unusual) kind of boat sank near Cape Cod, and (57) (repeating (24)) asserts that some boat or perhaps something only relevantly like a typical boat sank near Cape Cod.

- (55) SOMETHING/ONE BOAT SINK CAPE COD  
‘A boat sank (off) Cape Cod.’

Hyperlinks: Example 55

<a href="#">Lateral view</a> (1.3MB)	<a href="#">Front view</a> (1.4MB)	<a href="#">Close-up</a> (1.9MB)
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- (56) SOMETHING/ONE (2h)part:indef BOAT SINK CAPE COD IX  
‘Some (kind of) boat sank (off) Cape Cod (over there).’

Hyperlinks: Example 56

<a href="#">Lateral view</a> (292K)	<a href="#">Front view</a> (208K)	<a href="#">Close-up</a> (281K)
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- (57) SOMETHING/ONE BOAT (2h)part:indef SINK CAPE COD  
‘A boat (or something) sank (off) Cape Cod.’

Hyperlinks: Example 57

<a href="#">Lateral view</a> (951K)	<a href="#">Front view</a> (974K)	<a href="#">Close-up</a> (1.4MB)
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Adapting Kadmon and Landman’s (1993) condition on *any* we could characterize this as follows:

- (58) WIDENING  
The *part:indef* widens the interpretation of the phrase with which it is associated along a contextually determined dimension.

Thus, whatever the extension of the phrase would be without *part:indef* (normally fairly restricted contextually), it would be expanded to include other referents when *part:indef* is attached. The examples in (55)–(57) also demonstrate that *part:indef* has scopal properties; it can attach to different types of phrases and will widen the interpretation of whatever phrase it is attached to. In this connection, however, we should also point out *part:indef* appears to be allowed at or above its logical scope position (at least superficially like *only* in English); thus, many of the cases discussed below where *part:indef* appears higher in the structure also have alternative interpretations in which *part:indef* logically associates with an internal constituent.

The explanation of *part:indef* with indefinites given above can be extended straightforwardly to the cases of *part:indef* with *wh*-words. We take a *wh*-word, in a certain sense, to “stand in for” the possible phrases that could replace it in a well-formed answer (see, e.g., Hamblin (1973) and most subsequent work on questions). Usually, the range of values that a *wh*-word can stand in for is contextually restricted in much the same way as an indefinite like *someone*, and just as with the indefinites discussed above, when used with a *wh*-word *part:indef* also expands the domain of possible referents. This conveys the feeling that the questioner really has no idea what the



(61b)  $\frac{\text{whq}}{\text{SEE JOAN WHO}}$  [d]  
 part:indef [nd]

Hyperlinks: Example 61b

<a href="#">Lateral view</a> (944K)	<a href="#">Front view</a> (969K)	<a href="#">Close-up</a> (1.3MB)
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Moreover, *part:indef* is not allowed with just anything focused in the sentence. For use of *part:indef*, it must be the indefinite that is in focus. If the questioner wanted to know whether *anyone* saw Joan (that is, in a context like “I know that *Bill* didn’t see Joan, but...”), the questions in (62) are quite natural, but with focus on *Joan* (that is, in a context like “I know that nobody saw *Bill*, but...”), neither variant in (62) would be natural.

(62a)  $\frac{\text{y/n}}{\text{SOMETHING/ONE}^{\text{part:indef}} \text{SEE JOAN}}$

(62b)  $\frac{\text{y/n}}{\text{SOMETHING/ONE SEE JOAN}}$  [d]  
 part:indef----- [nd]  
 ‘Did *anyone* see Joan?’  
 ?\*‘Did anyone see *Joan*?’

Hyperlinks: Example 62b

<a href="#">Lateral view</a> (958K)	<a href="#">Front view</a> (986K)	<a href="#">Close-up</a> (1.3MB)
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As expected given the analysis so far, we find that in a negative context, such as (63)(=16), the particle can play a role similar to English *any*. On one reading of (63), the particle serves to emphasize that mother should not buy any cars, typical or not.

(63) MOTHER SHOULD NOT BUY CAR  $\frac{\text{neg}}{(2h)\text{part:indef}}$   
 ‘Mother should not buy (any) car(s).’  
 ‘Mother should not buy a car or anything.’

Hyperlinks: Example 63

<a href="#">Lateral view</a> (286K)	<a href="#">Front view</a> (265K)	<a href="#">Close-up</a> (266K)
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Another available reading of (63) comes about by Widening higher, at the VP level, where what is meant is that Mother should not buy a car or do anything like buying a car. In English, this kind of meaning can be expressed colloquially with “or something” or “or anything,” as in the following examples.

(64) Did you go to Europe?

- (65) Did you go to Europe or anything?  
 (66) I didn't buy a book or anything.

Sentence (64) is simply asking whether or not the proposition that you went to Europe is true, while (65) asks whether you went to Europe or did anything like going to Europe. Likewise, (66) is most commonly used to mean that I didn't buy a book or do anything that would be considered in the context to be like buying a book.

In other cases we have seen, *part:indef* appears to be attached still higher in the structure, lending a feeling of “uncertainty.” For example, we might paraphrase (67) (repeating (22)) as ‘That a boat sank off Cape Cod is likely but not certain’ and (68) repeating (32)) as ‘That John likes cars and books is likely but not certain.’

- (67) SOMETHING/ONE BOAT SINK CAPE COD *part:indef*  
 ‘A/some boat sank (off) Cape Cod (I think).’

Hyperlinks: Example 67

<a href="#">Lateral view</a> (250K)	<a href="#">Front view</a> (183K)	<a href="#">Close-up</a> (246K)
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- (68) JOHN LIKE CAR AND BOOK (2h)*part:indef*  
 ‘John likes cars and books (it seems).’

Hyperlinks: Example 68

<a href="#">Lateral view</a> (216K)	<a href="#">Front view</a> (235K)	<a href="#">Close-up</a> (195K)
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In the normal course of cooperative conversation, a speaker will say only things that s/he believes to be true, and moreover, in the absence of any qualification, to be *true for sure*. If we allow for propositions to be true to varying degrees of certainty, we can characterize the contribution of *part:indef* as serving to allow consideration of degrees of certainty other than *for sure*. We can view this as another case of Widening, now on the degree of certainty with which the speaker regards the proposition to be true. We can think of “degree of certainty” in a sentence as being identified with the polarity of the sentence (where in the absence of a qualifier like *part:indef*, a negative sentence would be “false for sure” and an affirmative sentences would be “true for sure”); the extension here is that under certain circumstances, values between the two can be explicitly evoked.<sup>12</sup>

The indefinite particle may be used to widen the speaker’s degree of certainty with respect to a proposition. The sentence in (69) expresses that it ought to be the case that father will give the car to John, but at the same time expresses some doubt as to whether, in reality, this will happen. It is not that the signer isn’t certain about what he or she believes *ought* to happen, but rather that the signer isn’t certain that that father *will* give the car to John.<sup>13</sup>

<sup>12</sup> This type of “Bayesian belief model” has been explored by several authors; see, e.g., Romero and Han (2001), Nilsen (to appear), van Rooy (to appear), and particularly Gärdenfors (1988).

<sup>13</sup> This is perhaps similar to the English “Father certainly must give the car to John” (noting that, perhaps counter-intuitively, one of properties of the speaker-oriented adverb *certainly* is that it introduces a small degree of doubt; compare ‘Audrey died in the explosion’ with ‘Audrey certainly died in the explosion’).



- (69) FATHER<sub>i</sub> MUST [ t<sub>i</sub> GIFT CAR JOHN] part:indef  
 ‘Father must give the car to John.’

Hyperlinks: Example 69

<a href="#">Lateral view (238K)</a>	<a href="#">Front view (266K)</a>	<a href="#">Close-up (261K)</a>
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In these uses (as is clear in some of the other examples, as well), *part:indef* functions like a speaker-oriented adverb (akin to *fortunately*, *certainly*, or *presumably*).

The last function of *part:indef* we will consider here is its use in managing conflicts in the discourse. If evidence arises that participants disagree about the plausibility of a proposition or presupposition, *part:indef* can be recruited to assist. Consider (70) (repeating (17)), uttered in response to a question asking what color John’s car is.

- (70) IX-1p neg  
 NEVER SEE JOHN POSS CAR part:indef  
 ‘I’ve never seen John’s car.’

Hyperlinks: Example 70

<a href="#">Lateral view (1.1MB)</a>	<a href="#">Front view (1.1MB)</a>	<a href="#">Close-up (1.5MB)</a>
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By asking the question in the first place, the questioner implicitly indicates that s/he believes the addressee knows the answer. If this is not the case, one option the addressee has is to respond “I don’t know,” but (70) goes a step further: “I don’t know—but it’s not my fault, as I have no way of knowing.” The way (70) does this is by picking out the prototypical means by which the answer might be known (i.e., having seen the car) and asserting the falsity of this proposition and all propositions involving means like it (even perhaps non-prototypical means, e.g., psychic revelation) by which the answer might be known. This, too, can be seen as a Widening effect, in this case on the entire proposition itself (expanding the referent to the proposition and propositions deemed similar, given the context).

In a related use, consider a situation in which Mary asks John a question. The presupposition that led Mary to ask John such a question is her belief that he might know the answer. Suppose that Pete does not believe that this presupposition is plausible. Pete might say to Mary:

- (71) JOHN      <sup>neg</sup>NOT^KNOW      ANSWER      !part:indef!  
 ‘John does not know the answer!  
 (How could you have thought he would?)’

Hyperlinks: Example 71

<a href="#">Lateral view</a> (1MB)	<a href="#">Front view</a> (1MB)	<a href="#">Close-up</a> (1.4MB)
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Here, *part:indef* is used to communicate the utter falsity of that presupposition: not only is it false that John knows the answer, anything (contextually) *like* John knowing the answer is also false.

It is not entirely clear whether a different kind of analysis is needed to account for the situations in which the particle seems to be associated with a presupposition or potential causality that is not explicitly stated. For example, compare (71) with (72). The meaning contribution of the particle is essentially the same in both cases; yet, in (72), there is no explicit negation in the sentence. Each of the examples is a denial of an implicit presupposition of the addressee. In (72), the addressee’s apparent belief that John might not know the answer is denied by the signer, with prejudice. It is clear that *part:indef* is mostly responsible for the disbelieving tone of such examples, but a formal solution based on a Widening effect in the pragmatic context has so far proved elusive.

- (72) JOHN KNOW ANSWER !part:indef!  
 ‘John knows the answer!  
 (How could you have thought he wouldn’t?)’

This is in some ways similar to the example given in (34), repeated below as (73).

- (73) POSS-1p Classifier: “pet carrier, open door” #DOG  
 Classifier: “close door and pick-up” MISSING (2h)part:indef  
 ‘My pet-carrier with my dog in it is missing!’

Hyperlinks: Example 73

<a href="#">Frontview</a> (4MB)
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Here, what is being highlighted is the disconnect between the indisputable reality and the expected situation. Whether such constructions should be analyzed as Widening, in a sense related to (but perhaps a bit different from) the others we have considered, or whether a different account would be more appropriate for these usages of the particle must be left as a question for further investigation.

To summarize, it appears that, in most cases, *part:indef* semantically associates with some layer of the linguistic structure (a determiner, a noun phrase, a predicate, sentence polarity, or an entire proposition) and “widens” the domain of reference, in some direction that is contextually appropriate. It is worth reiterating that the landscape of facts is still being explored, making

certain details of the analysis necessarily preliminary; however, the overall pattern seems to fit well with the approach we have endorsed here.

## 5. Conclusions

We have described here a particle that occurs with great frequency in ASL but which has not been previously analyzed in the literature, to our knowledge. Its articulation is similar to, but distinguishable from, the wh-sign glossed as “WHAT.” Although this particle does occur commonly in wh-questions, it also appears in a variety of other environments in which wh-phrases are disallowed. Further study of the semantics, distribution, and use of this particle is warranted. We have argued here that this particle functions to widen the domain of items referred to by a focused wh-phrase or indefinite quantifier such as ‘someone.’ This particle may also be used in a comparable way with respect to other constituents in the sentence (e.g., NP, VP, CP) and we have suggested that the interpretation in such cases also involves semantic Widening along a contextually determined dimension.

## 6. Appendix

### APPENDIX: NOTATIONAL CONVENTIONS

<i>example</i>	<i>explanation</i>
SEE, JOHN	gloss (nearest conventional English equivalent) for a sign. Proper names in this paper are actually fingerspelled, but, for ease of presentation, this is not marked explicitly here.
SHOW-UP	multiword gloss for a single sign
REAL/TRUE	a slash is used when a single ASL sign has more than one English translation
SOMETHING/ONE	a sign in ASL that may be translated as either ‘something’ or ‘someone’
fs-HALL	indicates that a sign is fingerspelled (H-A-L-L)
#CAR, #BUS	indicates a gloss for a fingerspelled loan sign.
WILL^NOT	^ indicates contraction
“WHAT”	a wh-sign produced with both hands extended, palms facing up, moving slightly from side to side
part:indef	an indefinite focus particle articulated with a single outward movement of one or both palms (facing upward)
IX-1p	pointing sign (used for pronominal reference); marked for first person
IX	pointing sign (used for pronominal reference); non-first person
POSS	a possessive pronoun, articulated with an open palm pointing toward the possessor
<b>non-manuals</b>	extended line indicates the domain over which the non-manual marker occurs
<u>whq</u>	wh-question marker (furrowed brows, squinted eyes, sometimes



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