Valency in Classifier Predicates: A Syntactic Analysis[1]

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1. Introduction

The goal of this paper is to explore certain syntactic properties of classifier predicates, in particular, the realization of the argument structure associated with them. The work presented here is a first approach to a crosslinguistic syntactic analysis of two sign languages in the Ibero-American domain: LSC (Catalan Sign Language) and LSA (Argentinian Sign Language).[2]

Classifier predicates are morphologically complex verbal forms, with at least two morphemes: the movement of the sign, which denotes the eventuality of the predicate, and the handshape of the sign, which correlates with an argument of the predicate and can be considered the classifier proper.[3] Because of this correlation between the type of entity the argument denotes and the type of handshape that is used, most classifications of classifiers are based on lexico-semantic notions (e.g., Supalla 1986). More recently, Benedicto and Brentari (2004) provide a morpho-phonological analysis of classifier handshapes based on Brentari's (1998) Prosodic Model, that offers a formal correlate to Engberg-Pedersen's (1993) classification of classifier handshapes into *handling*, *whole*

[2] Despite the historical, cultural and linguistic links between Argentina and Spain, there is no attested genetic relationship between the sign languages under study.
[3] See the Introduction to this volume for a more detailed overview of the types and

entity, *extension* and *limb* (extended to include *body part*). In this paper, we will follow this classification.

Additionally, work on the syntactic structure of classifier predicates in American Sign Language (ASL) has shown that there is a correlation between the type of classifier morpheme (handling, whole entity or body part) and the valency of the predicate itself. Benedicto and Brentari (2004) point out the following correlations between types of classifier and types of predicate in ASL:

(1)

    (i)   predicates with a handling classifier are transitive (with an external and an internal argument);

    (ii)   predicates with a whole entity classifier are intransitive unaccusative (one single internal argument),[4] and

    (iii)   predicates with a body part classifier are intransitive unergative (one single external argument).[5]

One of the main issues under discussion in the area of sign language linguistics is to what extent the visual modality of these languages has an effect on the structural properties they display, and in which areas this potential modality effect manifests itself.[6] The prevalence of the existence of verbal classifier morphemes in the sign languages known to date makes this area of the grammar a potentially good candidate

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characteristics of classifier predicates in sign languages.

[4] This group would also include *extension* classifier handshapes. Though with a slight difference in morphophonological structure, both *whole entity* and *extension* classifier handshapes form unaccusative predicates in ASL.

[5] For the original classification of intransitive predicates in these two groups (i.e., unergatives and unaccusatives), see Perlmutter (1978) and Burzio (1986).

[6] For recent discussion on the issue of language modality, see the contributions in Meier et al. (2002).

for modality effects, especially when compared with the rarity of these morphemes in spoken languages.[7] Since handling, whole entity and body part classifier morphemes have been documented, under these or other names, in so many sign languages,[8] and since they seem to present, by and large, the same set of morphophonological properties,[9] it is of interest to determine if those morphophonological properties correlate with the syntactic properties observed for ASL in (1). The question is to determine at what level, if at all, a modality effect could take place: at the phonological, morphophonological or morphosyntactic level. In this paper, in particular, we will provide new data to contribute to the question whether the correlation patterns of (1) constitute a general pattern in sign languages, or whether other fine-grained differences in morphosyntactic behavior can be observed across sign languages. In this last case, it will be useful in further research to compare the results in sign languages with the behavior of the same type of elements in spoken languages. If general patterns arise from such comparison, then we would be facing a Universal Grammar effect.[10]

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[7] See Aikhenvald (2000: 149-171).

[8] See, among others, Cvejanov (2002) for LSA (Argentinian Sign Language), Fourestier (1999) for LSC (Catalan Sign Language), and the references in Schembri (2003:fn.1) for some thirty sign languages.
One has to proceed with caution, however. There are some indications that classifier morphemes may not exist in all sign languages, as had been initially thought. Nyst (2004) reports that no (whole) entity classifier morphemes appear with motion predicates in Adamorobe Sign Language. Additionally, preliminary data seem to indicate that LSB (Brazilian SL) does not have *body part* classifiers (Brenda Veloso, p.c.).

[9] D. Brentari (p.c.), based on data collected for an on-going NSF-funded crosslinguistic project on 11 sign languages.

[10] As already pointed out in the discusión about crosslinguistic variation in Benedicto and Brentari (2004, sect 8), the same morphosyntactic patterns observed for ASL are also observed in spoken languages, with Washo's bipartite stems being the closest to what we see in ASL (see Jacobsen, 1980). For a formal approach on how to account for crosslinguistic variation in verbal classifiers, see Benedicto (2002, 2004).

In this paper, thus, we will proceed to evaluate the claims of (1), originally made for ASL, with respect to LSC and LSA. This will contribute to evaluate the extent of crosslinguistic similarities not only in the realm of morphophonology (where they have been pervasively found) but also in the syntax.

The paper is organized as follows. In section 2 we address the transitivity of handling classifiers, especially in comparison with whole entity classifiers, with which they can enter into argument alternations of the transitive-unaccusative type (e.g., *they opened the door* vs. *the door opened*). This evaluates the claims in i. and ii. under (1). In section 3 we address the idiosyncrasies of body part classifiers in their syntactic behavior. Finally, section 4 presents an overall evaluation of the results and general directions for further research. The discussion in these sections shows that, while claims i. and ii. about the transitive-unaccusative contrast can be validated for classifier predicates in LSA and LSC, claim iii. about the unergative character of predicates with body part classifiers remains inconclusive due to the lack of sufficiently discriminating tests. This highlights the need to establish language particular tests for this type of syntactic objects, a qualification that has already proven necessary for spoken languages in this domain.

2. Handling and Whole Entity Classifiers: Transitive and Unaccusative Predicates

Benedicto and Brentari (2004) use two types of tests to support their claims in (1): tests that target the internal argument of a predicate, that is, tests that identify the structural status of an argument as internal; and tests that detect the presence of an external, agentive argument in a predicate. The first type includes two different tests shown to

target the internal argument in ASL: the negative sign glossed as NOTHING, and the distributive morpheme.[11] The second type includes a sign, WILLING, which can be paraphrased as 'willingly' and the use of the negative imperative glossed as STOP, both of which disclose the presence of an agent.

There is a caveat that we need to be aware of, with respect to these tests.[12] These are language particular tests and, as such, nothing grants that there will be a correlate in other sign languages with a syntactic behavior similar to the one they show in ASL. This is especially true of the structural tests of the first type and across languages we find a great variety of tests used to identify internal arguments.[13] In fact, neither LSA or LSC have an equivalent of NOTHING, that is, a negative sign that selectively targets internal arguments. In this and next section, we will evaluate how the other tests behave in these two languages.

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[11] The [distr] morpheme is co-articulated with the verb and it consists of multiple, reduced repetitions of the stem movement, which are produced along an arc-shaped path in front of the signer. The number of repetitions is not determined and the locations along the path cannot be referred to anaphorically, as they do not necessarily correspond to the loci of the objects (Benedicto and Brentari, 2004: fn.16). It creates a single-event distributive reading over the object. It must be distinguished from the type of multiple-event verb that can be articulated with a determinate number of repetitions of the stem movement, which are less reduced and have short holds at the end of each repetition. With agreement verbs, the [distr] morpheme corresponds to the so called [exhaustive] form. As an anonymous reviewer points out, Padden (1988, 1990) has claimed that the former morpheme cannot appear with spatial verbs, including classifiers. However, the *possibility* for co-occurrence of exhaustive/distributive morpheme with classifiers seems sufficiently well documented, both in Benedicto and Brentari (2004) for ASL, and in the LSA and LSC data reported in this paper. Padden (1990) in fact reports on another superficially related phenomenon (repetition of a spatial/classifier verb on discrete spatial locations), which does exist but is different from the one reported here.
[12] For a list and discussion of unaccusativity tests in spoken languages, see Legendre (1989) and Levin & Rappaport Hovav (1995), among others.
[13] For instance, *there* insertion is used with (a subset of) unaccusative verbs in English but it does not exist in Romance languages such as Catalan, Spanish or Italian. Similarly, the use of a particular clitic (e.g., *ne/en* in Catalan, French or Italian) is used in certain Romance languages to detect an internal argument, but no equivalent exists in English.

As a reminder, the goal of this section is to establish if handling classifiers appear with a transitive predicate (with one internal argument and one agentive, external argument), and whether whole entity classifiers appear with an intransitive unaccusative predicate (with one internal argument).

2.1. Handling classifiers in transitive predicates

The presence of an agent in predicates with a handling classifier can be detected in LSC via the sign TALLA! used as a negative imperative.[14] This element distinguishes agentive predicates from non-agentive predicates.

(2)   a. $_2$MIRAR_FIXAMENT$_1$ TALLA!^{15} [LSC]

           you_stare_at_me   cut.IMPER

           'Stop staring at me!'

   b.   *FRANCÈS   SABER   TALLA!

           French   know   cut.IMPER

           ('*Stop knowing French!')

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[14] There is at least another sign with a negative imperative use, namely FIN! 'finish'. This sign, though, does not discriminate between agentive and non-agentive predicates.
[15] Following standard use, the examples are here transcribed following the traditional conventions borrowed from the spoken language where the Deaf community lives. Thus, LSC, ASL and LSA are transcribed using Catalan, English and Spanish, respectively.

The grammaticality of the negative imperative TALLA! with a handling classifier predicate contrasts with its ungrammaticality in conjunction with a minimally differing whole entity classifier predicate:

(4)   a.   MONEDA T_{old}+POSAR_ADINTRE   TALLA!   [LSC]

            coin   coin_hndl$_{hndl}$+put_inside   cut.IMPER

            'Stop inserting a coin!'

      b.   *MONEDA O+CAURE_ADINTRE   TALLA![16]

            coin   coin$_{w/e}$+fall_inside   cut.IMPER

            ('*Stop falling the coin inside!')

In (4a) the grammaticality of TALLA! with a handling classifier predicate indicates the presence of an agent, while its ungrammaticality in (4b) with a whole entity classifier predicate indicates the absence of an agent. Thus, we see that the difference in the number of arguments in the predicate is obtained out of the choice of classifier type: two in the case of a handling classifier, and one in the case of a whole entity classifier. In other words, a transitive predicate is formed with a handling classifier and an intransitive one with a whole entity classifier. This is true independently of the type of movement that combines with the classifier morpheme.[17] Therefore, we conclude that

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[16] There is an alternative interpretation for this sequence, namely 'Stop letting the coin fall inside!'. This interpretation, however, corresponds to a structure with an elided causative morpheme MANS.

[17] As pointed out in Benedicto and Brentari (2004), though there is a tendency for certain types of classifiers to appear with certain types of movements, classifier types (whether handling, whole entity, body part or extension) can combine quite freely with different movement roots (position, motion, manner, extension). Unfortunately, (lack of) space does not allow us to discuss these data further here.

the classifier morpheme itself, and not the movement, is responsible for the number of arguments of a given predicate as a whole.

With respect to LSA, the sign A_PROPÓSITO 'on purpose' is also incompatible with non-agentives, such as SABER 'to know' in (5a). In contrast, it can co-occur felicitously with an agentive predicate like ESTUDIAR ´to study', as the grammaticality of (5b) shows.

(5)　　a.　AMIGO　INGLÉS　SABER　(*A_PROPÓSITO)　　　　　[LSA]

　　　　　　friend　　English　　know　　　on_purpose

　　　　　　'My friend knows English (*on purpose).'

　　　　b.　AMIGO　INGLÉS　ESTUDIAR　　A_PROPÓSITO

　　　　　　friend　　English　　learn　　　　　on_purpose

　　　　　　'The friend is learning English on purpose.'

Thus, we can use it to detect the presence of an agent in minimally contrasting pairs including, respectively, a handling classifier and a whole entity classifier, as in (6):

(6)　　　　　　　　　　　　　　　　　　　　　　　　　　　　　[LSA]

a.　　　LIBRO MESA YO　C+PONER_DE_COSTADO　　($^{\surd}$A_PROPÓSITO)

　　　　book　　table　　I　　book_hndl$_{hndl}$+turn_on_its_side　　on_purpose

　　　　'I put the book (flat on its side) on the table on purpose.'

b.　　　LIBRO B+ESTAR_PARADO　　　B+CAER_DE_COSTADO (*A_PROPÓSITO)

　　　　book　　book$_{w/e}$+be_loc_vertical　　book$_{w/e}$+turn_on_its_side　　on_purpose

'The book was standing there and fell on its side (*on purpose).'

As with the examples of (4) for LSC, the grammaticality of A_PROPÓSITO in (6a) indicates the presence of an agent in predicates with a handling classifier, while its ungrammaticality in (6b) indicates the absence of such an agent in predicates with a whole entity classifier, thus signaling their respective transitivity and intransitivity.

2.2 Whole entity classifiers in unaccusative predicates

A complementary test now is required to show that the single argument of a predicate with a whole entity classifier is indeed an internal one. Of course, we have thematic information already: in both LSC cases under (4), MONEDA 'coin' is the theme of the event, and the same is true of LIBRO 'book' in (6) for LSA. Following some form of uniformity condition, if that constituent is the internal argument in (4a) or (6a), then it is also an internal argument in (4b) or (6b). However, it is still important to show structural (rather than thematic) confirmation for it, and here is where the [distr] morpheme comes in. In ASL, the [distr] morpheme added to the movement root triggers quantification only over the internal argument, not the external one. This is also the case in LSC, where the utterance in (7) (with a non-classifier predicate) can only have the interpretation in a. (distribution over the internal argument) and not the interpretation in b. (distribution over the external argument):

(7)   PROFESSOR   ALUMNE   AVISAR[distr]   [LSC]

      teacher   student   warn.[distr]

      'The teacher warned each one of the students.'

a. √ NP-subject V *each* NP-object

b. # *each* NP-subject V NP-object

If we apply the morpheme to a handling classifier predicate and a whole entity predicate, respectively, we obtain the expected results. As shown in (9), with a handling classifier, only the internal argument is accessible to the [distr] morpheme, not the external argument. Furthermore, when applied to a predicate with a whole entity classifier, as in (11), the [distr] morpheme can and does quantify over the single argument. Thus, we have further evidence that the single argument of a whole entity classifier behaves like the object of the transitive counterpart, that is, that it behaves as an internal argument, making the predicate unaccusative.

(8) DONA   LLIBRE   C+POSAR_DE_PEU   [LSC]

woman   book   book_hndl$_{hndl}$+put_upright

'The woman put the book up (there) .'

(9) DONA   LLIBRE   C+POSAR_DE_PEU[distr]   [LSC]

woman   book   book_hndl$_{hndl}$+put_upright[distr]

'The woman put each book up (there).'

a. √ NP-subj V *each* object

b. # *each* N V NP-obj

(10) 1+SER_HI   [LSC]

person $_{w/e}$+be_loc

'There was a person there.'

(11) 1+SER_HI[distr]   [LSC]

person $_{w/e}$+be_loc[distr]

'There was a person next to each other.'

Similar results obtain for LSA: the [distr] morpheme, which also exists in the language, distributes only over the single argument associated with the whole entity classifier of (13), the same situation we encounter with the object of the transitive predicate of (12) featuring a handling classifier. This parallel pattern indicates that both are of the same type, internal arguments.

(12)   LAURA   LIBRO   C+PONER_DE_PIE[distr]   [LSA]

Laura   book   book_hndl$_{hndl}$+put_upright[distr]

'Laura put each book upright (on the shelf).'

(13)   [LSA]

LIBRO   B+ESTAR_PARADO   B+CAER_DE_COSTADO[distr]

book   book$_{w/e}$+be_loc_vertical   book$_{w/e}$+turn_on_its_side[distr]

'Each book was standing there and fell on its side.'

Thus, from the evidence presented in this section and in section 2.1, we can conclude that claims (i) and (ii) in (1) can be extended to LSA and LSC: predicates with a handling classifier are transitive and predicates with a whole entity classifier are intransitive unaccusative.[18] Next, we will see that these two classes can instantiate the

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[18] This pattern has been observed on a variety of predicates in the data collected for this study, both for LSA and LSC. No individual variation has been detected so far.

transitive-unaccusative alternation.

2.3 Transitive-unaccusative alternation in classifier predicates

The argumental patterns discussed so far for classifier predicates allow us to conclude that the classifier handshape that combines with the verbal root is decisive for the argument structure of the resulting predicate. From this perspective, it is quite straightforward that in this domain LSA and LSC should display transitive-unaccusative alternations of the same sort we find in languages such as English (e.g., *they opened the door* vs. *the door opened*). This expectation is born out, as the LSA data in (14) illustrate:

(14) a. LAURA LIBRO....C+PONER_DE_COSTADO   [LSA]

Laura   book   book_hndl$_{hndl}$+turn_on_its_side

'Laura put the book on its side.'

b. LIBRO....B+CAER_DE_COSTADO

book   book$_{w/e}$+turn_on_its_side

'The book fell down on its side.'

As becomes obvious from this minimal pair (and from the examples in (4) for LSC), it is only the choice of classifier that determines the valency of the predicate: transitive in (14a) and (4a) and unaccusative in (14b) and (4b). Kegl (1990) had already noted this alternation for ASL and Benedicto & Brentari (2004) provide a syntactic account for it. Here we are able to extend this alternation pattern in classifier predicates to LSA and

LSC. As it stands, this already constitutes strong evidence for the syntactic nature of classifier morphemes crosslinguistically.

3. Body Part Classifiers

Body part classifiers present a somewhat more complex picture than the previous two types. Since the response of these classifier morphemes is different in LSA and LSC, we will divide this section by language and explain the particular problems in turn.

Let us remind the reader that the claim in Benedicto and Brentari (2004) is that a body part classifier will create an intransitive predicate of the unergative type, that is, that the argument associated with it will be an external (agentive) argument (see (1) iii). The tests used to provide support for this claim in ASL are: (i) the grammatical use of agent-detecting items (such as compatibility with WILLING or the negative imperative), which show the agentivity of the argument, and (ii) the ungrammaticality of the use of the [distr] morpheme, which in ASL applies only to internal arguments. In these two respects, predicates with a body part classifier in ASL contrast with predicates with a whole entity classifier (intransitives behaving as unaccusatives), and the contrast is especially visible when the movement root is the same.

3.1. LSC and body part classifiers

The main problem when trying to evaluate the claim in (1)iii for LSC derives from factors independent of the nature of classifier morphemes: an unergative behavior in

non-classifier predicates in this language cannot be independently established with the devices currently available.

The first difficulty concerns the fact that non-classifier unergative predicates such as TREBALLAR 'to work' or JUGAR 'to play',[19] are not responsive to the distributive test. That is, when applied to a predicate like TREBALLAR, the [distr] morpheme yields a grammatical result:

(15) a. ÍNDEX TREBALLAR[distr] [LSC]

index work[distr]

'Each of them was working.'

b. NEN+++ GRUP+++ JUGAR[distr]

child.PL group.PL play[distr]

'Each group of children were playing.'

There could be, at first sight, two possible explanations for this. The first one is that unergative predicates in LSC have, as appears to be the case in some spoken languages, a position for a dummy internal object (e.g., 'to work [e]' or 'to play [e], where [e]=a job, a game). Mayangna, a Misumalpan language of Nicaragua, for example, uses the particle *di* (the destressed form of the noun *dî* 'thing') with certain intransitives:

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[19] We chose these predicates a priori because they are the types that crosslinguistically are more reliably unergatives. It is well-known that one cannot establish the status of a predicate as unergative or unaccusative, only on the basis of its meaning. For instance, La Verne & Hale (1999) have shown repeatedly that the Navajo equivalent of the verb *laugh* (which in English is unergative) behaves as an unaccusative verb. See Sorace (2000) for crosslinguistic variation and gradiency effects in unaccusative/unergative behavior.

(16) a.   Yang   pamka   îtayang   [Mayangna]

           pron.1SG   tapir   hunt.1SG

           'I'm hunting a tapir.'

     b.   Yang   di   îtayang

           pron.1SG   thing   hunt.1SG

           'I'm hunting.'

A second potential explanation for the behavior of (15) is that, even though LSC has the [distr] morpheme as ASL does, its syntactic behavior is different. A parallel in spoken languages would be the presence of the clitic *se* in Romance languages: it exists as a morpheme in most of them, but its distribution and syntactic behavior is different in each language. If this were the case in LSC, then, taking into account that [distr] does present a different behavior with internal and external arguments in transitive predicates (see (8)-(11)), we would have to say, for example, that [distr] targets the first argument merged with the verb, which in the case of a transitive is the internal argument and in the case of an intransitive is the subject, whether internal or external. Admittedly, this is not the most desirable explanation.

This is, in any case, an interesting situation, since it would show the independence of morphological and syntactic properties for a single morpheme: a morphologically similar element may be present in more than a language, but its syntactic behavior may not be the same.

The second difficulty in establishing an independent unergative behavior in LSC concerns the distribution of agent detecting devices. In general, unaccusative predicates are non-volitional (so, the use of agent detecting tests renders ungrammatical results); however, in some languages an animate or human argument will license an agent oriented adverb. Consider, for instance, the case of (17) below, where the English unaccusative verb *to come*[20] does allow an agent oriented adverb:[21]

(17)   He came to the party ($\sqrt{}$voluntarily)

This is what happens in LSC. Relevant examples for agentivity require an animate and/or human argument, and in that case, the result rendered is grammatical:

(18)   UN   HOME   VOLENT   1+PASSAR   [LSC]

one   man   on_purpose   person $_{w/e}$+move_from_left_to_right

'A man passed on purpose (in front of the window).'

What needs to be developed in research on LSC at this point are independent structural tests that can target the structural position of an argument. Finding such tests is an empirical matter. At this stage, the lack of such tests is a by-product of the infancy of syntactic studies in SLs other than ASL.

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[20] We know, independently, that *to come* is unaccusative because it can undergo *there*-insertion (e.g., *there came three men*), which is a language particular property of unaccusative verbs in English.

[21] Things are, of course, not absolutely clear-cut. Unaccusative predicates of so-called internal change render an ungrammatical result, even if the subject is human (e.g., **the children grew voluntarily*).

3.2 LSA and body part classifiers

Contrary to what happens in LSC, the behavior of unergative and unaccusative predicates in LSA can be independently established, as the examples in (19) and (20) below show. In (19), an unergative predicate like JUGAR 'to play' shows the expected pattern (grammatical with an agent related element; ungrammatical with the [distr] morpheme). The unaccusative MORIR 'to die' of (20) also shows the expected pattern: ungrammatical with the agent detecting element; grammatical with the [distr] morpheme.

(19) a. $^\sqrt{}$NIÑO BOLITAS   JUGAR   A_PROPÓSITO   [LSA]

child   marbles   play   on_purpose

'The child is playing marbles on purpose.'

b.   *NIÑO++   JUGAR[distr]

child.PL   play.[distr]

('Each child is playing.')

(20) a.   *PRO MORIR A_PROPÓSITO   [LSA]

 pro.3SG die   on_purpose

('He died on purpose.')

b. $^\sqrt{}$V+ESTAR_TENDIDO[distr] MORIR[distr]

legs$_{w/e}$+be_loc_supine[distr] die[distr]

'Each person who was lying in bed died.'

The problem is that, when applied to the domain of classifier predicates, the tests yield mixed results, rendering them inconclusive: not all body part classifiers behave consistently in the same way, and of those examined, some manifest certain types of restrictions and some, other types of restrictions. Let us now examine the data in more detail.

The classifier 'S:head'[22] is restricted to combine with local movements (articulated at the wrist) denoting the movement of the head itself, not of the individual:[23]

(21)   *MIRAR_HACIA_VENTANA(rol) S+PASAR   [LSA]

look_at_the_window(role) head$_{BPCL}$+move_from_right_to_left

('I saw a person('s head) pass by (the window).')

Within these limits, 'S:head' responds to agentivity tests, as expected:

(22)   YO...S+MOVER_EN_CÍRCULO++ A_PROPÓSITO   [LSA]

pron.1SG head$_{BPCL}$+move_in_circle++ on_purpose

'I moved my head in circles on purpose.'

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[22] This type of body part classifier is not included in the original classification by Engberg-Pedersen. We take it over from Benedicto & Brentari (2004).

[23] In fact, the handshape S can combine with path movements, but in that case it loses the meaning of 'head' and assumes a taboo meaning ('phallus'). It usually is accomplanied by an H2 at the wrist of H1 (in the case of head), and an H2 at the

If the pattern in (19) was to be completed, then we would expect not to be able to find 'S:head' with a [distr] morpheme. This prediction is confirmed:

(23)   *CABEZA   S-S+ESTAR[distr]   [LSA]

    head   head_{BPCL}+be_loc[distr]

    'There is one head next to each other.'

Other body part classifiers show a mixed behavior pattern, contrary to expectations: grammatical with an agent related element (A_PROPÓSITO 'on_purpose') and grammatical with the [distr] test. Examples of such a pattern are attested with 'B-B:feet_on_tiptoe', as illustrated in (24):

(24)   [LSA]

a.MUJER   BAILE   TUTÚ B-B+CAMINAR_EN_PUNTAS_DE_PIE   A_PROPÓSITO

   woman   dance   tutu   feet_{BPCL}+walk_on_tiptoe   on_purpose

   'The ballerina walked on tiptoe on purpose.'

b. MUJER   BAILE   TUTÚ   B-B+ESTAR[distr]

   woman   dance   tutu   feet_{BPCL}+ be_loc[ext]

   'The ballerinas were standing on tiptoe in a row.'

One way to understand this behavior is that these classifier morphemes may not constitute a distinct syntactic class in LSA[24] (contrary to what happens with body part

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forearm of H1 in the second case.

[24] This is, in a way, what Zwitserlood (2003:5.4) seems to imply: that there is no separate class of body part classifiers functioning as classifiers. She addresses the issue of body part classifiers as a subset of handshapes appearing with manner verbs, which, later on, she treats as lexicalized elements (root compounds, in terms of Distributed

classifiers in ASL). One would need to strengthen the agent-detecting tests and to find out more tests targeting structural positions (rather than semantic properties).[25]

Given this inconclusive state of affairs, we consider it premature to draw strong conclusions about the unergativity of this type of classifier predicates in LSA.

4. Conclusions and Further Research

In this paper we set out to evaluate the syntactic status of classifier predicates in LSA and LSC, based on the hypotheses presented in Benedicto and Brentari (2004) for ASL.

The conclusion out of the results obtained in section 2 is that handling classifiers do indeed form transitive predicates. They contrast with predicates with whole entity classifiers, which show the behavior of unaccusative predicates. A relation can be established between the two of them, giving rise to the well-known transitive-unaccusative alternation. So, claims (i) and (ii) in (1) are confirmed for LSA and LSC.

Morphology; section 8.2.4).

[25] The mixed behavior observed in (24) may be related to an observation already noted for ASL (Benedicto and Brentari, 2004:fn62), where the classifier V:by_legs behaves as a body part classifier when the fingers involved move independently, but behaves as a whole entity classifier when the fingers involved do not move independently. In the examples in (24), this is also the case: (24)a. with independent movement of the hands behaves as a body part classifier (grammatical with agent oriented items), while (24)b. with non-independent movement of the hands behaves as a whole entity classifier ('biped entity') (grammatical with the [distr] morpheme). Clearly, more research is needed at this point to establish if other properties (e.g., morphophonological) correlate with this division.

In evaluating the status of body part classifiers, however, the need for language-specific tests targeting specific structural properties became obvious. Two main points arose from the discussion. The first one concerns the status of agent-oriented elements: it is necessary to establish for each language the restrictions and meanings of what might, at first sight, be the same kind of element as in other sign languages. We have seen, for instance, that LSC may show animacy effects in the use of agent-oriented tests (that is, seemingly agent-oriented tests may end up being sensitive to animacy rather than to agentivity), while such effects are lacking in ASL. Factors such as this one may render the tests unworkable and thus leave us with inconclusive results. Developing new discriminating tests is hindered by the early stages at which research on these languages is and, therefore, by the lack of a comprehensive description of the structural properties of such languages. The second one concerns the independence of the morphological and syntactic properties of a given morpheme. This affects the status of the [distr] morpheme in LSC. It may very well be the case that a given morpheme appears in more than one language, but that its syntactic behavior, its distribution, is altogether different in each language. There is nothing *a priori* that grants that a morpheme in language A, which is morphophonologically very similar to another morpheme in language B, will show the same syntactic behavior as the similar morpheme in language B. A case in point for spoken languages may be the morpheme *se* (and its variants): most Romance languages have such a morpheme but its syntactic distribution is different in all of them (they may share a core set of properties, but there are substantial differences that present themselves sometimes in subtle ways).

The results of our evaluation of body part classifiers in LSA and LSC constitutes a cautionary tale. The results are inconclusive because the tests did not work in the way

we expected (out of the behavior observed in other sign languages). Most of the issues we discuss in this paper have been dealt with in spoken languages, and one of the outcomes of this body of work is that it is crucial to have well-developed language-particular tests available. What may work in a language may not work (at all, or partially) in another, even if closely related, language.[26] Sign languages are not an exception to this.[27] What is needed at this point is to find structurally equivalent tests, that is, tests that target a particular configuration or structural position or property, no matter what their surface form is. This is the ultimate challenge, in particular, when dealing with morphosyntactic properties of the languages under study. Future research will necessarily have to address this issue.

Finally, let us consider the contribution of this study to the issue of modality that we introduced at the beginning of the paper. In the Introduction we suggested that the area of classifiers is a good potential area to find modality effects because of their pervasiveness in sign languages, as opposed to spoken languages. We also pointed out the importance of locating the subareas (phonology, morphology or syntax) where such potential effects could be taking place. In this paper, we have been able to show that the (morpho-)syntactic pattern described for ASL for handling and whole entity classifiers can also be extended to two other genetically unrelated sign languages, LSA and LSC. While this might, in principle, be interpreted as further support for a modality effect, one needs to make sure that such a (morpho-)syntactic pattern is absent in spoken

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[26] An example can be the use of *there* insertion in English, targeting unaccusatives (cf. √ *there came three men*, vs. * *there laughed three men*). This is a language-particular test that works in English but not in Spanish, Italian or Catalan, languages for which other totally different kinds of tests have been developed (e.g., the use of the clitic *ne* for Italian and Catalan).

[27] See, for instance, the unavailability in LSA and LSC of an item like the negative element NOTHING in ASL, which can quantify over internal arguments but not over

languages. If we can find the same pattern in verbal classifiers in spoken languages, then it becomes one more possibility in the range of choices allowed by the faculty of language and the modality effect is lost. And, in fact, we do find these patterns in some spoken languages, where a subset of classifier morphemes correlates with transitive predicates while another subset correlates with intransitive predicates.[28] The single argument of these intransitive predicates (with which the classifier morpheme is in association) seems to be internal and, thus, the predicate unaccusative; however, these languages are usually very poorly described and in most cases quite endangered, all of which brings about the same sort of problems faced by sign languages: the need for (and difficulty in) finding structure-specific language-particular tests, to obtain a clear assessment of their structural patterns.

This issue brings us back to the problem raised by body part classifiers. Once structure-specific language-particular tests can be established, a clearer evaluation of these elements will take place. However, in the meanwhile, they already constitute a strong candidate for variation within sign languages. If this is confirmed, that is, that body part classifiers may behave differently in different sign languages or may even not exist in some, then the potential for a modality effect in the area of classifiers is greatly reduced. In fact, it would be reduced to the pervasiveness of their existence, not to their formal structural properties, with the possible exception of the (morpho-)phonological component, which is the one interfacing with non-linguistic factors of language (the *phonetics* of sign languages, so to speak). In that sense, then, the hypothesis that modality effects would be found on the interfaces between the linguistic component and

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external arguments.

[28] An example of such a language would be Washo, a Hokan language described in Jacobsen (1980).

the input/output components (those in charge of getting the structures in and out of the linguistic component) would gather strength.

References

Aikhenvald, Alexandra Y. (2000). *Classifiers*. Oxford: Oxford University Press.

Benedicto, Elena (2002). Verbal Classifier Systems: The Exceptional Case of Mayangna Auxiliaries. *Proceedings of WSCLA 7th, UBC Working Papers in Linguistics* 10*:* 1-14. University of British Columbia,Vancouver.

Benedicto, Elena (2004). Non-traditional uninterpretable D features in the verbal functional domain: parasitic D[class]. Paper presented at *GLOW 27*. Thessaloniki, Greece.

Benedicto, Elena and Diane Brentari (2004). Where did all the arguments go? Argument-changing properties of Classifiers in ASL. *Natural Language and Linguistic Theory*, 22.4: 743-810.

Burzio, Luiggi (1986). *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.

Cvejanov, Sandra (2002*). Incorporación en verbos de movimiento de la lengua de señas argentina.* Unpublished Master Thesis, Universidad Nacional del Comahue, Neuquén, Argentina.

Engberg-Pedersen, Elizabeth (1993). *Space in Danish Sign Language. The Semantics and Morphosyntax of the Use of Space in a Visual Sign language*. Hamburg: Signum Press.

Fourestier, Simone (1999). Verben der Bewegung und Position in der LSC: Eine Untersuchung von Komplexen Verben in der Katalanischen Gebärdensprache. *Das Zeichen*, 47: 84-100. Hamburg: Institüt für Deutsche Gebaärdensprache.

Jacobsen, William H. (1980). Washo bipartite verb stems. In *American Indian and Indo-European Studies: Papers in Honor of Madison S. Beeler,* Kathryn Klar, Margaret Langdon, and Shirley Silver (eds.), 85-99. New York: Mouton.

Kegl, Judy (1990). Predicate Argument Structure and Verb-Class Organization in the ASL Lexicon. In *Sign Language Research: Theoretical Issues*, C. Lucas (ed.), 149-175. Washington, D.C.: Gallaudet University Press.

La Verne, Jeanne and Ken Hale (1999). Hopi –*na*. *MIT Working Papers in Linguistics* 33: 139-157.

Legendre, Geraldine (1989). Unaccusativity in French. *Lingua* 79: 95-164.

Levin, Beth and Malka Rappaport Hovav (1995). *Unaccusativity. At the Syntax-Lexical Semantics Interface*. Cambridge, MA: The MIT Press.

Meier, Richard P., Kearsy Cormier and David Quinto (eds.) (2002). *Modality and Structure in Signed and Spoken Languages*. Cambridge, MA: Cambridge University Press.

Nyst, Victoria (2004). Verbs of motion in Adamorobe Sign Language. Poster presented at TISLR 8, Barcelona.

Padden, Carol A. (1988). *Interaction of Morphology and Syntax in American Sign Language*. New York/London: Garland Publishing.

Padden, Carol A. (1990). The Relation between Space and Grammar in ASL Verb Morphology. In *Sign Language Research: Theoretical Issues*, C. Lucas (ed.), 118-132. Washington, D.C.: Gallaudet University Press..

Perlmutter, David (1978). Impersonal passives and the unaccusativity hypothesis. *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*: 157-189.

Schembri, Adam (2003). Rethinking 'Classifiers' in Signed Languages. In *Perspectives on Classifier Constructions in Sign Languages*, K.Emmory (ed), 3-34. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Sorace, Antonella (2000). Gradients in Auxiliary Selection with Intransitive Verbs. *Language* 76: 859-890.

Supalla, Ted (1986). The Classifier System in American Sign Language. In *Noun Classes and Categorization*, C. Craig (ed.), 181-214. Amsterdam/Philadelphia: John Benjamins.

Supalla, Ted (1990). Serial verbs of motion in ASL. In *Theoretical Issues in Sign Language Research, vol. 1: Linguistics,* S. Fischer & P. Siple, (eds.), 127-152. Chicago/London: University Chicago Press.

Zwitserlood, Inge (2003). *Classifying hand configurations in Nederlandse Gebarentaal (Sign Language of the Netherlands)*. Utrecht: LOT.