

SIGN LANGUAGE VARIETIES IN COSTA RICA

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Abstract

This paper offers a preliminary examination of several sign language varieties in use in Costa Rica and attempts to explain the relationship among these varieties. Using comparative lexical data from these sign language varieties, this paper presents evidence that there are at least four distinct sign languages in Costa Rica: (1) LESCO, a Costa Rican Sign Language distinct from (North) American Sign Language; (2) "Original LESCO" and "New LESCO;" (3) "Brunca Sign Language;" and (4) "Bribri Sign Language." The conclusion summarizes the findings and discusses some implications for future research.

Evidence for the existence of LESCO

What we are now calling LESCO in this paper is the sign language variety used by the great majority of young (under 30) Costa Rican signers living in the San José area. It is the type of signing found in deaf clubs (which tend to be frequented only by younger deaf people) in the San José area. It is the kind of signing described in sign language manuals in Costa Rica and the kind of signing that the average visitor to Costa Rica will see. It is immediately obvious to North American signers that this signing appears to be very closely related to American Sign Language (ASL) as it is used in the United States. Many deaf and some hearing people in Costa Rica are aware of the strong influence that (North) American sign vocabulary has had on signing in Costa Rica over the last thirty years. Yet Costa Ricans clearly identify this type of signing as distinct from ASL and commonly refer to this variety of signing as LESCO (*Lenguaje de Señas de Costa Rica*).

My first exposure to LESCO came from Costa Rican visitors to Gallaudet. While the LESCO they used looked very similar to ASL that I had seen, I was not able to collect any empirical data from

them to see how closely related LESCO was to ASL or if it was even a separate language.

It was not until this year that I had a chance to record some basic data on LESCO from various young signers in the San José area of Costa Rica. Included in the videotaped data are sign translations of the 200 word Swadesh list, the 100 word Swadesh list, and a special basic SL vocabulary list I have derived from the 200 word Swadesh list and used in an earlier comparison of French Sign Language (FSL) and ASL (Woodward 1978). In the body of this paper, I will only discuss results of comparisons from the special basic vocabulary list for sign language research. Results from the other two lists appear in another article (Woodward 1991).

Following classical glottochronological procedures (Gudschinsky 1956), this paper will classify language varieties as separate languages if they have less than 81% possible cognates in basic vocabulary and as dialects of the same language if they have at least 81% cognates in basic vocabulary.

The first search I made was for possible cognates between ASL signs and signs elicited from a native user of LESCO—a deaf man in his mid-twenties who learned LESCO as his first language from his mother, who is also deaf. The man was born and raised in the San José area of Costa Rica. Table 1 shows the possible cognates (from the basic sign language vocabulary list) in ASL and the variety of LESCO used by the younger deaf signers from San José.

In this and following tables, words that are possible cognates are in **bold**; words for which no sign was elicited are ~~struck-out~~; and non-cognates are shown in normal type.

Table 1. LESCO/ASL words in SL vocabulary list.

1. all	26. grass	51. other	76. warm
2. animal	27. green	52. person	77. water
3. bad	28. heavy	53. play	78. wet
4. because	29. how	54. rain	79. what
5. bird	30. hunt	55. red	80. when
6. black	31. husband	56. right	81. where
7. blood	32. ice	57. river	82. white
8. child	33. if	58. rope	83. who
9. count	34. kill	59. salt	84. wide
10. day	35. laugh	60. sea	85. wife
11. die	36. leaf	61. sharp	86. wind
12. dirty	37. lie	62. short	87. with
13. dog	38. live	63. sing	88. woman
14. dry	39. long	64. sit	89. wood
15. dull	40. louse	65. smooth	90. worm
16. dust	41. man	66. snake	91. year
17. earth	42. meat	67. snow	92. yellow
18. egg	43. mother	68. stand	93. full
19. fat/grease	44. mountain	69. star	94. moon
20. father	45. name	70. stone	95. brother
21. feather	46. narrow	71. sun	96. cat
22. fire	47. new	72. tail	97. dance
23. fish	48. night	73. thin	98. pig
24. flower	49. not	74. tree	99. sister
25. good	50. old	75. vomit	100. work

Calculation on Table 1 shows a 63.3% rate (62/98 pairs) of possible cognates between ASL and LESCO. This indicates that ASL and the variety of LESCO used by younger signers in San José are distinct languages, but very closely related historically. This rate of cognates is quite similar to that between two other closely related sign languages: ASL and French Sign Language. In an earlier study using the same vocabulary list (Woodward 1978), the

rate of cognates between modern French SL and ASL was found to be 61.0% (47/77 pairs).

While a number of young deaf signers in San José seemed to think that little significant variation in signing outside their community was likely, a few young signers felt that there might be significant variation outside their own community. The native signer mentioned above in particular felt that sign language varieties used by older signers in San José and some sign language varieties in Limon (in the east) and in Guanacaste (in the northwest) were quite different from what he used.

I asked the young man if I could meet his mother who was in her mid-forties. I was fortunate enough to be able to videotape them both signing translations of the three basic word lists. What I found was extremely interesting. What many people called LESCO or Costa Rican Sign Language was certainly not the only Costa Rican Sign Language. In fact, now we had to talk about "Original LESCO" and "New LESCO."

Evidence for "Original LESCO" and "New LESCO."

Table 2 shows the possible cognates (from the basic sign language vocabulary list) in the lexicon of the deaf woman, 44 years of age, and her deaf son, 24 years of age. I have labelled the mother's signing OLESCO (Original Costa Rican Sign Language), and the son's signing NLESCO (New Costa Rican Sign Language).

Calculation on the data in Table 2 shows that there is a 41.8% rate (41/98 pairs) of possible cognates between OLESCO and NLESCO. This percentage indicates that OLESCO and the variety of Costa Rican Sign Language used by younger signers in San José are distinct, and not very closely related historically. In fact, it is clear from this comparison that NLESCO is much more closely related to ASL than it is to OLESCO.

In order to see how closely related OLESCO is to ASL, another comparison of cognates was made. Table 3 shows the possible cognates (from the basic sign language vocabulary list) between ASL and OLESCO. These data work out to a 26.5% rate (26/98

pairs) of possible cognates between OLESCO and ASL. This indicates that OLESCO and ASL are distinct and only minimally related historically. The reason for the number of cognates between ASL and OLESCO is probably a result of indirect influences. It is possible that many of the cognates found in Table 3 are due to the very close historical relationship of Spanish Sign Language and

Table 2. OLESCO / NLESCO words in SL vocabulary list;
41.8% possible cognates (41/98).

1. all	26. grass	51. other	76. warm
2. animal	27. green	52. person	77. water
3. bad	28. heavy	53. play	78. wet
4. because	29. how	54. rain	79. what
5. bird	30. hunt	55. red	80. when
6. black	31. husband	56. right	81. where
7. blood	32. ice	57. river	82. white
8. child	33. if	58. rope	83. who
9. count	34. kill	59. salt	84. wide
10. day	35. laugh	60. sea	85. wife
11. die	36. leaf	61. sharp	86. wind
12. dirty	37. lie	62. short	87. with
13. dog	38. live	63. sing	88. woman
14. dry	39. long	64. sit	89. wood
15. dull	40. louse	65. smooth	90. worm
16. dust	41. man	66. snake	91. year
17. earth	42. meat	67. snow	92. yellow
18. egg	43. mother	68. stand	93. full
19. fat/grease	44. mountain	69. star	94. moon
20. father	45. name	70. stone	95. brother
21. feather	46. narrow	71. sun	96. cat
22. fire	47. new	72. tail	97. dance
23. fish	48. night	73. thin	98. pig
24. flower	49. not	74. tree	99. sister
25. good	50. old	75. vomit	100. work

Table 3. OLESCO / ASL words in SL vocabulary list; 26.5% possible cognates (26/98).

1. all	26. grass	51. other	76. warm
2. animal	27. green	52. person	77. water
3. bad	28. heavy	53. play	78. wet
4. because	29. how	54. rain	79. what
5. bird	30. hunt	55. red	80. when
6. black	31. husband	56. right	81. where
7. blood	32. ice	57. river	82. white
8. child	33. if	58. rope	83. who
9. count	34. kill	59. salt	84. wide
10. day	35. laugh	60. sea	85. wife
11. die	36. leaf	61. sharp	86. wind
12. dirty	37. lie	62. short	87. with
13. dog	38. live	63. sing	88. woman
14. dry	39. long	64. sit	89. wood
15. dull	40. louse	65. smooth	90. worm
16. dust	41. man	66. snake	91. year
17. earth	42. meat	67. snow	92. yellow
18. egg	43. mother	68. stand	93. full
19. fat/grease	44. mountain	69. star	94. moon
20. father	45. name	70. stone	95. brother
21. feather	46. narrow	71. sun	96. cat
22. fire	47. new	72. tail	97. dance
23. fish	48. night	73. thin	98. pig
24. flower	49. not	74. tree	99. sister
25. good	50. old	75. vomit	100. work

French Sign Language and to the influence of French Sign Language on ASL and of Spanish Sign Language on OLESCO. The influence of French Sign Language on ASL is well documented. There is some likely influence of Spanish Sign Language on OLESCO as well. Prior to the establishment of deaf education in Costa Rica in 1940, some Costa Rican deaf people received their education in Spain, where they probably picked up some Spanish

Sign Language and brought it back to Costa Rica, where it mixed with indigenous signing in the Hispanic segment of San José.

While it was now clear that there were two distinct sign languages in use in Costa Rica, it soon became clear that Original LESCO and New LESCO were not the only sign languages in use in Costa Rica. There are at least two other sign languages in Costa Rica, used by two different indigenous groups.

It so happened that two of the hearing linguistic consultants for indigenous languages working in the Linguistics Department at the University of Costa Rica had deaf relatives and fluently knew sign languages that were unique to their communities. They had never met anyone who used Original LESCO or New LESCO. The first of these communities was the Boruca and the second the Bribri. Since I have considerably more information on the sign language used by one group of Borucas, it is discussed first.

Evidence of the "Brunca Sign Language"

The third sign language in use in Costa Rica is a completely indigenous sign language used by one group of Boruca Indians in the Southern part of Costa Rica. It is referred to in this paper as "Brunca Sign Language," from the name of the pueblo where it is used. The pueblo Brunca, located in the district of Boruca in the canton of Buenos Aires in the province of Punta Arenas, has approximately 800 inhabitants of whom 8 are deaf. Normally in a population of this size, one would expect only 1 or 2 deaf people. Six of the eight deaf people are children below the age of puberty, one is fourteen, and one is forty years of age. All of the deaf people sign, and the great majority of hearing people also sign.

The situation in Brunca is quite similar to that in other small communities with larger than expected deaf populations in Latin America (Johnson 1989), the Caribbean (Washabaugh, Woodward and De Santis 1978; Woodward 1982), and in Africa (Frishberg 1978, 1987). Deaf people in such communities are integrated into the majority of everyday activities in the community; there is no separate deaf community; and there are generally no negative

stereotypes of deaf people. The hearing and deaf people in these communities use a sign language that differs in structure from the spoken language(s) in the community, and often this sign language is completely independent of any other known sign languages. This is clearly the case in Brunca.

While I was unable to visit Brunca, I did meet and interview two native users of Brunca Sign Language. One of the native users was a hearing woman in her late thirties, who had a deaf sister and a deaf niece; the other native user was the hearing woman's deaf fourteen-year-old niece. The hearing woman, who worked in the Linguistics Department at the University of Costa Rica as a linguistic consultant for spoken Boruca, had just brought her deaf niece to live with her in San José. It was the first time the young deaf woman had left her village. Neither of these two women nor any of the other people living in their pueblo had ever communicated with users of any other sign language.

While I was able to interview both these native users, I was able to make a videotape only of the hearing woman. The deaf niece did not want to be filmed. The videotape includes sign translations of several word lists into Brunca Sign Language. The videotaped signs from Brunca Sign Language are compared below with Original LESCO (Table 4), New LESCO (Table 5), and ASL (Table 6).

Tables 4, 5, and 6 demonstrate that Brunca Sign Language is a distinct language from Original LESCO, New LESCO, and ASL and that Brunca Sign Language belongs to a distinct language family from the other three sign languages. These tables do, however, show some possible cognates among Brunca Sign Language and the other three sign languages. There may be several reasons for these possible cognates. The possible cognates could indicate a very indirect historical relationship among the sign languages. The possible cognates could also be due to a similarity in a few basic gestures across ethnic groups in Costa Rica and/or due to universal iconic lexical tendencies in sign languages.

Table 4. Brunca SL / OLESCO words in SL list; 17.3% possible cognates (17/98).

1. all	26. grass	51. other	76. warm
2. animal	27. green	52. person	77. water
3. bad	28. heavy	53. play	78. wet
4. because	29. how	54. rain	79. what
5. bird	30. hunt	55. red	80. when
6. black	31. husband	56. right	81. where
7. blood	32. ice	57. river	82. white
8. child	33. if	58. rope	83. who
9. count	34. kill	59. salt	84. wide
10. day	35. laugh	60. sea	85. wife
11. die	36. leaf	61. sharp	86. wind
12. dirty	37. lie	62. short	87. with
13. dog	38. live	63. sing	88. woman
14. dry	39. long	64. sit	89. wood
15. dull	40. louse	65. smooth	90. worm
16. dust	41. man	66. snake	91. year
17. earth	42. meat	67. snow	92. yellow
18. egg	43. mother	68. stand	93. full
19. fat/grease	44. mountain	69. star	94. moon
20. father	45. name	70. stone	95. brother
21. feather	46. narrow	71. sun	96. cat
22. fire	47. new	72. tail	97. dance
23. fish	48. night	73. thin	98. pig
24. flower	49. not	74. tree	99. sister
25. good	50. old	75. vomit	100. work

Table 5. Brunca SL / NLESCO words in SL list; 9.2% possible cognates (9/98).

1. all	26. grass	51. other	76. warm
2. animal	27. green	52. person	77. water
3. bad	28. heavy	53. play	78. wet
4. because	29. how	54. rain	79. what
5. bird	30. hunt	55. red	80. when
6. black	31. husband	56. right	81. where
7. blood	32. ice	57. river	82. white
8. child	33. if	58. rope	83. who
9. count	34. kill	59. salt	84. wide
10. day	35. laugh	60. sea	85. wife
11. die	36. leaf	61. sharp	86. wind
12. dirty	37. lie	62. short	87. with
13. dog	38. live	63. sing	88. woman
14. dry	39. long	64. sit	89. wood
15. dull	40. louse	65. smooth	90. worm
16. dust	41. man	66. snake	91. year
17. earth	42. meat	67. snow	92. yellow
18. egg	43. mother	68. stand	93. full
19. fat/grease	44. mountain	69. star	94. moon
20. father	45. name	70. stone	95. brother
21. feather	46. narrow	71. sun	96. cat
22. fire	47. new	72. tail	97. dance
23. fish	48. night	73. thin	98. pig
24. flower	49. not	74. tree	99. sister
25. good	50. old	75. vomit	100. work

Table 6. Brunca SL / ASL words on SL list; 7.1% possible cognates (7/99).

1. all	26. grass	51. other	76. warm
2. animal	27. green	52. person	77. water
3. bad	28. heavy	53. play	78. wet
4. because	29. how	54. rain	79. what
5. bird	30. hunt	55. red	80. when
6. black	31. husband	56. right	81. where
7. blood	32. ice	57. river	82. white
8. child	33. if	58. rope	83. who
9. count	34. kill	59. salt	84. wide
10. day	35. laugh	60. sea	85. wife
11. die	36. leaf	61. sharp	86. wind
12. dirty	37. lie	62. short	87. with
13. dog	38. live	63. sing	88. woman
14. dry	39. long	64. sit	89. wood
15. dull	40. louse	65. smooth	90. worm
16. dust	41. man	66. snake	91. year
17. earth	42. meat	67. snow	92. yellow
18. egg	43. mother	68. stand	93. full
19. fat/grease	44. mountain	69. star	94. moon
20. father	45. name	70. stone	95. brother
21. feather	46. narrow	71. sun	96. cat
22. fire	47. new	72. tail	97. dance
23. fish	48. night	73. thin	98. pig
24. flower	49. not	74. tree	99. sister
25. good	50. old	75. vomit	100. work

Upon examining the possible cognates, we can see that the seven words counted as cognates are shared across the four different sign languages including ASL: 'fat,' 'hunt,' 'rain,' 'vomit,' 'water,' 'wide,' 'wind.' It is likely that these cognates are the result of possibly universal iconic lexical tendencies in sign languages. It is difficult to see how ASL or even NLESCO could have had any impact on an isolated indigenous sign language like Brunca Sign

Language. However, more comparative research on unrelated sign languages is needed before we can know for certain if these are false cognates.

Of the remaining possible cognates, two are shared across OLESCO, NLESCO, and Brunca: 'sharp' and 'what.' Eight remaining cognates are shared between OLESCO and Brunca: 'because,' 'dry,' 'name,' 'salt,' 'sit,' 'snake,' 'stand,' 'woman.' It is impossible to know at this time if these possible cognates are due to actual historical contact or due to some similarity in basic gestures across ethnic groups in Costa Rica. An investigation of gestures used by hearing people in various ethnic groups in Costa Rica could be of some help in determining the answer.

Evidence of "Bribri Sign Language"

The fourth sign language in use in Costa Rica is also a completely indigenous sign language; it is used by one group of Bribri Indians in the Southern part of Costa Rica. Owing to time and travel limitations, I have not been able to gather very much information about "Bribri Sign Language," although the evidence I have gathered indicates that it is a different sign language from the other sign languages discussed in this paper. The pueblo where this sign language is used has approximately 400 inhabitants. Three former members of this community were deaf. Though the deaf people are now deceased, hearing people remember the signs they used with these deaf people. Normally in a population of this size, one would have expected only 1 deaf person.

I was unable to obtain any personal data on the deaf individuals, but it was reported to me that all of them signed as did the great majority of hearing people. The situation in this Bribri community is quite similar to that in the Brunca pueblo and in other small communities with larger than expected deaf populations, as already mentioned. Deaf people were integrated into the majority of everyday activities in the community; there was no separate deaf community; and there were no negative stereotypes of deaf people. The hearing and deaf people in this community used a sign language

that differed in structure from the spoken language in the community, and Bribri Sign Language appears to be completely independent of any other known sign languages.

While I was not able to visit the pueblo where Bribri Sign Language was used, I did meet and interview a middle-aged male relative of two of the deaf people. This man worked as a linguistic consultant on spoken Bribri in the Department of Linguistics at the University of Costa Rica. He had interacted very frequently with his deaf relatives and felt he was as fluent as most of the hearing Bribri in his pueblo. He reported that none of the people in his pueblo had ever communicated with users of any other sign language.

I was not able to make a videotape of the three word lists for Bribri Sign Language. I was able, however, to elicit and transcribe forty-two signs that I have compared with the other sign languages discussed in this paper. The transcribed signs from Bribri Sign Language are compared below with Original LESCO (Table 7), New LESCO (Table 8), Brunca Sign Language (Table 9), and ASL (Table 10).

Tables 7, 8, 9, and 10 demonstrate that Bribri Sign Language is a distinct language from Original LESCO, New LESCO, Brunca Sign Language, and ASL; and that Bribri Sign Language belongs to a language family distinct from the other four sign languages. These tables do, however, show some possible cognates among Brunca Sign Language and the other four sign languages. There may be several reasons for these possible cognates. The possible cognates could indicate a very indirect historical relationship among the sign languages. The possible cognates could also be due to a similarity in a few basic gestures across ethnic groups in Costa Rica and/or due to universal iconic lexical tendencies in sign languages.

Upon examining the possible cognates, we can see that the following cognates are likely the result of possible universal iconic lexical tendencies in sign languages: 'child,' 'fish,' 'water.' These signs are shared with ASL and NLESCO. It is difficult to see how ASL or even NLESCO could have had any impact on an isolated indigenous sign language like Bribri Sign Language. However,

more comparative research on unrelated sign languages is needed before we can know for certain if these are false cognates.

For the remaining possible cognates, it is impossible to know at this time if these possible cognates stem from actual historical contact or from some similarity in basic gestures across ethnic groups in Costa Rica. An investigation of gestures used by hearing people in various ethnic groups in Costa Rica could be of some help in determining the answer.

Table 7. Bribri SL / OLESCO words in SL list; 14.3% poss. cognates (6/42).

1. all	22. grass
2. animal	23. green
3. bad	24. heavy
4. because	25. how
5. bird	26. kill
6. black	27. man
7. blood	28. name
8. child	29. new
9. count	30. night
10. day	31. old
11. die	32. river
12. dirty	33. salt
13. dog	34. sit
14. dry	35. snake
15. dull	36. stand
16. earth	37. star
17. egg	38. stone
18. fat/grease	39. sun
19. fire	40. thin
20. fish	41. water
21. good	42. woman

Table 8. Bribri SL / NLESCO words in SL list; 9.5% poss. cognates (4/42).

1. all	22. grass
2. animal	23. green
3. bad	24. heavy
4. because	25. how
5. bird	26. kill
6. black	27. man
7. blood	28. name
8. child	29. new
9. count	30. night
10. day	31. old
11. die	32. river
12. dirty	33. salt
13. dog	34. sit
14. dry	35. snake
15. dull	36. stand
16. earth	37. star
17. egg	38. stone
18. fat/grease	39. sun
19. fire	40. thin
20. fish	41. water
21. good	42. woman

Table 9. Bribri SL / Brunca SL words in SL list; 14.3% poss. cognates (6/42).

1. all	22. grass
2. animal	23. green
3. bad	24. heavy
4. because	25. how
5. bird	26. kill
6. black	27. man
7. blood	28. name
8. child	29. new
9. count	30. night
10. day	31. old
11. die	32. river
12. dirty	33. salt
13. dog	34. sit
14. dry	35. snake
15. dull	36. stand
16. earth	37. star
17. egg	38. stone
18. fat/grease	39. sun
19. fire	40. thin
20. fish	41. water
21. good	42. woman

Table 10. Bribri SL / ASL words in SL list; 7.1% poss. cognates (3/42).

1. all	22. grass
2. animal	23. green
3. bad	24. heavy
4. because	25. how
5. bird	26. kill
6. black	27. man
7. blood	28. name
8. child	29. new
9. count	30. night
10. day	31. old
11. die	32. river
12. dirty	33. salt
13. dog	34. sit
14. dry	35. snake
15. dull	36. stand
16. earth	37. star
17. egg	38. stone
18. fat/grease	39. sun
19. fire	40. thin
20. fish	41. water
21. good	42. woman

Conclusion

This paper has offered a preliminary examination of several sign language varieties in Costa Rica: signing used by younger signers in San José (NLESCO), signing used by older signers in San José (OLESCO), signing used by one group of Boruca Indians (Brunca Sign Language), and signing used by one group of Bribri Indians (Bribri Sign Language). Basic sign vocabulary in these sign language varieties were compared for possible cognates to ASL and

among the sign language varieties. Table 11 shows the percentages of cognates across the sign language varieties.

Table 11. Cognate percentages across sign languages.

	ASL	NLESCO	OLESCO	Brunca SL	Bribri SL
ASL	100.0	62.6	26.3	7.1	7.1
NLESCO		100.0	42.4	9.1	9.5
OLESCO			100.0	17.2	14.3
Brunca SL				100.0	14.3
Bribri SL					100.0

Classical glottochronological procedures as described by Gudschinsky (1956) classify language varieties as the same language if cognate percentages in basic vocabulary are between 81% and 100%. Accordingly, the five sign language varieties above would be classified as distinct languages, since all pairs of language varieties in Table 11 have fewer than 81% possible cognates in their basic vocabulary.

Thus far, the data obtained and procedures used in this paper have shown that Costa Rica has at least four separate sign languages. In addition to these four sign languages, there may well be other sign languages in Costa Rica, both in urban and in rural areas. In urban areas, there is a high probability of significant sign variation in Limon and in Guanacaste. Whether the sign variation results in separate sign languages or simply sign dialects still remains to be seen. Limon is located on the eastern coast of Costa Rica and has a large Black population with roots in the Caribbean. It is possible that indigenous sign languages from the Caribbean were brought to Limon. Some signers from San José report difficulty in communicating with some signers from Limon, especially older Black signers. Guanacaste is located in the northwest part of Costa Rica, near the Nicaraguan border. This area was part of Nicaragua

at one time, and some of the sign language varieties used in Guanacaste might be heavily influenced by Nicaraguan Sign Language(s). San José signers do not report difficulty in communicating with signers from Guanacaste, although some San José signers say that a number of signs in Guanacaste are quite different from theirs.

In rural areas, there is a high probability of other indigenous sign languages in use among various Indian populations in Costa Rica. Alan Fernandez (personal communication) has recently informed me that he has met two deaf Indians from the northern part of Costa Rica who apparently have their own sign language.

Future research is needed in both urban and rural areas of Costa Rica in order to determine the complete extent of sign language variation in Costa Rica, the total number of sign languages used in Costa Rica, and the historical relationships among these sign languages.

In closing, it should be pointed out that Costa Rica is generally assumed to have less linguistic and ethnic variation than other Central American countries. Given this assumption, the sign language situation in Costa Rica may be one of the simpler sociolinguistic situations in the Central American region. If this is true, the Central American region could prove to be an ideal living laboratory for sociolinguistic and historical-comparative studies of sign language.

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