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## Understanding Ghanaian sign language(s): history, linguistics, and ideology

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## APPENDIX A

### List of secondary data used in the study of chapter 2

#### Book

1. Agbenyega F. (n.d). *Sign Language Course: Basic concepts about the deaf: Aspects of deaf culture, language, history and psychology*. Unpublished training manual (Theory).
2. Foster, A. (Ed.). (1965). *A general view of the status of the deaf in Africa*. Proceedings of the 1st Annual Conference on the Education of the Deaf in Africa. Ibadan, Nigeria: Toyobo Printing Press<sup>130</sup>
3. Ilabor, E. (2010). *Dr Andrew Jackson Foster: The father of Deaf education in Africa*. Ibadan, Nigeria: Optimistic Press.
4. Kwaffo E.K. (1988). *A comparison of the effectiveness of the use of oralism and the total system of communication in teaching the Ghanaian Deaf child in our schools*. Unpublished Long Essay. Faculty of Education. Uni. of Cape Coast

#### Reports

1. Ghana Education Service\_SpeED. (2007, 27th November). Committee report on Common sign language usage in Special Schools for the Deaf in Ghana.

#### Newsletter

1. GNAD Newsletter (2016; 2012; 2010; 2009a; 2009b;2008a; 2008b; 2005a; 2005b; 2004; 2003; 1998). Bi-Annual publication of the Ghana National Association of the Deaf.
2. Martey-Markwei A.(1989). Missing Link. *Radio and TV Times. Ghana Broadcasting Corporation*. VOL. 22. No. 2. September - October. p 5.
- Ocloo R. Della. (2014 August 8th). Founder State School for the Deaf. The Mirror Newspaper. P40.

#### GNAD pamphlet

1. Amenumey Godwin. (1988). Memorial service for the late Dr. Andrew Foster. Accra. GNAD.
2. Ghana Mission School for the Deaf. (1958). Ephphatha Appeal Fund. Accra. The Advent Press
3. GNAD (2018). *The Talking Hands: Our language, our pride*. Unpublished pamphlet on GSL.
4. GNAD. (n.d.). *Deaf Awareness Handbook*. Unpublished handbook. Ghana National Association of the Deaf
5. Phillips H. (2002). *Deaf Awareness Pack: Basic issues on Deaf culture, Communication, Sign Language, History and causes of deafness in Ghana!*.

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<sup>130</sup> No longer in my possession. It was stolen.

Unpublish research.

The School for the Deaf (n.d.). Prospectus. Accra. J'Piter Press.

#### **Lectures/Seminar paper**

1. Addo, M. (1997). Local Sign Language Verses “foreign” Sign Language. Proceeding of the seminar *For Deaf Education in the Third World*. Beni Suef, Egypt: Initiative Conference.
2. Okyere, A & Addo, M.J (1999). Historical Development of Education of the Deaf in Ghana. In H. W. Brelje (Ed.). *Global Perspectives on the Education of the Deaf in Selected Countries* (pp. 141 -155). Hillsboro, Oregon: Butte Publications, Inc.
3. Anson-Yevu. (1977). History and Development of service for the handicapped in Ghana. Seminar paper. Training workshop in the education and rehabilitation of the handicapped. 11-29 July 1977. University of Cape Coast.
4. Ocloo Seth. (1996). Sign language and the Deaf in Ghana. Seminar paper of Deaf Education and SL. Ghana. 2-7 September.
5. Ocloo Seth. (2007). Rev. Andrew Foster’s work in Ghana, 1957 – 1965. GNAT conference\_50 years celebration of Deaf Education in Ghana.
6. Oppong A. (1997). Rational for developing a Ghanaian Sign Language. April. Seminar paper on: Good leadership skills ensure effective organization. Organized by GNAD at Christian Village, Kumasi, Ashanti
7. Pecku. N. K. (1979). History and Development of special education in Ghana. Seminar paper. Second Training workshop in the education and rehabilitation of the disabled. 29 July - 11 August. 1979. University of Cape Coast
8. Akach, P. (1996, 1-7 September). The Deaf as a Language Minority. Seminar on Deaf Education, Winneba, Ghana.
9. Akach, P. (1996, 1-7 September). The nature of human language. Seminar on Deaf Education, Winneba, Ghana.
10. Akach, P. (1996, 8-12 September). Dictionary Production. Seminar on Sign Language, Winneba, Ghana.

#### **Letters**

1. Amenumey Godwin. (1987, September 21st). [ Letter to Ghana Education Division on the visitation of Foster for the 30<sup>th</sup> Anniversary of Deaf Education in Ghana]. Retrieved from A. Godwin’s personal achieve.
2. Amenumey Godwin. (1987, October 28<sup>th</sup>). [Letter to Ghana Broadcasting Corporation] “In commemoration of 30th year anniversary of Deaf education in Ghana. Requesting permission to have copy of TV coverage of interview of Rev. Dr. Andrew Foster” . Retrieved from A. Godwin’s personal achieve.
3. Amenumey Godwin. (1988, January 15<sup>th</sup>). [Letter to Ghana Education Service on the demise of Foster]. “Obituary” Retrieved from A. Godwin’s personal achieve.

4. Amenumey Godwin. (1988, February 18th). [Letter to Bertha Foster on the demise of Foster\_GNAD planning a memorial service in Accra]. Retrieved from A. Godwin's personal achieve.
5. Amenumey Godwin. (1988, April 6th). [Letter to Kojo Botsio on the demise of Foster]. Retrieved from A. Godwin's personal achieve.
6. Baden Edward. [1988, April 8th]. [GNAD's appeal for funds letter]. "Memorial service for the late Dr. Andrew Foster." Retrieved from A. Godwin's personal achieve.
7. Botsio Kojo. [1988, April 12th]. [Letter to Amenumey Godwin on the demise of Foster]. Retrieved from A. Godwin's personal achieve.
8. Fiaxe D. D. (Mrs). [1988, March 29<sup>th</sup>]. [Letter to all schools for the Deaf]. "Memorial service for the late Dr. Andrew Foster." Retrieved from A. Godwin's personal achieve.
9. Foster Berta. [n.d.]. [Letter to praying friends in Ghana after the demise of Foster]. Retrieved from A. Godwin's personal achieve.
10. Foster Faith (Miss). [1989, June 12]. {Letter to GNAD}. "Greetings from Nigeria". ]. Retrieved from A. Godwin's personal achieve.
11. Ghana Broadcasting Corporation. (1987, November 9<sup>th</sup>). [Letter to G. Amenumey]. "Requesting for video tape". Retrieved from A. Godwin's personal achieve.



## APPENDIX B

### Handshape chat

The handshape chat is an adopted and modified version of the Hamburg Notation System for sign languages (HamNoSys)<sup>131</sup>, with added alphabets and numbers for referencing.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	Selected Fingers extended				Selected Fingers flattened				Selected Fingers bent				Selected Fingers Hooked				Derivative Diagrams					
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						

### GSL manual alphabet Chat

The GSL manual alphabet is identical to the ASL manual alphabet.


<sup>131</sup> [https://www.sign-lang.uni-hamburg.de/dgs-korpus/files/inhalt\\_pdf/HamNoSys\\_Handshapes.pdf](https://www.sign-lang.uni-hamburg.de/dgs-korpus/files/inhalt_pdf/HamNoSys_Handshapes.pdf)



## APPENDIX C

### GSL [GSL App] and ASL [Riekehof, 1978] “true friends” comparison with modified Swadesh list [73/88 =83%]

“True friends” are in bold text (e.g., **all**), while missing words are indicated with a strikethrough (e.g., ~~snow~~).

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





## APPENDIX D

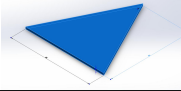
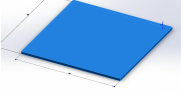

GSL [GSL App] and ASL [signBANK] “true friends” comparison with modified Swadesh list [68/86 =79%]

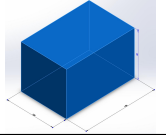
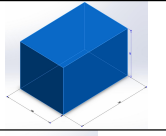

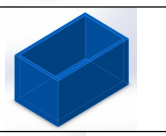
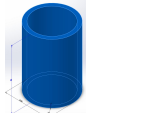
1. all	26. grass	51. <del>ether</del>	76. warm
2. <b>animal</b>	27. <b>green</b>	52. <b>person</b>	77. <b>water</b>
3. <b>bad</b>	28. <b>heavy</b>	53. <b>play</b>	78. <b>wet</b>
4. <b>because</b>	29. <b>how</b>	54. <b>rain</b>	79. what
5. bird	30. <del>hunt</del>	55. <b>red</b>	80. when
6. <b>black</b>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



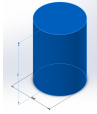
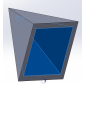

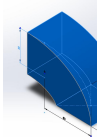
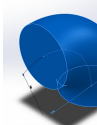
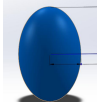

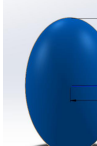


**APPENDIX E**

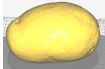


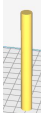
**Haptic task objects used in the study of chapter 4**

2D Forms						
1.	Triangle	H	8.00	cm	PYRA3	
		L	8.00	cm		
		Thickness	0.50	cm		
2.	Square	W	8.00	cm	BOX4	
		L	8.00	cm		
		Thickness	0.50	cm		
3.	Elipsoid	D	8.00	cm	BALL3	
		Thickness	0.50	cm		

3D Forms						
	Object	Dimensions			Code	Illustration
1.	Big cuboid	H	5.00	cm	BOXB1	
		W	6.00	cm		
		L	8.00	cm		
2.	Small cuboid	H	1.00	cm	BOXS1	
		W	2.00	cm		
		L	3.00	cm		
3.	Tapered cylinder	H	8.00	cm	CLY4	
		Base D	6.00	cm		
		Apex D	1.00	cm		
4.	Hollow cuboid	H	7.00	cm	BOX2	
		W	8.00	cm		
		L	13.00	cm		
5.	Hollow cylinder	D	6.00	cm	CLY2	
		H	8.00	cm		
		Wall thickness	0,50	cm		

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6.	Cylinder	D H	6.00 8.00	cm cm	CLY1	
7.	Hollow pyramid	H Base W/L Wall thickness 0,5 cm	8.00 6.00	cm cm	PYRA2	
8.	Pyramid	H Base W/L	8.00 6.00	cm cm	PYRA1	
9.	Curved cuboid	L W H	8.00 6.00 5.00	cm cm cm	BOX3	
10.	Curved cylinder	L/H D	6.00 6.00	cm cm	CLY3	
11.	Big elipsoid	D L	10.00 15.00	cm cm	BALL B1	
12.	Medium elipsoid	D L	6.00 8.00	cm cm	BALL B2 BALL M1	
13.	Small elipsoid	D L	2.00 3.00	cm cm	BALLS 1	
14.	Big potato	L D	15.00 10.00	cm cm	BALL B1 BALL B2	
15.	Medium potato	L D	9.2 6.00	cm cm	BALL M1	

					BALL M2	
16.	Small potato	L D	3.00 2.00	cm cm	BALL M2  BALLS 2	
17.	Big carrot	D L	6.50 25.00	cm cm	CYLB6	
18.	Small carrot	D L	2.00 8.00	cm cm	CYLS6	
19.	Rod	H D Thickness	8.00 1.00 0.50	cm cm cm	CYL5	



**APPENDIX F**

**LANGUAGE ATTITUDE, PERCEPTION AND USE QUESTIONNAIRE**

Before you begin:

- Please provide your pseudonym assigned for this study.
- Please answer honestly to each of the statement with the following appropriate responds in relation to your personal experience
  - Feel free to also answer with explanation if you want.

Pseudonym.....

**SECTION 1**

**SECTION 1**

**Language Background**

1. How many sign languages do you think are in the world? Tell us more about your answer?

2. How many sign languages are used in Ghana? Name them?

3. What sign language do you use most often. You may list more than one (e.g., GSL, ASL, International sign, village sign language)

**SECTION 2**

**Your thoughts about your Language contact** (please by circling your answer)

Please understand each statement carefully before selecting your responds

4. How often do you use the media (television, internet) to engage (watch, learn or communicate) in sign language with Deaf Ghanaian?  
a. Never                      b. Sometimes                      c. Often
5. How often do you use the media (television, internet) to engage (watch, learn or communicate) in sign language with white/foreign or Deaf American?  
a. Never                      b. Sometimes                      c. Often
6. How often do you see and use GSL dictionary or books?  
a. Never                      b. Sometimes                      c. Often
7. How often do you see and use ASL dictionary or books?  
a. Never                      b. Sometimes                      c. Often



8. When sending text messages to other deaf Ghanaians, do you make an effort for the syntax of your sentence to be exactly as English or GSL  
a. Never                      b. Sometimes                      c. Often
9. When sending text messages to hearing people, do you make an effort for the syntax of your sentence to be exactly as English or you use GSL syntax.  
a. Never                      b. Sometimes                      c. Often
10. Do you feel proud using GSL with other Deaf in public?  
a. Never                      b. Sometimes                      c. Often

### SECTION 3

#### Your thoughts about Language Status

Please indicate whether you agree or disagree with each statements

11. Knowing ASL can help me get a good job, than knowing GSL  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
12. Ghanaian Sign Language is the same as American Sign Language  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
13. Please explain your answer to question 12. Why do you feel that way?
14. American Sign Language is the same as Sign Exact English  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
15. Please explain your answer to question 12. Why do you feel that way?
16. If you use GSL you are not respected as educated but if you use ASL you are considered as educated and intelligent  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
17. Sign Language is not really a language since it is not every concept that could be expressed using it

- a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
18. Ghanaian Sign Language is the true sign language of deaf people in Ghana  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
19. Ghanaian Sign Language should rather be used as the language for teaching deaf and not English  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
20. Ghanaian Sign Language is not developed so deaf people in Ghana have to learn American Sign Language  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
21. Ghanaian Sign Language is not as good as American Sign Language  
1. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.

#### **SECTION 4**

##### **Your thought about Sociocultural view**

22. Doctors need to find a cure for deafness.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
23. Deaf people must learn Sign Exact English or how to speak because Ghana is a speech community.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
24. It is good to be deaf and be able to use a hearing aid.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
25. Deaf Ghanaian who knows Sign Exact English or American Sign Language are always successful in life.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
26. Deaf students who are fluent in Ghanaian Sign Language always fail their English exams.

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- a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
27. If you have children it is better to teach them ASL  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
28. Interpreters and deaf signer learning ASL will eventually cause GSL to die.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
29. Deaf people who can voice a little English than those who do not.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
30. Interpreters should learn GSL from deaf Ghanaians and not from foreign missionaries in church or from American Sign Language books.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
31. Deaf children must learn Ghanaian Sign Language from other deaf and not from internet or books.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
32. It is acceptable for deaf people in Ghana to learn advance signing from foreign deaf people.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
33. It is important that deaf children in Ghana should be taught by only deaf teachers.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
34. Please explain your answer to question 33. Why do you feel that way?

**SECTION 5**

**Your thoughts about Language Usage**

35. It is important to use Sign Exact English in the classroom for deaf students in Ghana.

- a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
36. It is important for deaf Ghanaians to use ASL with other Deaf Ghanaians  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
37. Is important to learn new signs from foreign/white deaf people.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
38. Deaf Ghanaian must not learn new signs from foreign/white deaf people so that GSL can be pure.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
39. Using American Sign Language give you a better chance to further your education.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
40. Using Sign Exact English gives you a better chance to further your education.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
41. Ghanaian Sign Language is not good for University Education because it only has limited vocabularies.  
a. Strongly agree   b. Agree   c. Unsure   d. Disagree   e. strongly disagree.
42. Do you know about any stereotypes used for deaf Ghanaian and interpreters who use American Sign Language?
43. How do you feel about Ghana adopting the use of American Sign Language in schools?
44. What do you think about the idea of Deaf people using Sign Exact English?

45. What are some of the factors you think motivates Deaf Ghanaians to learn American Sign Language from books, internet or foreign/white people?

46. What do you think motivates interpreters in Ghana to learn American Sign Language?

47. Where and how often do you see ASL being used by deaf people in Ghana

Where	Always	Often	Sometimes	Rarely	Never
At my home					
At friend's home					
At school					
At work					
At church					
On television					
During ceremonies (e.g., weddings, funerals)					
At GNAD offices					
At conferences					
At sporting events					
Meeting friends on the street					
Interpretation service (e.g., hospital, bank)					
Others, please specify. .....					

(please tick in the box your response)

48. Where and how often do you see GSL being used by deaf people in Ghana  
(please tick in the box your response)

Where	Always	Often	Sometimes	Rarely	Never
At my home					
At friend's home					
At school					
At work					
At church					
On television					
During ceremonies (e.g., weddings, funerals)					
At GNAD offices					
At conferences					
At sporting events					
Meeting friends on the street					
Interpretation service (e.g., hospital, bank)					
Others, please specify.					
.....					
.....					

49. Any other information you would like to share about your perceptions and views on sign language in Ghana.

50. What are thought about Deaf education in Ghana. You can reflect on your time in school and the current situation now. What change(s) have you observed, or suggestion would like to make



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