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# The treatment of Africa in eight sixth-grade geography textbooks

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The Treatment of Africa in eighth - grade  
geography text books



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BOSTON UNIVERSITY  
SCHOOL OF EDUCATION

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Paper

THE TREATMENT OF AFRICA IN EIGHT  
SIXTH-GRADE GEOGRAPHY TEXTBOOKS

Submitted by

Edith Pauline Bixby

(B. S. in Ed., Fitchburg State Teachers College, 1939)

In partial fulfillment of requirements for  
the degree of Master of Education

1 9 4 6

First Reader: W. Linwood Chase, Professor of Education

Second Reader: Franklin C. Roberts, Professor of Education

✓

Boston University  
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## CHAPTER I

### INTRODUCTION

"Textbooks alone are not efficient instruments for the understanding of social problems in a rapidly changing world.<sup>1/</sup> This statement is very true. However, a textbook is an important tool for children. With the idea of the textbook as a tool, the writer determined to find out what children could learn from textbooks about Africa.

After reading and evaluating the many topics which could be used, the following were selected: 1. Cities and towns ; 2. Rivers ; 3. Mountains ; 4. Lakes and falls ; 5. Minerals ; 6. Products ; 7. Pictures ; 8. Graphs ; 9. Wild animals ; 10. Personalities ; 11. Estimated, running words, and 12. Maps.

Eight texts were chosen to be evaluated. Gregory<sup>2/</sup> lists the same texts as those most commonly used in the elementary grades, with a few additional texts. The latest editions of the following texts were used :

- A. Atwood, Wallace W. and Thomas, Helen G. Nations Beyond the Seas, Ginn and Company, Boston, 1940.

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1/ "The Teacher and Classroom Technics," Part III, Chapter XII, Fourteenth Yearbook, Department of Superintendents, National Education Association, Pp. 283-311.

2/ William H. Gregory, A Scoring Plan for Elementary Geography Texts, The Boston Palmer Company, Boston, Massachusetts, 1935.





- B. Bodley, G.R. and Thurston, E.L., The Old World Continents, Iroquois Publishing Company, New York, 1940.
- C. Brigham, Albert P. and McFarlane, Charles F., Our Continental Neighbors, Book III, American Book Company, Boston, 1938.
- D. Smith, J. Russell, Foreign Lands and Peoples, The John C. Winston Company, Philadelphia, 1943.
- E. McConnell, W.R. , Living Across the Seas, Rand, McNally and Company, New York, 1939.
- F. Stull, Deforest, and Hatch, Roy, Our World Today, Allyn and Bacon Company, Boston, 1944.
- G. Branom, Frederick, K., and Ganey, Helen M., Eastern Hemisphere, Book III, William Sadlier, Incorporated, New York, 1940.
- H. Barrows, Harlan H., and Parker, Edith P., and Parker, Margaret T., Southern Lands, Silver, Burdett Company, New York, 1941.

These texts hereafter will be referred to by the letter which precedes the name of the text.

Certain criteria had to be set up in order to make the tabulation as uniform as possible. The following conditions were made : 1. Cities and towns in the running text were counted ; 2. Cities and towns in questions were not included ; 3. Names of cities and towns under pictures were mentioned ; 4. The remaining topics would not include the listing under pictures ; 5. The estimated number of running words would be found by finding the average of ten typical lines , and using this as a measure for the remaining number ; 6. The tabulation would be checked three times to reduce the number of possible errors to a minimum.

The data of these calculations will be found in Chapter III.



## CHAPTER II

### LITERATURE IN THE FIELD OF GEOGRAPHY TEXTS

Although the physical features of a country do not change there may be new discoveries of minerals, development of new industries, new uses of products and the building of cities which will change the emphasis of geography in a continent. For this reason there was no available material on the analysis of texts on Africa within recent times.

Texts in geography have changed a great deal in the last hundred years. Brigham and Dodge <sup>1/</sup> give an interesting history of the change of geography texts in the nineteenth century.

"The early books were encyclopedic and were meant to be memorized - just as textbooks unfortunately are in many places today."

"The books were descriptive, rather than explanatory, and causal relations were never even suggested."

Guyot in 1867 believed in encouraging children to think, and Murray, 1868-1870, stressed physical geography. These were two steps in the right direction. In 1896-1897, following the report of the Committee of Ten, Frye's Geographies and the Natural Series by Redway and Herman emphasized the modern phases

<sup>1/</sup>Albert Perry Brigham, Richard E. Dodge, "Nineteenth Century Textbooks of Geography"; Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Illinois Public School Publishing Company, 1935, Pp. 3-27.



of physical geography, each in its own way.

The next step in the last part of the century was the series of Tarr and McMurry in 1900, which were organized from the pedagogical rather than the logical standpoint.

The present day trend in geography texts emphasizes the relation between cultural and natural items, and there is a decrease in the stressing of facts as unrelated material. The difference in texts of today is not in the topics covered but rather in the quantity, and organization. Ridgely <sup>1/</sup> lists as the Elements of Geography the following:

Elements of the Natural Environment      Chief Human Activities

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1. Location</li> <li>2. Surface or relief</li> <li>3. Climate</li> <li>4. Soil</li> <li>5. Minerals</li> <li>6. Water supply</li> <li>7. Ocean</li> <li>8. Native plants</li> <li>9. Native animals</li> <li>10. Other peoples</li> </ul> | <ul style="list-style-type: none"> <li>1. <u>Economic Activities</u> <ul style="list-style-type: none"> <li>a. Agriculture</li> <li>b. Mining</li> <li>c. Manufacturing</li> <li>d. Commerce</li> <li>e. Grazing</li> <li>f. Lumbering</li> <li>g. Hunting and fishing</li> </ul> </li> <li>2. <u>Political Activities</u></li> <li>3. <u>Social Activities</u></li> </ul> |
|--|--|

He also states:

A geographic point of view may be obtained and retained

---

<sup>1/</sup> Douglas C. Ridgely, "Natural Environment and Human Activity," Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1933, pp. 181-188.



by keeping in mind three questions as guides in the evaluation of geographic material. These questions have found their way, directly or in essential meaning, into the geography work of the elementary school. They are :

1. Where do people live ?
2. Why do they live there ?
3. How do they live there ?

Farley <sup>1/</sup> gives a summary of the best score sheets which have been made out for geography texts.

There does not seem to be much agreement as to the number of place locations or of the places which should be mentioned.

Roseberry <sup>2/</sup> compared the amount of space given names of places in six geography texts with the ranking of Rugg and Rockett, and found only 3.2 % agreement.

Moore <sup>3/</sup> in a study of six geography texts for the middle grades found that the questions were 32.2 % memory and thought questions.

General principles applying to the curriculum are brought out by Thralls :

1. Adequate presentation with a wealth of carefully selected detail and the use of much concrete material.

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<sup>1/</sup> Genevieve J. Farley, "The Selection of Elementary School Textbooks- A Review of the Literature," Unpublished Service Paper, Boston University, Boston, 1944, pp. 153-166.

<sup>2/</sup> Eulalia E. Roseberry, "An Analysis of Textbooks in Elementary Geography," Master's Thesis, University of Chicago, Chicago, 1930.

<sup>3/</sup> Nelle E. Moore, "An Analysis of Study Questions As Found in Textbooks for the Elementary Grades," Elementary School Journal, 27: 1926, pp. 194-208.





2. Visualization- the imagination must be aroused; that is, the children should make the people's experiences in adjusting themselves to the specific natural environment a part of their own experiences, should vicariously experience the adjustments of a people to their natural environment.

3. Selection of such facts, concepts, and ideas, both natural and cultural, as will lead to the development and mastery of the major understandings and fundamental generalizations. 1/

---

1/ Zoe Thralls, "Some General Curricular Principles and Their Applications," Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1933, pp.201-218.

1844  
The first of the year was a very cold one, and the  
winter was unusually long and severe. The snow  
lay on the ground for many weeks, and the  
frost was very hard. The crops were all  
ruined, and the people suffered much from  
want of food and clothing. The spring  
was also very cold, and the crops were  
all killed. The summer was also very  
cold, and the crops were all ruined.  
The autumn was also very cold, and the  
crops were all ruined. The winter was  
also very cold, and the people suffered  
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## CHAPTER III

### A STUDY OF EIGHT SIXTH GRADE GEOGRAPHY TEXTBOOKS

The capital letters are used to indicate the different texts as discussed in Chapter I.

Cities and Towns. These are enumerated in the first table. It is very important to know places of geographical significance. "A knowledge of the location of places and place associations is a significant outcome of geographic studies." <sup>1/</sup>

TABLE I

CITIES AND TOWNS IN AFRICA  
MENTIONED IN EIGHT GEOGRAPHY TEXTBOOKS

TEXTS	A	B	C	D	E	F	G	H
ACCRA		2						1
ADDIS ABBA	2	3		2	3	1	1	6
AKSUM								2
ALEXANDRIA	5	4	5	2		5	2	9
ALGER, ALGIER	10	7	2	1	8	6	3	17
ANTANANARIVO		1						
ASMARA								1
ASUYUT					3			1
ASSUAN, ASWAN	6	2	1				3	4
BAMAKO		1						
BANANA		1	1					
BATHURST		1						
BEIRA	1	5	1	1		2		4
BENGUELA		2		1		2		3
BERBERA		1						

<sup>1/</sup> M.E. Branom, E.C. Walther, "Testing in the Field of Geography," Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1933, pp.333-344.



TABLE I (continued)  
 CITIES AND TOWNS IN AFRICA  
 MENTIONED IN EIGHT GEOGRAPHY TEXTBOOKS

TEXTS	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>
BINGERVILLE		2						
BISKRA						2		
BIZERTA								2
BLOENFONTEIN								1
BRAZZAVILLE		1						4
BROKEN HILL								1
BUKAMA	2							5
BUTA								2
CAIRO	17	4	6	7	4	14	9	13
CAPE TOWN	18	3	7	10	1	12	8	19
CASABLANCA		4	4		1	2		6
CEUTA								2
CONSTANTINE			1					
DAKAR	1	6					1	8
DAR ES SALAAM	1	5		1			1	3
DURBAN	10	6	2	3	2	3	3	17
EAST LONDON	1						2	
ELIZABETHVILLE		3		1		6		1
EL OBEID								6
EL CUED				1				2
ENTEBBE				1				
FES or FEZ		3	2		1			4
FREETOWN		1	1					
GHADAMES								1
HALFA	2							
IBADAN			1					1
ILEBO								1
JIBUTI	2	3		1	2			1
JOHANNES BURG	3	4	2	4	4	11	4	20
KABARA								1
KANO		4		1		7	4	8
KHARTOUM, KHARTUM	3	5	4		2	1	3	9
KIMBERLEY	4	2	2	3	3	4	1	11
KISMAYU								1
KONAKRY		2						
KUKA		2						
KULIKORO								3
KUMASI		1						
LAGOS		2						3
LAURENCO MARQUES	1	3	1	1		1	2	1







1911  
 ... ..  
 ... ..

No.	Date	Particulars	Debit	Credit	Balance	Total
1	Jan 1	...	...	...	...	...
2	Jan 2	...	...	...	...	...
3	Jan 3	...	...	...	...	...
4	Jan 4	...	...	...	...	...
5	Jan 5	...	...	...	...	...
6	Jan 6	...	...	...	...	...
7	Jan 7	...	...	...	...	...
8	Jan 8	...	...	...	...	...
9	Jan 9	...	...	...	...	...
10	Jan 10	...	...	...	...	...
11	Jan 11	...	...	...	...	...
12	Jan 12	...	...	...	...	...
13	Jan 13	...	...	...	...	...
14	Jan 14	...	...	...	...	...
15	Jan 15	...	...	...	...	...
16	Jan 16	...	...	...	...	...
17	Jan 17	...	...	...	...	...
18	Jan 18	...	...	...	...	...
19	Jan 19	...	...	...	...	...
20	Jan 20	...	...	...	...	...
21	Jan 21	...	...	...	...	...
22	Jan 22	...	...	...	...	...
23	Jan 23	...	...	...	...	...
24	Jan 24	...	...	...	...	...
25	Jan 25	...	...	...	...	...
26	Jan 26	...	...	...	...	...
27	Jan 27	...	...	...	...	...
28	Jan 28	...	...	...	...	...
29	Jan 29	...	...	...	...	...
30	Jan 30	...	...	...	...	...
31	Jan 31	...	...	...	...	...
		...	...	...	...	...

TABLE I (concluded)  
CITIES AND TOWNS IN AFRICA  
MENTIONED IN EIGHT GEOGRAPHY TEXTBOOKS

<u>TEXTS</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>
TETUAN		2						
TIMBUKTU or TOMBOUCTOU	3	3	1		1	3	4	7
TOUGGOURT	2							
TRIPOLI	1	1	4		1		1	7
TUNIS	6	4	3		4	1	1	8
WANKIE				1				
WORCESTER								8
ZANZIBAR CITY	1	2	1	1	1		1	

The writer does not try to prove whether or not a book which mentions a city several times is better than one which mentions it only once, or, whether it is better to have a great number or only a few cities mentioned. Actual record of the number of mentions is the objective.

Table I shows that in the eight texts investigated there were 102 different cities mentioned in the running text and under pictures. By reference to Table I one may find the exact number of times each city or town was given in each of the eight texts.

TABLE I-A shows the number of different towns and cities mentioned and the wide variation.

TABLE I-A

NUMBER OF DIFFERENT TIMES CITIES AND TOWNS IN AFRICA  
WERE MENTIONED IN EIGHT GEOGRAPHY TEXTS

<u>TEXTS</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>
	34	59	33	27	23	25	29	75

MEMORANDUM

FOR THE RECORD

NO.	DATE	DESCRIPTION	AMOUNT
1	1912	...	...
2	1913	...	...
3	1914	...	...
4	1915	...	...
5	1916	...	...
6	1917	...	...
7	1918	...	...
8	1919	...	...
9	1920	...	...
10	1921	...	...
11	1922	...	...
12	1923	...	...
13	1924	...	...
14	1925	...	...
15	1926	...	...
16	1927	...	...
17	1928	...	...
18	1929	...	...
19	1930	...	...
20	1931	...	...
21	1932	...	...
22	1933	...	...
23	1934	...	...
24	1935	...	...
25	1936	...	...
26	1937	...	...
27	1938	...	...
28	1939	...	...
29	1940	...	...
30	1941	...	...
31	1942	...	...
32	1943	...	...
33	1944	...	...
34	1945	...	...
35	1946	...	...
36	1947	...	...
37	1948	...	...
38	1949	...	...
39	1950	...	...
40	1951	...	...
41	1952	...	...
42	1953	...	...
43	1954	...	...
44	1955	...	...
45	1956	...	...
46	1957	...	...
47	1958	...	...
48	1959	...	...
49	1960	...	...
50	1961	...	...
51	1962	...	...
52	1963	...	...
53	1964	...	...
54	1965	...	...
55	1966	...	...
56	1967	...	...
57	1968	...	...
58	1969	...	...
59	1970	...	...
60	1971	...	...
61	1972	...	...
62	1973	...	...
63	1974	...	...
64	1975	...	...
65	1976	...	...
66	1977	...	...
67	1978	...	...
68	1979	...	...
69	1980	...	...
70	1981	...	...
71	1982	...	...
72	1983	...	...
73	1984	...	...
74	1985	...	...
75	1986	...	...
76	1987	...	...
77	1988	...	...
78	1989	...	...
79	1990	...	...
80	1991	...	...
81	1992	...	...
82	1993	...	...
83	1994	...	...
84	1995	...	...
85	1996	...	...
86	1997	...	...
87	1998	...	...
88	1999	...	...
89	2000	...	...
90	2001	...	...
91	2002	...	...
92	2003	...	...
93	2004	...	...
94	2005	...	...
95	2006	...	...
96	2007	...	...
97	2008	...	...
98	2009	...	...
99	2010	...	...
100	2011	...	...

...

...

A child reading Text A would learn about 34 different cities and towns, 59 in Text B, 33 in Text C, 27 in Text D, 23 in Text E, 25 in Text F, 29 in Text G, and 75 in Text H. There is a great difference in these texts, from 23 mentions in Text E to 75 different cities and towns in Text H.

So that it would be possible to compare the leading city of each text according to the number of times it occurred the following table was constructed.

TABLE I-B  
GREATEST NUMBER OF TIMES ANY CITY OR TOWN IN AFRICA  
WAS MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXT	CITY OR TOWN	NUMBER OF MENTIONS
A	CAPE TOWN	18
B	ALGIER	7
C	CAPE TOWN	7
D	CAPE TOWN	10
E	ALGIER	8
F	CAIRO	14
G	CAIRO	9
H	JOHANNESBURG	20

In Text A, Cape Town was mentioned the greatest number of times, 18; Text B, Algier, 7; Text C, Cape Town, 7; Text D, Cape Town, 10; Text E, Algier, 8; Text F, Cairo, 14; Text G, Cairo, 9; Text H, Johannesburg, 20. It is interesting to note that Cape Town led in the number of times it occurred in three texts, Algier in two texts, and Johannesburg in only one text, but that one text mentions it a greater number of times than any



of the leading cities in the other texts.

The following table will show the way the leading cities ranked in the different texts. It includes the number of cities listed three or more times, unless that number of cities was too large to list.

TABLE I-C  
CITIES AND TOWNS IN AFRICA  
MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXTS	A	B	C	D			
Cape Town	18	Algier	7	Cape Town	7	Cape Town	10
Cairo	17	Durban	6	Cairo	6	Cairo	7
Algier	10	Dakar	6	Alexandria	5	Kimberley	5
Durban	10	Khartoum	5	Casablanca	4	Johannesburg	4
Tunis	6	Mombasa	5	Tripoli	4	Nairobi	3
Aswan	6	Dar Es Salaam	5	Khartoum	4	Durban	3
Alexandria	5	Beira	5	Tunis	3		
Kimberley	4	Alexandria	4				
Johannesburg	3	Cairo	4				
Khartoum	3	Casablanca	4				
Pretoria	3	Johannesburg	4				
Timbuktu	3	Kano	4				
		Marakesh	4				
		Tunis	4				
		* Other Cities					

\* By reference to Table I it can be seen that eleven cities are mentioned three times each.

TEXTS	E	F	G	H			
Algier	8	Cairo	14	Cairo	9	Johannesburg	20
Tunis	4	CapeTown	12	Cape Town	8	Cape Town	19
Cairo	4	Johannesburg	11	Timbuktu	4	Durban	17
Johannesburg	4	Kano	7	Kano	4	Algier	17
Addis Ababa	3	Algier	6	Johannesburg	4	Cairo	13
Assuyut	3	Elizabethville	6	Durban	3	Kimberley	11
Kimberley	3	Alexandria	5	Khartoum	3	Khartoum	9



TABLE I - C (concluded)

CITIES AND TOWNS IN AFRICA  
MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXTS	E	F	G	H			
		Kimberley	4	Leopoldville	3	Alexandria	9
		Johannesburg	4	Matadi	3	Worcester	8
		Durban	3	Port Elizabeth	3	Tunis	8
		Port Elizabeth	3			Kano	8
		Pretoria	3			Dakar	8
		Timbuktu	3			Loanda	7
						Timbuktu	7
						Tripoli	7
						Stanleyville	6
						Oran	6
						El Obeid	6
						Casablanca	6

(By reference to Table I it can be seen that four cities were mentioned five times each, and six cities were listed three times each.)

Table I - C lists the cities in order of the number of times they were found in the texts. Cape Town, the leading city in three texts, is mentioned only three times in Text B, and only once in Text E. Algier, which leads in two texts is second in Text A, is mentioned only two times in Text C., once in Text D, six times in Text F, three times in Text G. Although it is found seventeen times in Text H it is only tied for third place in that text.

Rivers. The rivers in a country or continent mean water power, means of irrigation and transportation. The following Table II shows the rivers and tributaries listed and the number of times each mention occurred.





TABLE II  
RIVERS AND THEIR TRIBUTARIES FOUND IN AFRICA  
AS LISTED BY EIGHT GEOGRAPHY TEXTS

TEXTS	A	B	C	D	E	F	G	H	TOTALS
Atbara								3	3
Congo	6	30	12	14	1	12	12	12	99
Gambia		3						2	5
Kasai								3	3
Kunene				1					1
Limpopo	3	1		4		3		1	12
Lualaba						3		5	8
Niger	6	9	4			15	3	4	41
Nile	30	24	27	2	12	10	32	21	158
Blue Nile	3	3	1		2			7	16
White Nile	2	3	2	1	1	1		7	17
Orange				8		6		1	15
Quanza								2	2
Senegal		2				1		2	5
Ubangi		3		3				1	7
Vaal				3		2		3	8
Zambezi	2	10	4	3	1	12	1	5	38
<b>TOTALS</b>	<b>52</b>	<b>88</b>	<b>50</b>	<b>39</b>	<b>17</b>	<b>65</b>	<b>48</b>	<b>79</b>	<b>438</b>

TABLE II shows that there were seventeen different rivers mentioned in the eight texts. These mentions included only those in the running text.

The number of different rivers mentioned in each text follows.

TABLE II-A  
THE NUMBER OF DIFFERENT RIVERS IN AFRICA  
AS FOUND IN EIGHT GEOGRAPHY TEXTS

TEXTS	A	B	C	D	E	F	G	H
RIVERS	7	10	6	9	5	10	4	16



Text A lists 7 different rivers; Text B, 10; Text C, 6; Text D, 9; Text E, 5; Text F, 10; Text G, 4; Text H, 16. Text G mentioned only four rivers, while Text H listed sixteen, a difference of 12 rivers. The following Table shows the greatest number of times any river in Africa was found in each of the eight texts.

TABLE II - B

THE GREATEST NUMBER OF TIMES ANY RIVER IN AFRICA  
WAS MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXT	RIVER	NUMBER OF MENTIONS
A	Nile	30
B	Congo	30
C	Nile	27
D	Congo	14
E	Nile	12
F	Niger	15
G	Nile	32
H	Nile	21

The Nile River was mentioned the greatest number of times in Texts A, C, E, G, and H. Texts B and D mentioned the Congo the greatest number of times, while Text F mentioned the Niger most often. Text G lists the Nile 32 times, the greatest number of times a river is mentioned, while Text E, although the Nile is listed most often in that text, has only 12 mentions, a difference of 20.

A clearer picture of all the rivers is shown in the following table.



TABLE II--C

THE RIVERS OF AFRICA ACCORDING TO THEIR FREQUENCY  
OF MENTIONS AS FOUND IN EIGHT GEOGRAPHY TEXTS

TEXT A		TEXT B		TEXT C		TEXT D	
Nile	50	Congo	30	Nile	27	Congo	14
Congo	6	Nile	24	Congo	12	Orange	8
Niger	6	Zambezi	10	Niger	4	Limpopo	4
Limpopo	3	Niger	9	Zambezi	4	Ubangi	3
Blue Nile	3	White Nile	3	White Nile	2	Zambezi	3
White Nile	2	Ubangi	3	Blue Nile	1	Vaal	3
Zambezi	2	Blue Nile	3			Nile	2
		Gambia	3			White Nile	1
		Senegal	2			Kunene	1
		Limpopo	1				

TEXT E		TEXT F		TEXT G		TEXT H	
Nile	12	Niger	15	Nile	32	Nile	21
Blue Nile	2	Zambezi	12	Congo	12	Congo	12
White Nile	1	Congo	12	Niger	3	Blue Nile	7
Zambezi	1	Nile	10	Zambezi	1	White Nile	7
Congo	1	Orange	6			Lualaba	5
		Limpopo	3			Zambezi	5
		Lualaba	3			Niger	4
		Vaal	2			Atbara	3
		Senegal	1			Kasai	3
		White Nile	1			Vaal	3
						Gambia	2
						Quanza	2
						Senegal	2
						Orange	1
						Ubangi	1
						Limpopo	1

The Congo, which ranked first in Texts B and D, ranks second in Texts A,C,G,H; third in Texts E and F; The Nile, which ranked first in Texts A,C,E,G,and H, was second in Text B, fifth in Text D, and fourth in Text F. The Niger which

TABLE I

THE RESULTS OF THE ANALYSES OF THE SAMPLES OF THE  
MATERIALS IN THE LABORATORY

NO.	NAME	ANALYSIS	RESULTS	REMARKS
1	...	...	...	...
2	...	...	...	...
3	...	...	...	...
4	...	...	...	...
5	...	...	...	...
6	...	...	...	...
7	...	...	...	...
8	...	...	...	...
9	...	...	...	...
10	...	...	...	...

NO.	NAME	ANALYSIS	RESULTS	REMARKS
11	...	...	...	...
12	...	...	...	...
13	...	...	...	...
14	...	...	...	...
15	...	...	...	...
16	...	...	...	...
17	...	...	...	...
18	...	...	...	...
19	...	...	...	...
20	...	...	...	...

The results of the analyses of the samples of the materials in the laboratory are given in Table I. The results of the analyses of the samples of the materials in the laboratory are given in Table I. The results of the analyses of the samples of the materials in the laboratory are given in Table I.

ranks first in Text F, rates second in Text A, fourth in Texts B and D, third in Texts C and G, seventh in Text H, and is not mentioned in Text E.

Rivers which were mentioned the same number of times were given equal ratings.

Mountains. Mountains within a country are responsible for many phenomena. They may receive the moisture from the wind as it passes over them, causing arid lands or deserts on the other side. They may be storehouses of hidden wealth. From their summits vast water power may find its source.

The mountains of Africa are tabulated as follows:

TABLE III

MOUNTAIN RANGES AND PEAKS IN AFRICA  
AS FOUND IN EIGHT GEOGRAPHY TEXTBOOKS

TEXTS	A	B	C	D	E	F	G	H	TOTALS
AHAGGAR						1			1
AIR						2			2
ATLAS	3	5	3	3	3	7	2	12	38
BLACK*						1			1
DRAKENSBERG		2	1	1			1	1	6
ETHIOPIAN HIGHLANDS**	1						2		3
MT. KENYA		2	1		1	1			5
KENYA HIGHLANDS		1							1
MT. KILIMANJARO	1	2	1			1		1	6
LONGEBERG***						1			1
RUWENZORI****		1	1	1		1			4
NIRUVELT			1						1
SHIRE HIGHLANDS				1					1
TABLE		1		1		1		1	4
TIBETSI						2			2
TOTALS	5	14	8	7	4	18	5	15	76

\*OR ZWARTEBERG    \*\*OR ABYSSINIAN HIGHLANDS    \*\*\*OR LONG  
\*\*\*\* OR MOUNTAINS OF THE MOON





The following mountains were mentioned in the eight geography texts: Ahaggar, Air, Atlas, Black or Zwarteberg, Drakensberg, Ethiopian or Abyssinian Highlands, Mt. Kenya, Kenya Highlands, Mt. Kilimanjaro, Long or Longeberg, Ruwenzori or Mountains of the Moon, Nieuwvelt, Shire Highlands, Table, and Tibestsi.

The number of different mountains and peaks is tabulated below.

TABLE III-A

NUMBER OF DIFFERENT MOUNTAINS AND PEAKS IN AFRICA  
MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXTS	A	B	C	D	E	F	G	H
NO. MENTIONS	3	7	6	5	2	10	3	4

The above figures show that Text F mentioned the greatest number, namely, 10, Text B, 7; Text C, 6; Text D, 5; Text H, 4; Texts A and G, 3, and Text E, only 2. The difference between the mentions of different mountains and peaks is eight.

Table III-B will show the greatest number of times a mountain was mentioned in each text.



TABLE III-B

THE GREATEST NUMBER OF TIMES ANY MOUNTAIN IN AFRICA  
WAS MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXT	MOUNTAIN	NUMBER OF MENTIONS
A	Atlas	3
B	Atlas	5
C	Atlas	3
D	Atlas	3
E	Atlas	3
F	Atlas	7
G	(Atlas (Ethiopian Highlands 2)	2
H		12

The eight texts seemed to be in agreement that the Atlas Mountains are the most important, although Text G does mention the Ethiopian Highlands an equal number of times. The difference between the number of mentions may be significant. Text H mentioned it 12 times, while Text G only mentioned it twice.

Table III-C summarizes all the mountains and peaks according to their frequency of mentions in each text.

TABLE III-C

MOUNTAINS AND PEAKS OF AFRICA IN ORDER OF FREQUENCY  
OF MENTIONS AS FOUND IN EIGHT GEOGRAPHY TEXTS

TEXT A	TEXT B	TEXT C	TEXT D
Atlas 3	Atlas 5	Atlas 3	Atlas 3
Ethiopian H. 1	Drakensberg 2	Drakensberg 1	Drakensberg 1
Kilimanjaro 1	Kilimanjaro 2	Kenya 1	Ruwenzori 1
	Kenya 2	Kilimanjaro 1	Shire 1
	Ruwenzori 1	Ruwenzori 1	Table 1
	Table 1	Nieuwvelt 1	



TABLE III-C (concluded)

MOUNTAINS AND PEAKS OF AFRICA IN ORDER OF FREQUENCY  
OF MENTIONS AS FOUND IN EIGHT GEOGRAPHY TEXTS

TEXT E	TEXT F	TEXT G	TEXT H				
Atlas	3	Atlas	7	Atlas	2	Atlas	12
Kenya	1	Tibetsi	2	Ethiopian	2	Drakensberg	1
		Air	2	Drakensberg	1	Kilimanjaro	1
		Ahaggar	1			Table	1
		Black	1				
		Kenya	1				
		Kilimanjaro	1				
		Longeberg	1				
		Ruwenzori	1				
		Table	1				

The Ethiopian Highlands are mentioned in Texts A and G. The Drakensberg Mountains are included in Texts B,C,D,G, and H. Mt. Kilimanjaro is mentioned in Texts A, B, C, F, and H. Mt. Kenya is listed in Texts B,C, E, and F. The Kenya Highlands are referred to in Text B. The Ruwenzori Mountains are found in Texts B,C,D and F. The Table Mountains are mentioned in Texts B, D, F, and H. The Nieuwvelt Mountains are listed only in Text C. The Shire Highlands are mentioned only in Text D. The Tibetsi Mountains are found only in Text F. The Air, Ahaggar, Black, and Longeberg Mountains are listed only in Text F.

Lakes and Falls. Although the lakes and falls in Africa may be of more scenic than commercial value at the present time, one cannot predict their future importance.



Table IV records the names and frequency of mentions in each text.

TABLE IV  
NAMES AND FREQUENCY OF MENTIONS OF LAKES IN AFRICA  
AS FOUND IN EIGHT GEOGRAPHY TEXTS

LAKES	TEXTS	A	B	C	D	E	F	G	H	TOTALS
Albert		1			1		1	1	2	6
Chad			3	4	1		5		2	15
Nyasa		1	3	2	1	2	1	1	1	12
Tana									1	1
Tanganyika		1	5	3		1	4	1	4	19
Victoria		3	10	7	2	1	4	1	5	33
Edward								1	1	2
	TOTALS	6	21	16	5	4	15	5	16	

Table IV shows that Lakes Albert, Chad, Nyasa, Tana, Tanganyika and Victoria were found in the eight texts.

The number of different lakes in each text is as follows:

TABLE IV-A  
NUMBER OF DIFFERENT LAKES IN AFRICA  
MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXTS	A	B	C	D	E	F	G	H
NUMBER OF MENTIONS	4	4	4	4	3	5	5	7

Text H mentioned seven lakes; Texts F and G , 5; Texts A, B, C, and D, 4; and Text E, 3. Text H mentioned twice the number Text E listed, which is a difference of four mentions between the greatest and the smallest.





The greatest number of times any lake was listed is summarized in Table IV-B.

TABLE IV-B

GREATEST NUMBER OF TIMES ANY LAKE IN AFRICA  
WAS MENTIONED IN EIGHT GEOGRAPHY TEXTS

TEXT	LAKES	NUMBER OF MENTIONS
A	Victoria	3
B	Victoria	10
C	Victoria	7
D	Victoria	2
E	Nyasa	2
F	Chad	5
G	Albert	1
G	Nyasa	1
G	Tanganyika	1
G	Victoria Falls	1
G	Edward	1
H	Victoria Falls	5

Lake Victoria leads in the number of mentions in Texts B, C, H, A, and D. Lake Nyasa leads in Text E and Lake Chad, in Text F. In Text G, Lakes Albert, Nyasa, Tanganyika, Victoria and Edward are listed one time each.

Table IV-C lists the lakes according to their frequency of mentions.



TABLE IV-C

LAKES IN AFRICA LISTED ACCORDING TO THEIR FREQUENCY  
OF MENTIONS IN EIGHT GEOGRAPHY TEXTS

TEXT A		TEXT B		TEXT C		TEXT D	
Victoria	3	Victoria	10	Victoria	7	Victoria	2
Albert	1	Tanganyika	5	Chad	4	Nyasa	1
Nyasa	1	Nyasa	3	Tanganyika	3	Chad	1
Tanganyika	1	Chad	3	Nyasa	2	Albert	1

TEXT E		TEXT F		TEXT G		TEXT H	
Nyasa	2	Chad	5	Albert	1	Victoria	5
Tanganyika	1	Tanganyika	4	Nyasa	1	Tanganyika	4
Victoria	1	Victoria	4	Tanganyika	1	Albert	2
		Nyasa	1	Victoria	1	Chad	2
		Albert	1	Edward	1	Nyasa	1
						Tana	1
						Edward	1

The lakes as listed in their order of frequency of mentions in TABLE IV-C are: Text A, Victoria 3; Albert, 1, Nyasa 1, and Tanganyika 1; Text B, Victoria 10, Tanganyika 5, Nyasa 3, Chad 3; Text C, Victoria 7, Chad 4, Tanganyika 3, Nyasa 2; Text D, Victoria 2, Nyasa, Chad, and Albert 1 mention each; Text E, Nyasa 2, Tanganyika 1, Victoria 1; Text F, Chad 5, Tanganyika 4, Victoria 4, Nyasa 1, Albert 1; Text G, Albert 1, Nyasa 1, Tanganyika, Victoria 1, Edward 1; Text H, Tanganyika 4, Albert 2, Chad 2, Nyasa 1, Tana 1, Edward 1.

Falls and their frequency of mentions are summarized in the following table.



TABLE IV-D

FALLS IN AFRICA LISTED ACCORDING TO THEIR FREQUENCY  
OF MENTIONS FOUND IN EIGHT GEOGRAPHY TEXTS

FALLS	TEXTS								TOTALS
	A	B	C	D	E	F	G	H	
Livingstone								2	2
Stanley		2	2					1	5
Victoria	2	5	1	3	4			2	17

Three falls are mentioned in the eight texts, namely :  
Livingstone, Stanley, and Victoria Falls.

Text H is the only text which mentioned Livingstone Falls. Stanley Falls is listed two times in Text B; two times in Text C and once in Text H. Victoria Falls is found two times in Text A, five times in Text B, once in Text C, three times in Text D, four times in Text E, and two times in Text H. Text H is the only text which mentioned all the falls.

#### Minerals.

Geographic interpretation of a region takes into account the mineral resources and the extent to which they are produced and used. A knowledge of the coal and iron resources of any region is fundamental in the interpretation of the progress of its people. The interpretation of mineral resources and their value to man is one of the illuminating concepts in geography. 1/

1/ E.P. Parker, "Major Conclusions to be Drawn from the Investigations", Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois:Public School Publishing Company, 1933, pp.161-177.







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47	CHAPTER XLVI	460
48	CHAPTER XLVII	470
49	CHAPTER XLVIII	480
50	CHAPTER XLIX	490
51	CHAPTER L	500

Table V shows that many minerals are mentioned in the eight texts. The extent of their abundance and use can not be given here.

Antimony is mentioned in Text D; Asbestos, in Texts A, B, D, E, F, and H; Asphalt, in Text B; Bauxite, in Text B; Chromite, in Texts A, B, D, E, F, and H; Cobalt, in Text E; Coal in all texts; Copper in all texts; Diamonds in all texts; Gold in all texts; Graphite in Texts A, B, C, D, and G; Iron, in Texts A, B, C, D, E, F, and H; Lead, in Texts A, B, C, E, G, and H; Manganese, in Texts A, B, and H; Mica, in Texts B, C, and E; Nickel, in Text D; Petroleum, in Texts A, B, and H; Phosphate, in Texts, A, B, C, D, E, G, and H; Platinum, in Texts A, C, F, and H; Potash, in Texts B and H; Salt, in Texts B, C, E, F, and H; Silver, in Texts B, C, E, F, G, and H; Sulphur, in Texts B and C; Tin, in Texts A, B, C, D, E, F, and H; Uranium, in Texts E and H; Vanadium, in Texts A, D, and E; Zinc, in Texts A, B, C, D, E, F, G, and H.

Twenty-seven different minerals were mentioned in the eight geography texts. Coal, copper, diamonds, gold, and zinc were listed in all texts; phosphate and tin, in seven texts; asbestos, chromite, lead, and silver, in six texts; graphite and salt, in five texts; platinum, in four texts; manganese, mica, petroleum, and vanadium, in three texts; potash, sulphur, and uranium, in two texts; antimony, asphalt, bauxite, cobalt, and nickel, in one text.



Products.  
(Crops.)

Crops of all kinds are the direct result of man's work. His agricultural efforts are always conditioned in a large measure by the natural environment. The simple, but fundamental variations in the relationships existing between agricultural and the natural environment throughout the world are sources of never-ending interest and profit in the pursuit of geographic knowledge. <sup>1/</sup>

In recent years, the knowledge of plants, new uses, possibilities of transplanting in other climes, and usability of heretofore unknown or plants regarded as weeds has brought out this importance. The speed of transportation and refrigeration, also should increase its importance.

TABLE VI

## PRODUCTS OF AFRICA AS FOUND IN EIGHT GEOGRAPHY TEXTS

PRODUCTS	TEXTS								NUMBER OF TEXTS
	A	B	C	D	E	F	G	H	
Alfalfa				X		X		X	3
Almonds		X				X		X	3
Apples	X	X			X	X	X	X	6
Apricots			X		X			X	3
Bananas	X	X	X	X	X	X	X	X	8
Barley	X	X	X		X	X	X	X	7
Beans	X			X	X		X	X	5
Cacao	X	X	X	X	X	X	X	X	8
Carrots								X	1
Castor Beans		X	X						2
Cattle	X	X	X	X	X	X	X	X	8
Cauliflower								X	1

<sup>1/</sup> Douglas Ridgley, "Natural Environment and Human Activity," Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1933, pp. 181-188.



TABLE VI(continued)

## PRODUCTS OF AFRICA AS FOUND IN EIGHT GEOGRAPHY TEXTS

PRODUCTS	A	B	C	D	E	F	G	H	NUMBER OF TEXTS
Cedar		x					x	x	3
Celery							x		1
Chestnuts					x			x	2
Cinnamon		x							1
Clover		x				x		x	3
Cloves	x	x		x	x		x		5
Coconuts	x	x	x	x		x		x	6
Coffee	x	x	x	x	x	x	x	x	8
Copra	x	x	x						3
Cork Oak	x	x	x		x		x	x	6
Corn	x	x		x	x	x	x	x	7
Cotton	x	x	x	x	x	x	x	x	8
Dates	x	x	x		x	x	x	x	7
Ebony		x	x					x	3
Esparto Grass		x	x		x		x	x	5
Figs		x	x		x	x		x	5
Fish		x		x				x	3
Flax						x		x	2
Frankincense		x							1
Ginger		x							1
Goats	x	x	x	x	x	x	x	x	8
Grapefruit	x							x	2
Grapes	x	x	x	x	x	x	x	x	8
Guano		x		x					2
Gum Arabic		x		x	x			x	4
Gum Copal		x	x		x			x	4
Hemp(sisal)	x	x	x	x	x	x		x	7
Indigo						x			1
Ivory		x	x	x	x	x	x	x	7
Kapok					x				1
Koala Nuts		x		x					2
Lemons	x				x	x	x	x	5
Lettuce							x	x	2
Mahogany	x	x	x	x				x	5
Mangos								x	1
Mangroves		x	x					x	3
Manioc or Casava	x	x	x	x	x		x	x	6
Melons					x		x	x	3
Millet	x	x		x	x		x	x	6
Mother of Pearl		x							1
Mulberry		x	x			x			3
Myrrh		x							1



TABLE VI (concluded)

## PRODUCTS OF AFRICA AS FOUND IN EIGHT GEOGRAPHY TEXTS

PRODUCTS	TEXTS								NUMBER OF TEXTS
	A	B	C	D	E	F	G	H	
Cats					X	X	X	X	4
Okume								X	1
Olives	X	X	X	X	X		X	X	7
Onions	X				X			X	3
Oranges	X	X	X	X	X	X	X	X	8
Ostriches		X	X	X		X	X	X	6
Palm Oil and Kernels	X	X	X	X	X	X	X	X	8
Peaches	X	X	X	X	X	X	X	X	8
Peanuts	X	X	X	X	X	X	X	X	8
Pears	X	X	X		X	X		X	6
Piassawa		X							1
Pine					X		X	X	3
Pineapples	X	X				X	X	X	5
Plaintain					X			X	2
Plums				X	X		X	X	4
Pomegranates			X			X			2
Potatoes					X	X	X	X	4
Pumpkins				X	X			X	3
Quince						X			1
Radishes								X	1
Raffia (Palm)		X						X	2
Rice	X	X	X	X	X	X	X	X	8
Rosewood		X							1
Rubber	X	X	X	X	X	X	X	X	8
Rye						X			1
Satinwood		X							1
Sheep	X	X	X	X	X	X	X	X	8
Sorghum				X					1
Sponges		X	X					X	3
Sugar	X	X	X	X	X	X	X	X	8
Tea					X		X	X	3
Tobacco	X	X	X	X	X	X	X	X	8
Tomatoes				X			X	X	3
Vanilla Beans	X	X	X	X	X		X	X	7
Wattle					X			X	2
Wax (Bees)				X	X	X		X	4
Wheat	X	X	X	X	X	X	X	X	8
Wool	X	X	X	X	X			X	6
Yams (Sweet Potatoes)	X			X	X	X	X	X	6





Summarized in one table the number of different products which are grown in Africa is quite startling. Too often one thinks of Africa as only able to produce cotton, rubber, cacao, palm oil and dates. The extent to which these products are or may be grown cannot be discussed here, but the variety is enlightening.

There were ninety-three different crops mentioned in the eight geography texts. The products found in all the texts examined were: bananas, cacao, cattle, coffee, cotton, goats, grapes, oranges, palm oil and kernels, peaches, peanuts, rice, rubber, sheep, sugar, tobacco, and wheat. Seven texts referred to the following: barley, corn, dates, hemp, ivory, olives and vanilla beans. Apples, coconuts, cork oak, manioc or cassava, millet, ostriches, pears, wool, yams or sweet potatoes were found in six texts. Five texts mentioned beans, cloves, esparto grass, figs, lemons, mahogany, and pineapples. Gum Arabic, gum copal, oats, plums, potatoes, and bees wax were listed in four texts. Three texts mentioned alfalfa, almonds, apricots, cedar, clover, copra, ebony, fish, mangroves, melons, mulberry, onions, pine, pumpkins, sponges, tea, and tomatoes. Castor beans, chestnuts, flax, grapefruit, guano, kola nuts, lettuce, plaintains, pomegranates, raffia palm, and wattle were listed in two texts. One text mentioned carrots, cauliflower, celery, cinnamon, frankincense, ginger, indigo, kapok, mother of pearl, myrrh, okume, pissawa, quince, radishes, rosewood, rye, satinwood, sorghum. Text mentions may be found by referring to table.



Pictures. Even before children learn to read they enjoy picture books and from their observations they are able to tell logical stories from their observations. Elementary school children usually turn to illustrations first. They are a valuable part of any text.

Pictures and actual landscapes contribute chiefly by giving concrete concepts of observable cultural and natural features that are elements in geographic thinking. <sup>1/</sup>

Table VII shows the number of illustrations according to the size and the number.

TABLE VII  
NUMBER OF DIFFERENT PICTURES FOUND  
IN EIGHT GEOGRAPHY TEXTS OF AFRICA

SIZE OF PICTURES	TEXTS								TOTALS
	A	B	C	D*	E	F	G	H	
Full Page				1				1	2
Half Page or Less than Whole			4	2	1	2		4	13
Less than Half Page	40	36	20	60	20	33	16	36	261
Totals	40	36	24	63	21	35	16	41	276

\* In Text D, the pictures are not with the running text, but on a separate page.

<sup>1/</sup> Edith Putman Parker, "Major Conclusions to be Drawn from the Investigations," Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1933, pp.161-177.



In the eight geography texts reviewed, only Texts D and H gave space to a full Page Picture.

The next largest size received a greater number of illustrations. Text D had two; Text E, one; Text F, two; and Text H, four. The remaining texts did not include pictures of this size.

Naturally the "Less than Half" group included a greater number. Text A had 40; Text B, 36; Text C, 20; Text D, 60; Text E, 20; Text F, 33; Text G, 16; Text H, 36.

Text D had the largest total, namely, 63. These illustrations were on separate pages and not with the running text. Text H had 41; Text A, 40; Text B, 36; Text F, 35; Text C, 24; Text E, 21; Text G, 16.

Surely a child who looks at sixty-three clear pictures, if they are representative of Africa, would have a much clearer concept of that continent than if he observed only sixteen clear pictures.

Graphs. It would seem to be true from investigations that graphs could be made simple enough for children in the intermediate grades to interpret. Katheryne Colvin Thomas<sup>1/</sup> found that children above the fourth grade could read simple graphs.

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<sup>1/</sup> Katheryne Colvin Thomas, "The Ability of Children to Interpret Graphs," Thirty-Second Yearbook of the National Society for the Study of Education, Bloomington, Illinois: Public School Publishing Company, 1933, pp. 492-494.



Edith Parker states: "Graphs and statistics contribute chiefly ideas of quantitative comparisons relating to cultural and natural items."

TABLE VIII

GRAPHS RELATING TO AFRICA AS FOUND  
IN EIGHT GEOGRAPHY TEXTS

SUBJECTS	TEXTS							
	A	B	C	D	E	F	G	H
Production of gold		1						
Temperature				5				
Trade						2		
Diamonds					1			
Exports and Imports of British and French Africa							1	

Graphs are not widely used in elementary geography texts, if the above table is representative. Text D had the greatest number, namely, five temperature graphs. Text B had one graph showing the production of gold. Text F included two, showing amount of trade. One diamond graph was given in Text E. Text G gave one graph showing the exports and imports of British and French Africa.

Children reading Texts A, C, and H would find no graphs relating to Africa.

Wild Animals. Wild animals as well as flora and fauna tell a great deal about the country in which they live. Children have a natural fondness for animals whether domestic or wild.



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TABLE IX  
WILD ANIMALS OF AFRICA AS FOUND IN EIGHT GEOGRAPHY TEXTS

WILD ANIMALS	TEXTS								NUMBER OF TEXTS
	A	B	C	D	E	F	G	H	
Antelopes		X	X		X	X	X		5
Baboons			X				X		2
Buffaloes		X		X	X		X		4
Cheetas							X		1
Chimpanzees		X	X				X		3
Crocodiles					X		X		2
Deer					X				1
Elephants	X	X	X	X	X	X	X	X	8
Fox							X		1
Gazelles			X				XX		2
Giraffes		X	X		X	X	X		5
Gnus			X						1
Gorillas		X	X			X			3
Hippopotamus			X	X	X	X	X		5
Hyenas			X		X		X		3
Jackals			X		X			X	3
Kongoni or Hartebeests		X		X					2
Leopards		X	X	X	X	X	X		6
Lions		X	X		X	X	X		5
Lizards			X						1
Lynx							X		1
Monkeys		X	X	X	X	X	X		6
Panthers			X						1
Rhinoceros		X	X		X	X	X		5
Zebras		X	X		X		X		4
Totals	1	12	18	6	14	9	18	2	

In the eight geography texts examined the following wild animals of Africa were mentioned: antelopes, baboons, buffaloes, cheetahs, chimpanzees, crocodiles, deer, elephants, fox, gazelles, giraffes, gnus, gorillas, hippopotamus, hyenas, jackals, kongoni or hartebeests, leopards, lions, lizards, lynx, monkeys, panthers, rhinoceros, zebras.

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Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
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Text A mentioned one animal; Text H,2; Text D,6; Text F,9; Text B,12; Text E 14, and Texts C and G, 18.

Personalities. Personalities mentioned in a geography text should make the reading more realistic and less factual, and serve as another tie between reading, history and geography.

TABLE X

## PERSONALITIES MENTIONED IN EIGHT GEOGRAPHY TEXTS ON AFRICA

PERSONALITIES	TEXTS	A	B	C	D	E	F	G	H	TOTALS
Columbus				x	x					2
Vasco de Gama				x	x					2
David Livingstone		x	x	x			x	x		5
Henry Stanley			x	x	x		x	x	x	6
Christ				x	x		x			3
Cecil Rhodes		x	x	x			x	x		5
Napoleon Bonaparte				x						1
Haile Selassie (Menelik II)					x					1
King Solomon					x		x			2
Queen of Sheba					x		x			2
Theodore Roosevelt					x					1
Sir Harry Johnston					x					1
Tutenkhamon		x					x			2
President Munroe		x								1
Mungo Park							x			1
Ptolemy							x			1
Queen Victoria							x			1
Prince Albert							x			1
Alexander the Great							x			1
Leopold II (Belgium)									x	1
Cleopatra							x			1
<b>TOTALS</b>		<b>4</b>	<b>3</b>	<b>7</b>	<b>9</b>	<b>0</b>	<b>13</b>	<b>3</b>	<b>2</b>	

Text E mentioned no famous people. Texts B and G mentioned 3; Text A, 4; Text C, 7; Text D,9, and Text F, 13.



The different personalities mentioned were as follows: Columbus, Vasco de Gama, David Livingstone, Henry Stanley, Christ, Cecil Rhodes, Napoleon Bonaparte, Haile Selassie, (Menelik II ), King Solomon, Queen of Sheba, Theodore Roosevelt, Sir Harry Johnston, Tutenkhamon, President Munroe, Mungo Park, Ptolemy, Queen Victoria, Prince Albert, Alexander the Great, Leopold II of Belgium, and Cleopatra.

Running Words. The estimated number of running words in the eight elementary texts showed how the texts varied in the number of words thought necessary to tell Africa's story. Quantity is only one phase of the composite learning and teaching.

TABLE XI

ESTIMATED NUMBER OF RUNNING WORDS FOUND  
IN EIGHT GEOGRAPHY TEXTS ON AFRICA

TEXTS	ESTIMATED NUMBER OF RUNNING WORDS
A	11, 255
B	21, 257
C	11, 757
D	13, 422
E	9, 779
F	10, 183
G	8, 635
H	29, 530

Text H has approximately three times the number of estimated running words in Text E or in Text G.

Faint, illegible text at the top of the page, possibly a header or introductory paragraph.

Centered text block, possibly a title or a specific heading.

Text block below the centered section, possibly a subtitle or a short paragraph.

Large, faint text block, possibly a main body of text or a large heading.

Text block at the bottom of the page, possibly a footer or a concluding paragraph.

Maps. Maps are to a student of geography what signposts are to a motorist. A child may develop many concepts about a new land merely by map study. Looking at the latitude will tell whether it is a cold or a warm land. Observing the coastline will tell him whether or not it has possibilities as a trading country. A glance at rivers will suggest possibilities for power, irrigation, and transportation in the new lands. Ability to read maps and good maps to read are very important.

## TABLE XII

## MAPS FOUND IN EIGHT GEOGRAPHY TEXTS ON AFRICA

## TEXT A

## FULL PAGE COLORED MAPS

- 1 Relief Map showing vegetation
- 1 Physical Map
- 1 Political and Economic Map

## SMALL BLACK AND WHITE MAPS

- 1 Rainfall Map
- 1 Map showing distribution of population
- 1 Cape to Cairo Route Map
- \* 1 Relief Map of the Nile Delta and Valley

- \* Sectional Maps of Africa

## TEXT B

## FULL PAGE BLACK AND WHITE MAPS

- 1 Relief Map
- 1 Map of the Natural Regions
- 1 Political Map
- 1 Map of Natural Products and Exports

## SMALL BLACK AND WHITE MAPS

- 1 Rainfall Map
- 1 Distribution of Population Map

## TEXT C

## FULL PAGE COLORED MAPS

- 1 Political Map
- 1 Physical Map



Faint, illegible text at the top of the page, possibly a header or introductory paragraph.

Section header or title, centered on the page.

Main body of faint, illegible text, possibly containing a list or detailed description.

Faint text at the bottom right of the page, possibly a signature or date.

## TABLE XII (Continued)

## MAPS FOUND IN EIGHT GEOGRAPHY TEXTS ON AFRICA

## TEXT C (continued)

## FULL PAGE BLACK AND WHITE MAP

1 Natural Regions

## SMALL BLACK AND WHITE MAPS

1 Map showing SPANISH, PORTUGUESE, and ITALIAN possessions

2 Rainfall Maps

1 Map showing the drainage basins of Africa

1 Map showing the types of land and vegetation

1 Map showing the distribution of population

## TEXT D

## FULL PAGE COLORED MAP

1 Political Map

## TWO PAGE COLORED MAPS

1 HUMAN USE MAP

1 PHYSICAL AND POLITICAL MAP

## SMALL BLACK AND WHITE MAPS

2 Rainfall Maps

## TEXT E

1 PHYSICAL AND POLITICAL (over 1 page) COLORED MAP

1 FULL PAGE BLACK AND WHITE RELIEF MAP

## SMALL BLACK AND WHITE MAPS

1 Rainfall Map

1 Distribution of Population Map

2 Temperature Maps

1 Vegetation Map

1 Product Map

1 Relief Map of the Suez Canal

1 Mineral Map

## TEXT F

## FULL PAGE COLORED MAPS

1 Physical and Political Map

1 Population Map

2 Climatic Maps

## SMALL BLACK AND WHITE MAPS

\* 1 Map showing the distribution of sheep

\* 1 Map showing the acreage of cotton in Egypt

\* Sectional Maps of Africa

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## TABLE XII (Concluded)

## MAPS FOUND IN EIGHT GEOGRAPHY TEXTS ON AFRICA

## TEXT G

## FULL PAGE COLORED MAPS

- 1 Physical Map
- 1 Political Map

## FULL PAGE BLACK AND WHITE MAP

- 1 Relief Map

## SMALL BLACK AND WHITE MAPS

- 1 Rainfall Map
  - 1 Population Map
  - \* 1 Map showing the cultivated land of Egypt
  - \* 1 Map showing the acreage of cotton in Egypt
  - 1 Mineral Map
- \* Sectional Maps of Africa

## TEXT H

## TWO PAGE PHYSICAL AND POLITICAL MAP

## SMALL BLACK AND WHITE MAPS

- 2 Rainfall Maps
  - 1 Population Map
  - 1 Vegetation Map
  - 1 Map showing former German possessions
  - \* 1 Map showing Trans-Saharan Routes
  - \* 1 Map showing the distribution of sheep
  - \* 1 Map showing the production of corn
  - \* 1 Map showing the cultivated land of Egypt
  - \* 1 Map showing the acreage of cotton in Egypt
  - \* 1 Map showing the acreage of wheat in Egypt
- \* Sectional Maps of Africa

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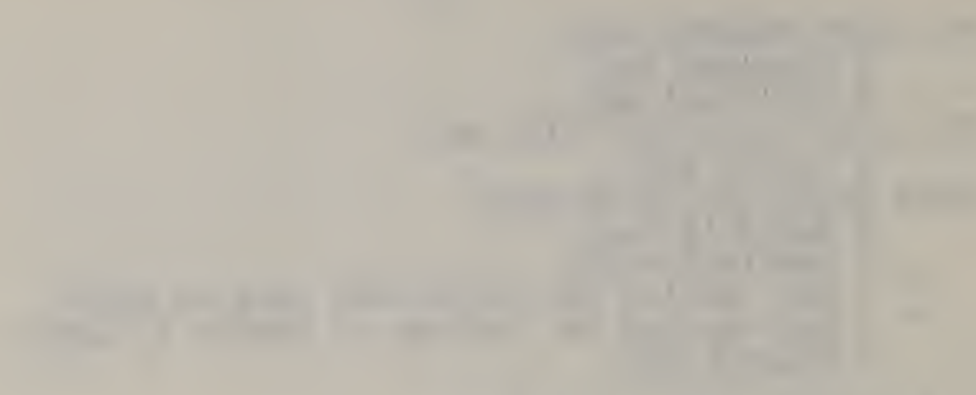
Maps in the eight texts vary greatly. To evaluate maps accurately for clearness and emphasis actual observation is the best test.

Before the discussion of what should we teach about Africa, it should be of greatest benefit to the teacher to know what textbooks offer. The following summary table shows at a glance the wide range of material in texts. Remembering the textbook is only a tool does not make it less important.

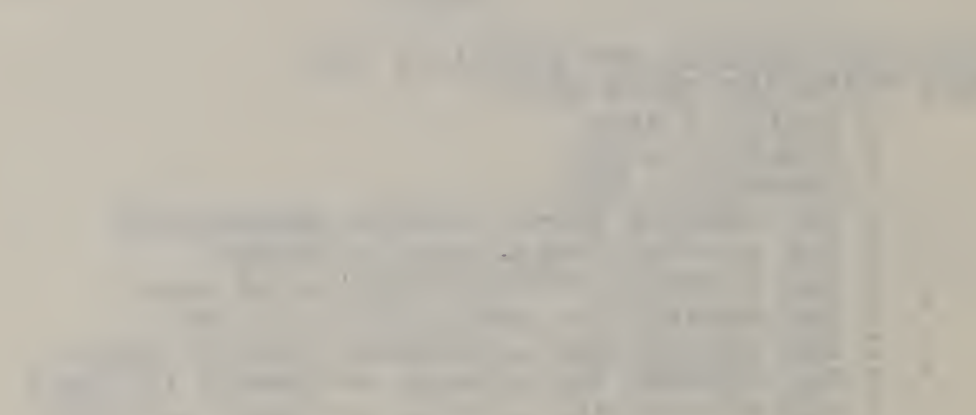
CHAPTER 10

THE HISTORY OF THE UNITED STATES

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TABLE XIII  
SUMMARY TABLE OF EIGHT GEOGRAPHY TEXTS

TEXTS	A	B	C	D	E	F	G	H	AVERAGE
1. Number of different towns and cities mentioned									
	34	59	33	27	23	25	29	75	38
2. Greatest number of times any city was mentioned									
	18	7	7	10	8	14	9	20	12
3. Number of Rivers mentioned									
	7	10	6	9	5	10	4	16	8
4. Greatest number of times any river was mentioned									
	30	30	27	14	12	15	32	21	23
5. Number of different mountains and peaks mentioned									
	3	7	6	5	2	10	3	4	5
6. Greatest number of times a mountain was mentioned									
	3	5	3	3	3	7	2	12	5
7. Number of different lakes mentioned in each text									
	4	4	4	4	3	5	5	7	5
8. Greatest number of times a lake was mentioned									
	3	10	7	2	2	5	1	5	4
9. Number of different minerals mentioned									
	16	20	16	14	16	12	9	18	15
10. Number of different products mentioned									
	37	61	42	43	49	42	44	72	49
11. Number of pictures in each text									
	40	36	24	63	21	35	16	41	34
12. Number of graphs									
	0	1	0	5	1	2	1	0	1
13. Number of wild animals mentioned									
	1	12	18	16	14	9	18	2	11
14. Number of different personalities									
	4	3	7	9	0	13	3	2	5
15. Estimated number of running words									
	A. 11,255	B. 21,257	C. 11,757	D. 13,422					
	<u>E.</u> 9,779	<u>F.</u> 10,183	<u>G.</u> 8,635	<u>H.</u> 29,530					14,477



## CHAPTER IV

### CONCLUSIONS

The information which children may learn from geography textbooks depends upon the text used. If one text is used, the concepts which a child may get would vary from those of another text, as the Summary Table in Chapter III clearly shows. Whether a teacher desires the maximum, average, or minimum will determine her selection. The use of several texts would be the optimum. This, however, is not always possible.

A contrast of the extremes will give an idea of the difference in texts and the concepts children would get. The number of different cities ranges from twenty-three to seventy-five. Of course, in comparison with other continents, Africa is more sparsely settled, and even these cities do not compare in size with ours. But when only twenty-three are mentioned, it does not average one city for a country. Even though these cities are smaller, they are important in their countries.

The rivers vary in number from four to sixteen. Text G mentions only four, but those four are the most important ones. To civilized lands vast water power means electricity, and with that, modern conveniences. Surely the amount of water for that purpose should be emphasized. Primitive man always settled near streams, just as our own colonists did. It is important





that rivers other than the four most important rivers have potential power and also serve as a means of transportation.

The Atlas Mountains are the only ones mentioned in Text E. This certainly would give a child a concept of Africa as quite a flat continent. The highest peak of Africa, Mt. Kilimanjaro, is not even located in this mountain range which is so often mentioned.

The number of minerals ranges in number of mentions from nine to twenty. The most important minerals are mentioned in the text which lists only nine. The possibility of greater wealth of minerals would not be indicated by this small number. Large deposits of uranium are found in the heart of the Belgian Congo. Some of our metals which are so abundant now may be used up and then we shall be glad or even forced to seek the possibilities of some of the lesser minerals according to their number of mentions.

The number of products varies from thirty-seven to seventy-two. The possibilities of a self-sustaining and food-basket country seem much more important with seventy-two varieties of products. Refrigeration may introduce even more fruits and vegetables heretofore unknown or unappreciated in the diets of Americans and Europeans. The wide range of vegetable possibilities in Africa has not even been anticipated.

Illustrations in these texts range from sixteen to sixty-three. Africa has been visited and photographed by many modern photographers. Surely, in this day and age we cannot

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afford to fail to give children the clearest, the best story telling pictures which can be printed. They need pictures of people at work, of food, of play, of cities, natural vegetation and color, if possible. Some children learn a great deal from visual aids. A picture adds to their interest, their understanding, and in many cases it is a great aid in retention as they keep that picture in mind.

The number of estimated running words varies from 8,635 to 29,530. This shows that the latter text has more than three times as many words as the former text. Africa has taken probably the least amount of studying of any of the continents. There is no remote place on our globe today. We should know as much as possible about the world in which we live. Many of us will always find it necessary to travel vicariously, so we should know even those places we may never see.

Graphs were not used in three texts, and only once in three texts. Children in the sixth grade can understand, enjoy and delight in not only reading graphs, but in asking questions about them, and even in trying to make some of their own. We use them in our arithmetic books, and no other subject can apply graphs better than our geography texts. We have one more chance to use something visual. Give the child a clear concise picture.

The writer would like to stress the fact that it is clearly understood that a child does not retain everything he reads.



The texts vary so greatly in the factual material presented that if a child retains thirty per cent of what he reads (this, of course, is purely hypothetical), and if he has only sixty knowledges about Africa, he would retain far less than would a child who has learned ninety knowledges.

The texts do not seem to be in agreement as to the cities which are of most importance. Algier, Cairo, Cape Town, Durban, Johannesburg, Kimberley, and Mombasa are the only cities mentioned in all eight texts. Of these seven cities four are in the Union of South Africa. It would be interesting to learn how different countries in Africa would list the seven most important cities. If we expect children to know places we should know which cities to build in importance.

These data were collected to show how texts do vary in the material presented about one continent. In finding out about how texts may vary the task of the teacher in selecting a text is very important. Special attention should be given to the maps, their clearness, and their story. Some maps try to show so many features that children must be bewildered. Other maps with no color may not appeal to the desire for color. Graphs in a book add to the knowledge and provide an interesting and concise tool. In the hands of elementary children pictures help to establish a desire to know about people, places, and activities. Choose your book as you would any story book. Geography takes children on a magic carpet which is real and possible to see in our air-minded world.

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