

PROGRESS OF LITERACY  
IN  
VARIOUS COUNTRIES

A preliminary statistical study of available census data  
since 1900

U N E S C O

*Published in 1953 by the United Nations  
Educational, Scientific and Cultural Organisation  
19, Avenue Kléber, Paris-16<sup>e</sup>  
Printed by Firmin-Didot et Cie*

*Printed in France  
ED.52.III.6.A.*

MONOGRAPHS ON FUNDAMENTAL EDUCATION—VI

## MONOGRAPHS ON FUNDAMENTAL EDUCATION

- I. *Fundamental Education: description and programme*
- II. *Co-operatives and Fundamental Education*  
by Maurice Colombain
- III. *The Mexican Cultural Mission Programme*  
by Lloyd H. Hughes
- IV. *The Haiti Pilot Project: phase one, 1947-1949.*
- V. *The Healthy Village: an experiment in visual education in West China*
- VI. *Progress of Literacy in Various Countries*
- VII. *Social Welfare Work in Jamaica* (in preparation)
- VIII. *The Use of Vernacular Languages in Education*

## P R E F A C E

*The collection and diffusion of information and the preparation of studies on educational problems is a continuous part of Unesco's programme. While numerous assessments of the extent of world illiteracy and the progress in combating it have been made, so far as we know there has not before been any intensive study of its incidence on a comparative international level. Yet it is obvious that the different methods of assessing literacy or illiteracy, the methods of analysing results and computing percentages of either category, must be known before comparisons can be made or conclusions drawn on an international level. Such a study not only makes possible more informed comparison—to see to what degree and in what particulars there has been progress or recession—but also gives some guidance from the experience of others to those who are engaged in or are planning the taking of literacy censuses among groups or populations which have not been enumerated before.*

*This study should serve another purpose. It is common knowledge that educational work with adults—whether it be of a basic fundamental nature or at an advanced university level—lacks, more than any other field of educational activity, a methodology or even an agreed set of tools for evaluating individual achievements or progress in particular programmes or campaigns. Statistical methods of analysis, while not fully answering this need, do, however, provide a precise and useful tool for such measurement. This demonstration of some possible uses of these methods may then suggest to others ways in which they could be employed elsewhere.*

*For reasons of space and owing to the incompleteness of data, this study covers only 26 countries, including only those for which illiteracy figures are available for three or more census years since about 1900. In all cases, results from the last census for which figures on illiteracy are available are included. It is planned to supplement this volume in the near future with another study containing available data relating to non-self-governing territories and other dependent areas. When the results of the censuses taken in many countries around 1950 become available it is hoped that they can be included in new editions of these volumes.*

*It is hoped, too, that these future studies will demonstrate more fully*

## PROGRESS OF LITERACY

*the extensions of these methods and show what correlations can be made with other elements in the educational and social structures.*

*A glance at the statistical tables in this book and at the list of sources given makes it clear that the study has used only available census data. Later statements have at times been made on the literacy position in a number of countries but Unesco has deliberately kept to available census data as these, being the most complete, providing the best basis for comparability, and being immediately available, permitted a much earlier appearance of the book. Some countries, again, have conducted censuses later than the ones quoted here, but they have either dropped the question on illiteracy from these or have not yet released tabulated returns on it. Unesco recognizes that in many cases the picture today will be more favourable than it appears here, but as the present purpose is to demonstrate a method of measurement, analysis and comparability, and only incidentally to give relevant figures, it was felt that present publication was justified. There will always be a measure of time-lag, but it is hoped that future volumes will bring the picture more nearly to date.*

*This study has been prepared by the Statistical Division of Unesco with assistance from the United Nations Statistical Office in the collection of census data. We trust that the study will be of value to all those concerned with the study of literacy and the efforts being made to achieve progress in it.*

### EXPLANATION OF SYMBOLS

The following conventional symbols are used throughout this volume:

- . Category not applicable
- ... Data not available
- Magnitude nil
- \* Estimated figure

# CONTENTS

INTRODUCTION . . . . .	9
CHAPTER I. Measuring progress of literacy. . . . .	13
CHAPTER II. Progress in various countries. . . . .	33
Argentina: 1895-1947 . . . . .	33
Belgium: 1900-30 . . . . .	35
Brazil: 1900-40 . . . . .	40
Bulgaria: 1900-34 . . . . .	45
Burma: 1901-31 . . . . .	51
Canada: 1901-41 (including Newfoundland: 1901-45). . . . .	55
Ceylon: 1901-46 . . . . .	64
Chile: 1907-40 . . . . .	69
Colombia: 1918-38 . . . . .	74
Cuba: 1899-1943. . . . .	77
Egypt: 1907-37 . . . . .	83
Finland: 1900-30. . . . .	87
France: 1901-46 . . . . .	92
Greece: 1907-46 . . . . .	96
Honduras: 1926-45 . . . . .	101
Hungary: 1900-41 . . . . .	104
India: 1901-41 . . . . .	109
Italy: 1901-31 . . . . .	114
Mexico: 1900-40. . . . .	119
Philippines: 1918-48 . . . . .	122
Portugal: 1900-40 . . . . .	126
Spain: 1900-40 . . . . .	133
Turkey: 1927-45. . . . .	136
Union of South Africa: 1904-46. . . . .	141
United States: 1900-47 . . . . .	150
Yugoslavia: 1900-48 . . . . .	161
CHAPTER III. Some international comparisons. . . . .	168
LIST OF SOURCES . . . . .	193

PROGRESS OF LITERACY

APPENDIX

Table A. Population of 26 countries classified by literacy: each census since about 1900. . . . .	200
Table B. Illiterate population in 26 countries, distributed by age and sex: latest available census . . . . .	214
LIST OF GRAPHS . . . . .	225



# INTRODUCTION

## PROBLEM OF ILLITERACY

So long as a sizeable portion of the world population remains without the rudimentary knowledge of reading and writing, the problem of illiteracy will continue to be of interest and concern to all who are engaged in activities designed to raise the standards of living and the levels of culture of the peoples of the world. In particular, the public administrator, the educator, the social scientist, and even the economic planner will want to know the number and proportion of men and women who cannot read and write among the inhabitants of their area.

The size of the problem varies in different areas of the world and among different sections of the population. In certain countries of Western Europe, and in certain other areas of the world largely populated by people originating from Western European countries, the problem may be considered of little or no importance. Education has long been compulsory and almost universal in these countries and areas, and the number of persons not able to read and write is confined to an irreducible minimum, composed mainly of the mentally incapable. In other areas, progress in the reduction of illiteracy has been slow, owing to the lack of sufficient means to provide educational opportunities for the whole population, especially where the population is increasing faster than the facilities of education.

Nevertheless, in the majority of countries and areas of the world, remarkable progress has been made in recent decades in the reduction of the number and proportion of illiterates among the population. Such progress can be measured fairly accurately by means of available statistics on literacy and illiteracy, especially those derived from national population censuses.

## STATISTICS OF ILLITERACY

Statistical data on illiteracy are generally obtained from three

## PROGRESS OF LITERACY

principal sources : marriage registers, military records and population censuses. The first two sources are unsatisfactory because they refer to limited portions of the population. Even the last source is not entirely satisfactory because of certain serious limitations which are set forth in the following paragraphs. Yet the national population censuses are still the best source available for statistics of illiteracy. They are the only source utilized for the present study.

## AVAILABILITY OF DATA

Unfortunately, census data on illiteracy are not available for many areas of the world. In those countries which claim to have little or no illiteracy, such as Denmark, Germany, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom, the question on literacy has not been included in the census schedule, at least since the beginning of this century. Other countries with very low illiteracy rates, such as Australia, Austria, Canada, New Zealand and the continental United States, have discontinued the use of the question on literacy in their more recent censuses. These cases, however, are not serious since the number of illiterates thus left unaccounted for is negligible. More serious is the lack of census data from areas where illiteracy is believed to be still prevalent, but where its extent cannot be accurately estimated.

For practically all of Africa, except Egypt and the Union of South Africa, illiteracy statistics from census sources are unknown. For large portions of Asia, including China, Mongolia, the States of Indo-China, and the Arab countries of the Middle East, the situation is much the same. Among the American nations, no recent census data on illiteracy are available for Bolivia, Ecuador, Haiti, Paraguay or Uruguay.

Thus, leaving out of consideration those countries where the illiteracy rate is believed to be low, there still remains almost one-third of the world population for whom no census data on illiteracy are available.

## RELIABILITY OF DATA

Such census data as are available are not always entirely reliable for various reasons. In the first place, they are subject to all the difficulties inherent in census enumerations such as under-enumeration (when, for example, some groups are unaccounted for),

over-enumeration (when, for example, certain groups or individuals are counted twice), omission of certain segments of the population (particularly the indigenous peoples), inaccuracy of reporting, etc. In addition, criteria of literacy and illiteracy are often vaguely stated and variously applied. Finally, no actual test of literacy is feasible in census enumerations, and the word of the respondent or the judgment of the enumerator must be accepted at face value, with all the subjective elements of error involved.

#### COMPARABILITY OF DATA

The prospect is still more discouraging when an attempt is made to compare illiteracy data between one country and another, or even between different censuses of the same country. Definitions of literacy and illiteracy are widely divergent, ranging from 'can read' or 'cannot read' to 'can or cannot write a short letter to a friend and read the answer'. Ability to sign one's name is in some cases considered as sufficient evidence of literacy, while in others it is not. The population to which any criterion of literacy is applied may be persons of all ages, even including infants who have not yet learned to talk! On the other hand, various age limits have been specified for consideration of literacy, ranging from 5 to 15 years or older.

Methods of tabulation are different for each country and sometimes for each census of a given country. Persons unspecified for literacy may or may not be included with the total population, with the literates, or with the illiterates. Persons of unknown age may or may not be included in the total count of literates and illiterates. Persons who can read only (or who can write only) may be included with the literates or with the illiterates, or given as a separate group considered as neither literate nor illiterate.

#### LEGITIMATE USES OF DATA

In spite of all the limitations, such census data on illiteracy as have been gathered for the present study still constitute the most useful information available for an historical analysis of the progress of literacy in various countries of the world. Such an analysis will serve to show, for each country examined, the extent of illiteracy existing at the beginning of the period under consideration, the

## PROGRESS OF LITERACY

amount and rate of progress made in the reduction of illiteracy during the period and the size of the problem still remaining at the date of the last available census.

Although it would be extremely imprudent to draw any comparisons of the extent of illiteracy between countries, it may be instructive to follow the course of progress within each country over several decades, especially in those countries which have maintained a continuous series of national censuses with fairly consistent data on literacy and illiteracy. Some useful lessons may be derived from such a study of the progress of literacy, country by country, during a specified period of time.

Such an international survey may stimulate the public administrator and the educator in a given country to make further efforts towards the reduction of illiteracy in their own country, and to seek additional knowledge from the experience of other countries which have tackled the same problem more or less successfully in earlier years. The social scientist may find useful the data on the differential illiteracy rates in the various population segments according to sex, age, urban and rural residence, ethnic groups, etc. The demographer and the statistician may find food for thought in the methodological aspects of the study. Finally, the general reader will find herein a fairly comprehensive collection of illiteracy figures relating to 26 countries, each covering several decennial censuses.

## SOURCES OF THE DATA

Data used for this study are obtained for the most part from official census reports of the countries concerned. In a few instances additional figures have been taken from unpublished material supplied to Unesco or to the United Nations by the countries concerned or from two international publications: *Aperçu de la Démographie des Divers Pays du Monde, 1929-1936*, published by the International Statistical Institute, and the *United Nations Demographic Yearbook, 1948*, published by the Secretariat of the United Nations. A complete list of the national sources consulted in the present study is given on pages 193 to 199.

## CHAPTER I

# MEASURING PROGRESS OF LITERACY

### CRITERION OF LITERACY

The United Nations Population Commission has recommended that literacy should be defined for census purposes as the ability both to read and to write a simple message in any language.<sup>1</sup>

In practice, several different criteria have been used in the censuses of the 26 countries included in the present study, some of them quite at variance with the above international recommendation. It is obvious that great caution must be exercised in any attempt to draw international comparisons from the data presented in the following chapters. Even within the same country it may be necessary to take into consideration changes in criteria between different censuses.

On the following pages is given a list of the questions on literacy asked, together with the instructions given to enumerators, in each of the 26 countries at various censuses taken since 1900. For many of the countries, the coverage of censuses is not complete, so that there may have been changes introduced at one census or another which have not been noted. On the whole the list gives a fairly comprehensive idea of the bases on which literacy data have been collected in the national censuses included in the present survey.

*List of census questions on literacy (with instructions to enumerators) used in 26 countries at various censuses taken since 1900*

*Argentina.* (1947) 'Do you know how to read?' 'Do you know how to write?' (It is enough to know how to read and write . . . any language. . . . Return 'No' for persons who can only write numerals or sign their names.)

*Belgium.* (1900, 1910, 1920, 1930) (Specify whether the person enumerated can both read and write.)

(1947) (Does the enumerated person know how to read and write? 'Yes' or 'No'.)

<sup>1</sup> United Nations. Population Commission, Third Session, 1948. *Report* (UN Doc. E/805). Lake Success, 1948, pp. 17-18. Mimeo.

PROGRESS OF LITERACY

- Brazil.* (1920) 'Can you read and write?' (Answer 'Yes' or 'No'.)  
(1940) 'Can you read and write?' (Answer 'Yes' if the person enumerated can read and write and 'No' if illiterate.)
- Bulgaria.* (1905) 'Can you read and write, or can you neither read nor write?' (1910) 'Can you ('Yes' or 'No') read and write any language?' (1920) 'Can you read and write any language?' 'Can you only read or only write?' 'Can you neither read nor write?'  
(1926) 'Can you read and write any language ('Yes' or 'No')?'  
'If not, can you only read or only write?'  
(1934) 'Can you read and write?'
- Burma.* (1901) 'Literate or illiterate.'  
(1911, 1921) (A person should not be entered as literate unless he is able to write a letter to a friend and read the answer to it.)  
(1931) 'Literate or illiterate.' (Enter the word 'literate' for all persons who can both read and write a letter in any language.)
- Canada.* (1911, 1921) 'Can read.' 'Can write.' (If a person can read in any language, the enumerator will reply 'Yes', and by 'No' if the person cannot read. If the person can write in any language the question will be answered by 'Yes', and 'No' if unable to write.)  
(1931) 'Can read and write.' (If the person can *read* and *write* in any language the question will be answered by writing 'W', but if the person is able to read *only* in any language write 'R', for a person who cannot read nor write enter 'No'. For a blind person write 'Yes' if the person could read and write in any language before becoming blind or, if, being born blind he or she has been taught to read and write. Do not return any person as able to read and write simply because he can write his own name. For persons under five years of age leave the column blank.)
- Newfoundland.* (1945) (Every person enumerated was asked if he could read and write, not only his own name, but whether he had a knowledge of reading and writing. For persons who could read and write, the entry was 'RW'; for those who could read only, the entry was 'R'; and for persons who could neither read nor write, the entry was 'No'.)
- Ceylon.* (1911, 1921) (. . . enter the mother tongue for each person who can read and write it. In the case of a person who can read and write another language . . . enter that language; if anyone can read and write a language in addition to his mother tongue, the latter alone is to be entered. The entry 'None' is to be made in the case of persons unable to read and write any language.)

MEASURING PROGRESS OF LITERACY

(1946) 'Whether able to read and write mother tongue; if not what other language.' (Enter . . . the language of the race to which his father belongs under each person who can read and write it. . . . The test of ability to read and write should be whether the person is able to write a short letter and read the reply to it. If the person cannot read and write this language, enter 'No', but if he can read and write another language, add the name of that language after the word 'No'. . . enter 'None' in case of inability to read and write any language.)

*Chile.* (1907) 'Can you read?'

(1920) 'Can you read?' (Write the word 'Yes' for those who can read, and 'No' for those who cannot read.)

(1930) 'Can you read?' (Note 'Yes' or 'No'.)

'If you cannot read, do you go to school?' (Note 'Yes' or 'No'.)

(These questions are to be put only to persons of more than 8 completed years of age. For children under that age leave the space blank.)

*Colombia.* (1918) (In the fifth column, enter 'Yes' for those persons who can read and 'No' for those who cannot read; the same procedure should be adopted in respect to the sixth column entitled 'Can write'.)

*Cuba.* (1943) 'Can you read and write?' (In this column write the word 'Yes' for each person over seven years of age who can read and write any language, and the word 'No' for those persons over 7 years of age who cannot read and write. For children under 7 years indicate only whether or not they go to school.)

*Egypt.* (1907) 'Able or not able both to read and write.'

(1917) (State whether the enumerated person is able to read fluently a printed paper in some one language. . . . State whether the enumerated person is able to write by himself or from dictation a short letter in some one language. . . . Each of the two questions . . . must be put to each person, whatever his age. Refrain from putting them to children under 5 years.)

*Finland.* (1910, 1920) 'More than primary education?' 'Able to read and write?' 'Able to read only?' 'Unable to read?'

(1930) 'More than primary education?' 'Others able to read and write?' 'Able to read only?' 'Unable to read?'

*France.* (1901) 'Can you read and write?'

(1911, 1921, 1931, 1936) 'Can you both read and write?'

(1946) 'Can you read?' ('Yes' or 'No'.) 'Can you write?' ('Yes' or 'No'.)

*Greece.* (1907) 'If you know how to read and write enter "literate"; if not, enter "illiterate".'

PROGRESS OF LITERACY

- (1920, 1928) 'Can you read and write?' ('Yes' or 'No'.)  
*Honduras.* (1945) 'Can you read?' 'Can you write?'  
*Hungary.* (1900) 'Are you able to read and write, or only to read, or can you neither write nor read?'  
(1910) 'Has completed 8, 6, 4 classes of secondary school or of an institution of the same level; has completed 4, 6 classes of primary school; can read and write, can only read, can neither read nor write.' (Reply to questions . . . by underlining the words in italics.)  
(1920) 'Has completed his studies at university, at an institute of applied sciences, or at another institution of higher education; has completed 8, 6, 4 classes of a secondary school; has completed 4, 6 classes of a primary school; can read and write, can only read, can neither read nor write.'  
*India.* (1901) (Enter against all persons, of whatever age, whether they can or cannot both read and write any language.)  
(1911, 1921, 1931) (Enter against all persons who can both read and write any language the word 'literate'. . . . Only those are to be considered literate who can write a letter to a friend and read the answer to it.)  
*Italy.* (1901, 1911) 'Can read' 'Cannot read'.  
(1921) 'Can you read?' ('Yes' or 'No'.)  
*Mexico.* (1930) 'Can you read and write?' 'Can you read only?'  
*Philippines.* (1939) (Able to read and write: Write 'Yes' for a person 10 years of age and over who can both read and write in any language or dialect, and 'No' for such a person who cannot both read and write in any language or dialect. Do not report a person as able to read and write simply because he can read and write his own name. For persons under 10 years of age, leave this column blank. For persons who can read but not write, obviously, the report . . . should be 'No'.)  
*Portugal.* (1940) 'Can you read?' (Answer, according to the case, 'Yes' or 'No'.)  
*Spain.* (1920) 'Can you read?' 'Write?' (Respond by 'Yes' or 'No'.)  
(1940) 'Can you read?' 'Can you write?'  
*Turkey.* (1927) 'Can the enumerated person read printed matter?'  
(1935) 'Able or unable to read in the new alphabet'. 'Able or unable to write in the new alphabet.'  
*Union of South Africa* (1904, Natal) (Write 'CR' for Cannot Read; 'R' for Read only; 'RW' for Read and Write.)  
(1918, European population only.) (Insert 'Read and Write' 'Read only' or 'Cannot Read', as the case may be.)  
(1921, Native population only.) (If able to read and write,



## MEASURING PROGRESS OF LITERACY

insert the figure 1. If able to *read only*, insert the figure 2. If *unable to read and write*, insert the figure 3.)

*United States.* (1900, 1910) (. . . whether the person enumerated was able to read and . . . whether he was able to write.)

(1920) (Write 'Yes' for a person 10 years of age and over who can read any language . . . and 'No' for such person who cannot read any language. Write 'Yes' for a person 10 years of age and over who can write any language . . . and 'No' for such person who cannot write any language.)

(1930) (Write 'Yes' for a person 10 years of age or over who can read and write in any language . . . and 'No' for such person who cannot both read and write in some language. Do not return any person as able to read and write simply because he can write his own name.)

*Yugoslavia.* (1921, 1931, 1948) (Ask the person whether he can read and write; read only; neither.)

### MINIMUM AGE LIMITS

In most countries nowadays the census question on literacy is applied only to persons above a stated minimum age, such as 5 years or 10 years, or some other stated age. Even where no age limit is stated in the census schedule or instructions, the results are often tabulated as from a certain minimum age. One method followed by certain countries, such as Ceylon and Egypt, is simply to exclude all persons under 5 years of age from the computation of literacy and illiteracy rates. There are, however, a number of countries which still publish literacy figures for the total population of all ages, though often accompanied by an analysis of data based on a stated minimum age level.

Table 1 shows, for the 26 countries included in the present study, the criteria of literacy and minimum age limits used in their tabulations on literacy for the various censuses taken since about 1900.

PROGRESS OF LITERACY

TABLE I. Criteria of literacy and minimum age limits derived from census tabulations on literacy in 26 countries: 1895-1948

Country	Census year	Criterion of literacy in census tabulations	Minimum age (in years) in literacy tabulations
Argentina	1895	...	6
	1914	Can read and write	7
	1947	Can read and write	14
Belgium	1900	Can read and write	0
	1910	Can read and write	0 and 5
	1920	Can read and write	0 and 5
	1930	Can read and write	0 and 7
Brazil	1900	Can read and write	0
	1920	Can read and write	0 and 7
	1940	Can read and write	5
Bulgaria	1900	Can read and write	0
	1905	Can read and write	0
	1910	Can read and write	0 and 10
	1920	Can read and write	0
	1926	Can read and write	0 and 10
	1934	Can read and write	0 and 10
Burma	1901	Can read and write	0
	1911	Can read and write	0
	1921	Can read and write	0
	1931	Can read and write	0 and 5
Canada	1901	...	5
	1911	Can read	5
	1921	Can read	5
	1931	Can read	5
Newfoundland	1901	Can read; can write	0
	1911	Can write	0
	1921	Can read	11
	1935	Can read	10
	1945	Can read and write	10
Ceylon	1901	Can read and write	0
	1911	Can read and write	0
	1921	Can read and write	0 and 5
	1946	Can read and write	5
Chile	1907	Can read	0
	1920	Can read	0
	1930	Can read	8
	1940	Can read	7

## MEASURING PROGRESS OF LITERACY

Country	Census year	Criterion of literacy in census tabulations	Minimum age (in years) in literacy tabulations
Colombia	1918	...	0
	1928	...	...
	1938	Can read	0 and 7
Cuba	1899	Can read or is attending school	0 and 10
	1907	Can read or is attending school	0 and 10
	1919	Can read or is attending school	0 and 10
	1931	Can read	0 and 10
	1943	Can read	0 and 10
Egypt	1907	Can read and write	0
	1917	Can read and write	5
	1927	Can read and write	5
	1937	Can read and write	5
Finland	1900	Can read; can write	0 and 15
	1910	Can read; can write	0 and 15
	1920	Can read; can write	0 and 15
	1930	Can read; can write	0 and 15
France	1901	Can read and write	0 and 5
	1911	Can read and write	0 and 5
	1921	Can read and write	0 and 5
	1926	Can read and write	0 and 5
	1931	Can read and write	0 and 5
	1936	Can read and write	0 and 5
Greece	1907	Can read and write	0
	1920	Can read and write	0 and 6
	1928	Can read and write	0 and 8
Honduras	1926	Can read	0
	1930	Can read; can write	0 and 7
	1935	Can read; can write	0 and 7
	1940	Can read; can write	0 and 7
	1945	Can read; can write	0 and 7
Hungary <sup>1</sup>	1900	Can read and write	0
	1910	Can read and write	0 and 6
	1920	Can read and write	0 and 6
	1930	Can read and write	0 and 6
	1941	Can read and write	0 and 6

<sup>1</sup> Persons were also counted as literate who had completed a certain level of schooling, given as four years of secondary school in the 1910 census, four years of secondary or primary school in the 1920 and 1930 censuses, and one year of elementary school in the 1941 census.

PROGRESS OF LITERACY

Country	Census year	Criterion of literacy in census tabulations	Minimum age (in years) in literacy tabulations
India	1901	Can read and write	0
	1911	Can read and write	0
	1921	Can read and write	0
	1931	Can read and write	0 and 5
Italy	1901	Can read	0
	1911	Can read	0 and 6
	1921	Can read	6
	1931	Can read	6
Mexico	1900	Can read	0 and 12
	1910	Can read	0 and 12
	1921	Can read	10
	1930	Can read	10
	1940	Can read	6
Philippines	1918	Can read	10
	1939	Can read and write	10
	1948	Can read and write	10
Portugal	1900	Can read	0
	1911	Can read	0
	1920	Can read	0 and 7
	1930	Can read	0 and 7
	1940	Can read	0 and 7
Spain	1900	Can read	0
	1910	Can read	0
	1920	Can read	0 and 6
	1940	Can read	0 and 6
Turkey	1927	Can read	0 and 7
	1935	Can read	0 and 7
	1945	Can read	0 and 7
Union of South Africa	1904	Can read	0 and 15
	1911	Can read	0 and 15
	1918	Can read	0 and 7
	1921	Can read	0
	1946	Can read and write	0 and 10
United States	1900	Can read and write	10
	1910	Can read and write	10
	1920	Can read and write	10
	1930	Can read and write	10
Yugoslavia	1921	Can read	12
	1931	Can read	11
	1948	Can read	10

MEASURING PROGRESS OF LITERACY

LITERACY, ILLITERACY AND SEMI-LITERACY

The census reports of many countries tabulate in various ways, the number and proportion of persons able both to read and to write, able to read only and unable either to read or to write. If, for the moment, these categories of persons are regarded as literate, semi-literate, and illiterate respectively, their relative proportions at given censuses are shown in Table 2 for 12 countries.

TABLE 2. *Percentage of literates, semi-literates and illiterates in the total population at specified age levels, in 12 countries: various census years*

Country	Census year	Age level years	Percentage of persons		
			Able to read and write	Able to read only	Not able to read or write
Bulgaria	1920	10 and over	53.3	0.3	46.4
	1926	10 and over	60.3	0.3	39.3
Canada	1901	5 and over	82.9	2.7	14.4
	1911	5 and over	89.0	0.5	10.5
	1921	10 and over	94.3	0.6	5.1
	1931	10 and over	95.7	0.5	3.8
Newfoundland	1935	10 and over	78.7	3.0	18.3
	1945	10 and over	86.8	1.2	12.0
Finland	1900	15 and over	38.8	59.7	1.5
	1910	15 and over	55.3	43.6	1.1
	1920	15 and over	69.9	29.1	1.0
	1930	15 and over	84.1	15.0	0.9
Honduras	1935	7 and over	30.2	2.6	67.2
Hungary	1900	6 and over	61.4	3.4	35.2
	1910	6 and over	68.7	2.6	28.8
	1920	6 and over	84.8	1.4	13.7
	1941	6 and over	92.6	0.3	7.1
India (selected States)					
Baroda	1941	5 and over	26.7	6.6	66.7
Cochin	1941	5 and over	41.0	2.0	57.0
Delhi	1941	5 and over	29.1	0.6	70.3
Jaipur	1941	5 and over	6.2	0.5	93.3
Jammu and Kashmir	1941	5 and over	7.0	1.0	92.0
Mysore	1941	5 and over	15.0	1.0	84.0
Mexico	1900	10 and over	22.3	3.6	74.2

PROGRESS OF LITERACY

Country	Census year	Age level years	Percentage of persons			
			Able to read and write	Able to read only	Not able to read or write	
	1910	10 and over	27.7	2.6	69.7	
	1930	10 and over	38.5	2.2	59.3	
	1940	10 and over	46.0	2.5	51.6	
Spain	1900	10 and over	41.3	2.5	56.2	
	1910	10 and over	47.8	1.7	50.5	
	1920	10 and over	56.0	0.8	43.1	
Turkey	1935	10 and over	20.4	0.4	79.2	
	1945	10 and over	30.5	0.3	69.3	
Union of South Africa (European or white population)	1904	10 and over	94.6	1.3	4.1	
	1911	10 and over	97.0	0.7	2.3	
	1918	10 and over	97.9	0.8	1.2	
	(Native population)	1904	all ages	5.1	1.1	93.7
		1911	all ages	6.8	1.2	92.0
		1921	all ages	9.7	1.5	88.8
		1946	all ages	21.2	1.8	77.0
United States	1920	10 and over	94.0	0.5	5.4	
Yugoslavia	1931	11 and over	54.8	0.6	44.6	

It is thus seen that, with the exception of Finland, the proportion of persons able to read but not write rarely exceeds three per cent of the population. Furthermore, as the population becomes more literate, this percentage of semi-literates generally tends to decrease. Hence the category of semi-literates may be considered to have only passing importance, and to apply to relatively few countries. For greater comparability, the criterion adopted in the present study is to consider all persons as illiterate who cannot both read and write.

However, this does not do away with the problem of comparability in the case of countries which adopt as the criterion of literacy the ability to read without reference to the ability to write. It would appear from Table 2 that the illiteracy rates reported by such countries may very well be understated to the extent of two or three per cent, and allowance may therefore be made on this basis. The special case of Finland is discussed further in the next chapter, on page 87.

MEASURING PROGRESS OF LITERACY

PERSONS UNSPECIFIED FOR LITERACY

Many census reports also show the number of persons unspecified for literacy. In computing a percentage of literacy or of illiteracy, it seems appropriate to exclude this number both from the total population and from the number of literates or illiterates, though the practice is not uniform among the countries. Where persons of unspecified literacy are included with either the literates or the illiterates, the resulting rates are affected only in so far as such persons are numerous in relation to the number of literates or illiterates. Where the number of cases of literacy unspecified is small in relation to the total population, or where the illiteracy rate is either very high or very low, their inclusion or exclusion in the total population would not appreciably change the resulting percentages. Where there are a large number of such cases, and the illiteracy rate is neither extremely high nor extremely low, the difference may amount to almost two per cent, as in the example of Portugal, among the countries shown in Table 3.

TABLE 3. *Computation of illiteracy rates for total population, 10 years old and over, including and excluding persons of literacy unspecified, in six selected countries: latest census years*

Country	Census year	No. of persons of literacy unspecified	Percentage of illiteracy computed on total population	
			Including literacy unspecified	Excluding literacy unspecified
Brazil	1940	86 886	56.7	56.8
Chile	1940	91 560	25.8	26.4
France	1946	1 378 623	3.3	3.4
Philippines	1948	316 429	37.8	38.7
Portugal	1940	211 681	48.7	50.4
Union of South Africa (Native population)	1946	118 996	70.9	72.4

As far as the computation of percentage rates is concerned, the same results are achieved, of course, if the cases of literacy unspecified are redistributed proportionately among the literates and illiterates. Indeed it may be assumed that this has been done by some countries which present no figures on persons unspeci-

PROGRESS OF LITERACY

fied for literacy, and give no explanation of this in the published reports.

PERSONS OF UNKNOWN AGE

Most of the census tabulations on literacy also show the number of persons of unknown age but who are specified as to literacy. The question whether such persons should or should not be included in the computation of illiteracy rates for the total population above a minimum age limit is usually of academic interest only. Table 4 which shows the percentages of illiteracy in the populations of five selected countries for various census years, uses two methods of computation, one including and one excluding persons of unknown age. It will be seen that the difference may amount to as much as 0.3 per cent between the two methods of computation.

TABLE 4. *Computation of illiteracy rates for total population at specified age levels, including and excluding persons of age unknown, in five selected countries: various census years*

Country	Census year	Age level, years	No. of persons of age unknown <sup>1</sup>	Percentage of illiteracy for population at specified age level	
				Including age unknown	Excluding age unknown
Argentina	1947	14 and over	64 946	13.6	13.3
Brazil	1940	15 and over	30 448	56.1	56.1
Egypt	1927	10 and over	38 072	85.9	85.8
India	1931	10 and over	757 768	90.9	90.9
Turkey	1935	10 and over	71 304	79.6	79.4

<sup>1</sup> Excluding persons of literacy unspecified.

For all practical purposes, therefore, it seems reasonable and justifiable to include persons of unknown age in computing illiteracy rates for the total population above the minimum age, provided the minimum age is not above, say 15 years.



## MEASURING PROGRESS OF LITERACY

### ILLITERACY RATES BY AGE-GROUPS

Apart from the questions of a minimum age limit and the treatment of the unknown age-groups, there is still wide variation in the methods of tabulating census data on literacy by age. At one extreme, countries such as Greece and Portugal have gone to great lengths in presenting figures on literacy and illiteracy for every single year of age from 0 to 100 and over. At the other extreme are countries such as Ceylon, which give no classification beyond the minimum age for literacy tabulations.

The United Nations Population Commission, at its fourth session, recommended that the data on literacy and illiteracy should be tabulated, for each sex, by the following age-groups: under 15 years (if the census questions on literacy covered any person under 15), 15 to 19, 20 to 24, 10-year groups from 25 to 64, 65 years and over. If the literacy questions covered the population over 10 years old (or a lower minimum age), the Commission further suggested that the age-group 10 to 14 years should be tabulated separately, in order to extend the amount of information available on an internationally comparable basis.<sup>1</sup>

The data available from the census reports of the countries included in the present study have been analysed by age-groups corresponding, as far as possible, to those recommended by the United Nations Population Commission. In most cases, however, the age-groups had to be adapted to the availability of comparable data for two or more census years.

### AGE ANALYSIS BY 'COHORTS'

Wherever possible, an attempt has also been made to analyse the literacy data from successive censuses of the same country by cohorts, that is, groups of persons born within specified periods of time. In some cases, due to irregularities in census periods and age classification used, the data are only approximated for certain cohorts. Furthermore, it has not been possible to make allowances for such factors as mortality rates and immigration or emigration, as the cohorts are followed from one census to the next. In general it may be claimed that any progress in literacy rates shown by the cohorts is due very largely to improved opportunities for education, including self improvement in the knowledge

<sup>1</sup> United Nations. Population Commission, Fourth Session, 1949. *Report* (UN Doc. E/1313). Lake Success, 1949, p. 29. Mimeo.

## PROGRESS OF LITERACY

of reading and writing. Thus the cumulative influence of education among the younger age-groups and the changing age structure of the population may to some extent be isolated for further study.

### DIFFERENTIAL RATES OF ILLITERACY

Besides tracing the progress of literacy in the total population, it will be instructive to compare the differential rates of illiteracy between males and females or urban and rural populations, or by ethnic and language groups, religions, and types of economic activity. Unfortunately, with the exception of the sex difference, such data are available for a few countries only.

### MEASUREMENT OF PROGRESS

Several alternative methods present themselves for the measurement of progress in a given country. The most obvious one is to count the number of literate persons from one census to the next and to note the increase in their number. Such a measure has the advantage of simplicity and tangibility, and is particularly susceptible of being used in an inspirational manner, especially in countries where the number of literates is relatively small and increasing rather rapidly. Note the following examples:

*Egypt.* Increase in number of literate persons (able to read and write), 5 years old and over, 1907-37:

	1907	1917	1927	1937
No. of literates (thousands)	609	863	1 671	2 570
Increase since pre- vious census (thousands)	.	254	808	899

*Portugal.* Increase in number of literate persons (able to read), 7 years old and over, 1900-40:

	1900	1911	1920	1930	1940
No. of literates (thousands)	1 156	1 476	1 743	2 193	3 110
Increase since pre- vious census (thousands)	.	320	267	450	917

MEASURING PROGRESS OF LITERACY

*Finland.* Increase in number of literate persons (able to read and write), 15 years old and over, 1900-30:

	1900	1910	1920	1930
No. of literates (thousands)	688	1 036	1 438	1 998
Increase since previous census (thousands)	.	348	402	560

In these three countries the number of literate persons increased considerably during each intercensal period. Was there satisfactory progress, then, in each case? Let us look at the other side of the picture, noting the changes in the number of illiterate persons.

*Egypt.* Increase or decrease in the number of illiterate persons (unable to read and write), 5 years old and over, 1907-37:

	1907	1917	1927	1937
No. of illiterates (thousands)	8 804	9 951	10 454	11 242
Increase or decrease since previous census (thousands)	.	+ 1 147	+ 503	+ 788

*Portugal.* Increase or decrease in number of illiterate persons (unable to read), 7 years old and over, 1911-40:

	1900	1911	1920	1930	1940
No. of illiterates (thousands)	3 384	3 489	3 416	3 549	3 228
Increase or decrease since previous census (thousands)	.	+ 105	- 73	+ 133	- 321

*Finland.* Increase or decrease in number of illiterate persons (unable to read and write), 15 years old and over, 1900-30:

	1900	1910	1920	1930
No. of illiterates (thousands)	1 087	898	619	377
Increase or decrease since previous census (thousands)	.	- 249	- 219	- 242

The fact is that, owing to the growth of the total population in each country, an increase in the number of literate persons from one census to the next may or may not be accompanied by a corresponding decrease in the number of illiterate persons. Sometimes, indeed, as in the case of Egypt between the census years 1907 and

PROGRESS OF LITERACY

1917, the number of illiterates may actually increase several times more than the increase in the number of literates.

To measure progress of literacy by the decrease in number of illiterates would have the same disadvantage, but in the opposite direction. For a steady decrease in the number of illiterates may be accompanied by a varying increase in the number of literates, depending on the growth of the total population.

Graph I (see end of book) shows the increase or decrease in number of literates and illiterates in Egypt, Portugal and Finland during their respective periods of time. It will be seen that, while the number of literates steadily increased in each country, the number of illiterates in Egypt also steadily increased; in Portugal it remained more or less constant; but in Finland it showed steady decrease.

In order to take into consideration the changing size of the total population, it would seem preferable to measure progress either by the increase in the percentage of literacy or by the decrease in the percentage of illiteracy. For technical reasons which will be explained later, let us take the reduction in percentage of illiteracy as a measure of progress. Consider again the examples of the same three countries.

*Egypt.* Changes in number and percentage of illiterates, 5 years old and over, 1907-37:

	1907	1917	1927	1937
No. of illiterates (thousands)	8 804	9 951	10 454	11 242
Percentage of illiterates	93.5	92.0	86.2	81.4
Decrease in percentage of illiteracy since previous census	.	1.5	5.8	4.8

*Portugal.* Changes in number and percentage of illiterates, 7 years old and over, 1900-40:

	1900	1911	1920	1930	1940
No. of illiterates (thousands)	3 384	3 489	3 416	3 549	3 228
Percentage of illiterates	74.5	70.3	66.2	61.8	50.9
Decrease in percentage of illiteracy since previous census	.	4.2	4.1	4.4	10.9

*Finland.* Changes in number and percentage of illiterates, 15 years old and over, 1900-30:

	1900	1910	1920	1930
No. of illiterates (thousands)	1 087	838	619	377
Percentage of illiterates	61.2	44.7	30.1	15.9
Decrease in percentage of illiteracy since previous census	.	16.5	14.6	14.2

This measure is obviously more appropriate, since it is based not only on the changing number of literate or illiterate persons, but also on the changing size of the total population. Even where the number of illiterates was increasing, as in the case of Egypt, or where the number of illiterates remained almost constant, as in Portugal, the reduction in percentage of illiteracy shows that real progress was being made in those countries as well as in Finland, where the number of illiterates was rapidly decreasing.

Another question now arises: Granted that varying amounts of progress were made in each of these countries during the given periods, what was the rate of progress in each case? For instance, in Portugal there was a reduction of 4.2 per cent in illiteracy between 1900 and 1911, of 4.1 per cent between 1911 and 1920, and of 4.4 per cent between 1920 and 1930. Was the rate of progress increasing, decreasing, or remaining constant during those periods?

Note that the reduction of 4.2 per cent was made on the initial amount of 74.5 per cent illiteracy. Hence the relative rate of progress<sup>1</sup> in this case was 5.6 per cent. The relative rates of progress for the next two periods were 5.8 per cent and 6.6 per cent respectively. Thus it may be claimed that Portugal was making relatively faster progress in each successive period between 1900 and 1930. Of course, it is obvious that the rate of progress between 1930 and 1940 was still more accelerated.

Similarly, for Egypt the relative rates of progress were 1.6, 5.6, and 6.3 per cent respectively for the periods between 1907 and 1937, showing a steady acceleration in the rate of progress during the period of 30 years.

Suppose we wish to compare the relative rates of progress between Egypt, 1907-37, and Portugal, 1900-40. Since the lengths of the periods to be considered are not the same for both countries, it is necessary to introduce another measure, the *average decennial rate of progress*.<sup>2</sup> As shown in Table 5, the average

<sup>1</sup> Relative rate of progress =  $\frac{\text{Reduction in percentage of illiteracy}}{\text{Initial percentage of illiteracy}} \times 100.$

<sup>2</sup> Average decennial rate of progress = relative rate of progress averaged geometrically for a uniform time period of 10 years. The formula used is:

$$\frac{P_2}{P_1} = (1 - r)^t$$

$$\text{or } \log P_2 - \log P_1 = t \log (1 - r)$$

where  $P_1$  = initial percentage of illiteracy

$P_2$  = final percentage of illiteracy

$t$  = time period in decades

$r$  = average decennial rate of progress.

In all the tables in the following chapters, the average decennial rate of progress is expressed as a percentage rate (i.e.,  $r \times 100$ ) and generally rounded to the nearest full percentage unit.

## PROGRESS OF LITERACY

decennial rate of progress for Egypt, 1907-37, was about five per cent, and for Portugal, 1900-40, it was about nine per cent.

A possible objection might be raised against the use of the measures just described. It can be shown that a relative rate of progress based on the reduction in percentage of illiteracy accentuates the rate of progress where the initial percentage of illiteracy is low. On the other hand, a relative rate of progress based on the increase in percentage of literacy would have the opposite effect, that is, it would accentuate the rate of progress in those cases where the initial level of literacy is low. The answer to this objection is found in the fact that, in either case, we are dealing with percentages, which can only range from 0 to 100. Both theoretically and practically, it is not possible to maintain indefinitely any relative rate of progress based on increase in percentage of literacy, for eventually the maximum limit of 100 per cent would be reached where no further progress is possible. On the other hand, any given rate of progress based on the reduction in percentage of illiteracy can be maintained indefinitely, for the limit of zero per cent is approached but never actually reached. This agrees with the practical situation in regard to illiteracy, where there will always be an irreducible minimum percentage of illiterates in any given country or population group. Therefore, we have chosen to measure progress of literacy in terms of reduction in percentage of illiteracy.

Graph II (see end of book) shows the reduction in percentage of illiteracy in Egypt, Portugal and Finland. The percentages are plotted on a logarithmic scale, so that the slope of each line indicates the relative rate of progress. Where two lines are nearly parallel, as between Egypt, 1917-27, and Portugal, 1900-20, their relative rates of progress were about the same.

## COMPARISON BETWEEN COUNTRIES

Applying the foregoing method to the three countries used as examples, let us now compare the rates of progress in the reduction of illiteracy in each of these countries.

Table 5 shows the various elements of measurement as applied to Egypt, Portugal and Finland in order to assess the amount and rate of progress in each country during the specified periods of time. It is seen at once that the criterion of literacy is not the same for each country; thus a direct comparison between them of the number and percentage of literates and illiterates is not valid. Nor is it valid to compare directly the increase or decrease

MEASURING PROGRESS OF LITERACY

in the number of literates and illiterates, since the age levels of the population considered for literacy are not the same and the size of the total population is different in each country.

Element 8, percentage of illiteracy, takes into account the variations due to size of total population, but is still not comparable between countries because of the difference in criterion of literacy (element 1), in age level considered (element 2), and in the length of the time period covered (elements 3 and 4).

Element 9 is more comparable, but does not take into account the difference in the initial level of literacy shown by element 8 (a), nor the difference in the time period covered.

Finally, element 10 provides a suitable measure for comparison because, allowing for all the variations in the other elements, it refers to the rate of progress within each country, related to the initial level of literacy in each case, and reduced to a common time period. Thus we see that Finland, during its period of years, showed relatively more rapid progress, on the average, than either of the other two countries during their respective periods of time.

TABLE 5. *Elements of measurement applied to assess the progress of literacy in Egypt, Mexico and Portugal since about 1900*

Element of measurement	Egypt	Portugal	Finland
1. Criterion of literacy	Can read and write	Can read	Can read and write
2. Age level of population	5 years and over	7 years and over	15 years and over
3. Time period covered	1907-37	1900-40	1900-30
4. Length of period	30 years	40 years	30 years
5. Total population (thousands) at specified age level			
(a) beginning of period	9 414	4 540	1 776
(b) end of period	13 812	6 338	2 375
6. No. of literates (thousands)			
(a) beginning of period	609	1 156	688
(b) end of period	2 570	3 110	1 998
7. No. of illiterates (thousands)			
(a) beginning of period	8 804	3 384	1 087
(b) end of period	11 242	3 228	377

PROGRESS OF LITERACY

Element of measurement	Egypt	Portugal	Finland
8. Percentage of illiteracy			
(a) beginning of period	93.5	74.5	61.2
(b) end of period	81.4	50.9	15.9
9. Reduction in percentage of illiteracy during period	12.1	23.6	45.3
10. Average decennial rate of progress	5%	9%	36%

FACTORS RELATED TO PROGRESS OF LITERACY

The limitations of the present study have precluded consideration of other factors related to the progress of literacy in different countries. For example, the introduction and enforcement of compulsory education laws, the provision and extension of opportunities for free public instruction, the special literacy campaigns conducted in many countries, are essential factors in the reduction of illiteracy, but are beyond the scope of this study. Data on school attendance are not available in sufficient amount to be used for a collateral study. For those countries which present census data on the educational level of the population, either in place of or in addition to literacy data, it would certainly be profitable to analyse such data if and when they become more generally available on a comparable basis. For the present, however, this study will be confined to data on literacy and illiteracy available from census publications of the given countries. Those data will be analysed, for 26 countries, in the following chapter, with the countries presented in alphabetical order.



# CHAPTER I I

## PROGRESS IN VARIOUS COUNTRIES

### ARGENTINA: 1895-1947

#### ILLITERACY IN THE TOTAL POPULATION

The census of 1895 found 1,766,184 persons 6 years old and over who were not able to read and write. This was 54.4 per cent of the total population at that age level. Similarly, the results of the 1914 census gave 2,386,012 illiterates 7 years old and over, being 37.9 per cent of the total population at that age level. At the census of 1947, the tabulation of literacy data was limited to the population 14 years old and over. The results from the last census, together with comparative data from the two earlier censuses, are shown in Table 6.

TABLE 6. *Number and percentage of illiterates in the population of Argentina, 14 years old and over: 1895-1947*

Census year	Population 14 years old and over		
	Total no. of persons	Persons not able to read and write	Per cent illiterate
1895	2 451 761	1 305 738	53.3
1914	5 026 914	1 765 900	35.1
1947	11 318 896	1 541 678	13.6

The amount of illiteracy is thus shown to have been reduced by almost 40 per cent between 1895 and 1947. In relation to the initial percentage of illiteracy in 1895, the average rate of progress has been about 23 per cent per decade.<sup>1</sup>

<sup>1</sup> For discussion on the method of computing an average decennial rate of progress, see page 29.

PROGRESS OF LITERACY

ILLITERACY BY SEX AND AGE

Literacy data by sex and age are not available for the earlier census years. The 1947 census shows illiteracy to be three per cent higher among the female than among the male population 14 years old and over. In the age group 14-29, however, there is no difference between the two sexes. The female illiteracy rate is higher by 3.4 per cent in the age group 30-49, and 9.6 per cent in the age group 50 and over.

TABLE 7. *Percentage of illiteracy in the population of Argentina, 14 years old and over, by sex and age: 1947*

Age	Percentage of illiteracy		
	Both sexes	Male	Female
<i>14 years and over</i>	<i>13.6</i>	<i>12.1</i>	<i>15.2</i>
14-29	8.3	8.3	8.3
30-49	12.4	10.8	14.2
50 and over	25.1	20.6	30.2
unknown	64.7	57.4	69.9

ILLITERACY BY NATIONALITY

The only data available on illiteracy by nationality are from the 1914 census and refer to the population 7 years old and over. At that census, the illiteracy rate for all foreigners was 34.9 per cent, compared with 39.6 per cent for Argentines. Among the larger groups in the foreign population, nationals of the Ottoman Empire had the highest rate of illiteracy (70.8 per cent), while the British had the lowest (7.9 per cent). No conclusions, however, should be drawn from these figures on the level of literacy in the home countries of these immigrants.

TABLE 8. *Percentage of illiteracy in the population of Argentina, 7 years old and over, by nationality and sex: 1914*

Nationality	Population 7 years old and over			
	Total No. of persons	Percentage of illiteracy		
		Both sexes	Male	Female
<i>All nationalities</i>	<i>6 301 961</i>	<i>37.9</i>	<i>34.8</i>	<i>41.5</i>
Argentinian	4 004 313	39.6	38.9	40.2
<i>All foreign groups</i>	<i>2 297 648</i>	<i>34.9</i>	<i>29.3</i>	<i>44.4</i>

BELGIUM: 1900-30

Nationality	Population 7 years old and over			
	Total No. of persons	Percentage of illiteracy		
		Both sexes	Male	Female
Italian	914 789	38.1	32.7	47.6
Spanish	804 861	30.2	21.3	44.7
Russian	89 060	40.4	32.4	51.8
Uruguayan	83 435	23.6	24.3	22.8
French	78 644	16.1	13.9	18.9
Ottoman	62 181	70.8	68.5	81.0
Austro-Hungarian	37 265	30.4	25.2	40.3
British	26 980	7.9	7.4	9.2
German	26 406	8.9	6.1	14.1
Swiss	14 104	10.3	7.5	14.9
Other	159 923	50.3	46.9	56.5

ILLITERACY AMONG SCHOOL-AGE CHILDREN

Additional data are available from the 1914 census concerning illiteracy among the school-age population, that is, children 6-13 years old. At that census, there were enumerated 1,485,785 children of school age, of whom 695,283, or 46.8 per cent, were returned as able to read and write; 69,821, or 4.7 per cent, as able to read only; and 720,681, or 48.5 per cent, as able neither to read nor to write. The adding together of the last two groups gives 53.2 per cent illiteracy among the school-age population at that census.

In this connexion it may be noted that the proportion of school-age children found to be attending school at the time of the census in 1895 was only 31.1 per cent. This percentage had increased to 48.0 at the 1914 census, and at the educational census of 1943 was found to be 75.3. The great increase in the school attendance of school-age children is bound to result in the substantial progress of literacy in the general population when these children pass beyond the school-going ages.

BELGIUM: 1900-30

ILLITERACY IN THE TOTAL POPULATION

In the total population of Belgium of 7 years old and over, there were 1,123,594, or 20.0 per cent illiterates at the beginning of the

PROGRESS OF LITERACY

century. By 1930, the number of illiterates had been reduced to 402,155 and the percentage of illiteracy to 5.6, which is nearly 15 per cent less than in 1900. This represents an average decennial rate of progress of 35 per cent. The number and percentage of illiterates in the population 7 years old and over, at each of the census years 1900-30, are given in Table 9.

TABLE 9. *Number and percentage of illiterates in the population of Belgium, 7 years old and over: 1900-30*

Census year	Population 7 years old and over		
	Total No. of persons	Persons not able to read and write	Per cent illiterate
1900	<sup>1</sup> 5 627 202	1 123 594	20.0
1910	6 361 979	878 936	13.8
1920	6 645 855	553 071	8.3
1930	7 150 494	402 155	5.6

<sup>1</sup> Excluding persons of literacy unspecified.

Considering the total population of 15 years old and over, the percentage of illiteracy was reduced from 19.6 in 1900 to 5.9 in 1930, showing a relative rate of progress of 33 per cent per decade. Table 10 gives the number and percentage of illiterates in the population of 15 years old and over, for each of the census years 1900-30.

TABLE 10. *Number and percentage of illiterates in the population of Belgium, 15 years old and over: 1900-30*

Census year	Population 15 years old and over		
	Total No. of persons	Persons not able to read and write	Per cent illiterate
1900	<sup>1</sup> 4 571 042	894 723	19.6
1910	5 156 755	693 067	13.4
1920	5 549 737	435 318	7.8
1930	6 232 821	369 404	5.9

<sup>1</sup> Excluding persons of literacy unspecified.

The percentage of illiteracy among the female population is slightly higher than among the male. Since the percentage difference between the sexes was larger in 1900 than in 1930, the relative rate of progress over the whole period shows up slightly better for the female population, as is shown in Table 11.

TABLE 11. *Reduction of illiteracy in the population of Belgium, 7 years old and over and 15 years old and over, by sex: 1900-30*

Age and sex	Percentage of illiteracy				Reduction of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
<i>7 years old and over</i>						
Both sexes	20.0	13.8	8.3	5.6	14.4	35
Male	18.1	12.6	7.6	5.2	12.9	34
Female	21.8	15.0	9.0	6.0	15.8	35
<i>15 years old and over</i>						
Both sexes	19.6	13.4	7.8	5.9	13.7	33
Male	17.1	11.7	6.7	5.5	11.6	31
Female	22.0	15.1	8.9	6.4	15.6	34

ILLITERACY BY SIZE OF LOCALITY

Figures on literacy were reported separately for communes of 5,000 or more inhabitants and of less than 5,000 inhabitants. On this basis, it is interesting to observe that, during the period 1900-30, not only was there less illiteracy in the smaller localities, but the relative rate of progress also was more for these smaller localities than for the larger ones. The percentages of illiteracy in these two classes of communes, and their relative rates of progress during the period under consideration, are shown in Table 12.

TABLE 12. *Reduction of illiteracy in the population of Belgium, 15 years old and over, by size of locality and by sex: 1900-30*

Size of locality and sex	Percentage of illiteracy				Reduction of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
<i>Communes with 5,000 or more inhabitants</i>						
Both sexes	20.5	14.3	8.8	6.5	14.0	32
Male	17.9	12.4	7.4	5.8	12.1	31
Female	22.8	16.1	10.1	7.0	15.8	33
<i>Communes with less than 5,000 inhabitants</i>						
Both sexes	18.6	12.2	6.4	5.1	13.5	35
Male	16.2	10.8	5.8	4.8	11.4	33
Female	21.0	13.7	7.0	5.3	15.7	37

PROGRESS OF LITERACY

The 1930 census report gives more detailed figures on literacy by the following sizes of communes: under 2,000 inhabitants; 2,000—under 5,000; 5,000—under 20,000; 20,000—under 50,000; 50,000—under 100,000; 100,000 inhabitants and over. It appears from Table 13 that the highest percentage of illiteracy was reported for communes with 5,000—under 20,000 inhabitants, and the lowest percentages of illiteracy obtained in both the smallest and the largest class of communes.

TABLE 13. *Percentage of illiteracy in the population of Belgium, 15 years old and over, by size of locality and by sex: 1930*

Size of locality	Percentage of illiteracy		
	Both sexes	Male	Female
<i>All classes</i>	5.9	5.5	6.4
Under 2,000 inhabitants	4.0	3.9	4.3
2,000 to under 5,000	6.0	5.8	6.3
5,000 to under 20,000	7.3	6.8	7.8
20,000 to under 50,000	6.7	6.1	7.3
50,000 to under 100,000	5.4	4.2	6.4
100,000 and over	4.9	4.1	5.5

ILLITERACY IN DIFFERENT AGE GROUPS

Without regard to size of locality, the percentage of illiteracy has been consistently lowest among persons 15-20 years old, both male and female. The school-age population of 7-14 years old started with a relatively higher rate of illiteracy at the earlier censuses, but, with remarkably rapid progress (at the rate of about 45 per cent per decade), was, in 1930, next to the lowest group in percentage of illiteracy. Even the adult and old-age groups, however, have shown consistent progress in the reduction of illiteracy over the entire period.

TABLE 14. *Reduction of illiteracy in the population of Belgium, 7 years old and over, by sex and broad age groups: 1900-30*

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
<b>Male:</b>						%
7 years and over	18.1	12.6	7.6	5.2	12.9	34
7-14	22.5	16.3	12.0	3.7	18.8	45
15-20	10.3	6.7	3.9	1.4	8.9	49

BELGIUM: 1900-30

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
21-59	14.9	9.8	5.6	4.6	10.3	32
60 and over	37.5	28.9	16.9	13.3	24.2	29
Female:						
7 years and over	21.8	15.0	9.0	6.0	15.8	35
7-14	20.8	14.5	9.5	3.4	17.4	45
15-20	8.6	5.2	2.7	0.9	7.7	53
21-59	19.3	12.2	6.8	4.5	14.8	38
60 and over	49.7	39.6	25.7	18.7	31.0	28

ILLITERACY AMONG SELECTED COHORTS

The census reports of 1900-20 gave detailed tabulations on literacy by year of birth, which enable the percentages of illiteracy for selected cohorts to be calculated. Table 15 shows the progress of literacy among four selected cohorts. The relative rate of

TABLE 15. *Reduction of illiteracy in the population of Belgium by specified cohorts: 1900-20*

Cohort	Percentage of illiteracy			Reduction of illiteracy		Decennial rate of progress	
	1900	1910	1920	1900-10	1910-20	1900-10	1910-20
I. Persons born 1856-65:						%	%
Im. Male	14.8	13.5	.	1.3	.	9	.
If. Female	20.0	18.8	.	1.2	.	6	.
II. Persons born 1866-75:							
IIIm. Male	11.4	9.7	7.6	1.7	2.1	15	22
IIIf. Female	13.4	11.9	9.9	1.5	2.0	11	17
III. Persons born 1876-85:							
IIIIm. Male	10.2	7.4	5.4	2.8	2.0	27	27
IIIIf. Female	9.0	7.8	6.3	1.2	1.5	13	19
IV. Persons born 1886-95:							
IVIm. Male	.	6.5	3.9	.	2.6	.	40
IVIf. Female	.	5.5	4.2	.	1.3	.	24

## PROGRESS OF LITERACY

progress was greatest among cohort IV, i.e., persons who were 15-24 years old in 1910; it was progressively lower among each older group of persons and was lowest among cohort I, the group aged 35-44 in 1900. Within each cohort, the male persons showed relatively more progress than the female.

## CONSISTENCY AND RELIABILITY OF DATA

The definition of literacy used in the census of Belgium has been, throughout the period under consideration, ability both to read and to write. The instructions to enumerators clearly stated that those who could *read only*, or even those who could *write only*, were to be entered as illiterate. Furthermore, persons were not to be considered literate, whose knowledge of reading was limited to the spelling of words, or whose knowledge of writing consisted only of the ability to reproduce a signature or a few words copied mechanically.

As for blind persons who could write and who could also, by the sense of touch, understand the idea expressed by words reproduced by typographical characters specially prepared for their use, such persons were to be considered as able both to read and to write.

The territory of Belgium at the 1930 census included the areas of Eupen-Malmedy, ceded by Germany in 1920. The amount of illiteracy in 1920 in the population of these areas, all ages included, was 12.4 per cent (male, 13.1 per cent; female, 11.6 per cent). These percentages were somewhat lower than corresponding percentages in the population of the rest of Belgium (total, 16.9; male, 16.5; female, 17.2). However, the total population of Eupen-Malmedy in 1920 was only 60,213, being less than one per cent of the total population of Belgium; the inclusion of this population in the census of 1930 could not have affected the validity of comparisons between the 1920 and 1930 censuses so far as percentages of illiteracy are concerned.

## BRAZIL: 1900-40

### ILLITERACY IN THE TOTAL POPULATION

At the census of 1940, there were more than 13 million persons in Brazil, 15 years old and over, who were counted as illiterate, that



is, not able to read and write. This was more than twice the number of illiterates, at the same age level, reported in 1900, even though the percentage of illiteracy had been reduced from 65.3 in 1900 to 56.1 in 1940.

TABLE 16. *Number and percentage of illiterates in the population of Brazil, 15 years old and over: 1900-40*

Censu year <sup>a</sup>	Population 15 years old and over		
	Total No. of persons	Persons not able to read and write	Per cent illiterate
1900	9 752 111	6 371 660	65.3
1920	17 557 282	11 401 715	64.9
1940	<sup>1</sup> 23 649 371	13 269 381	56.1

<sup>1</sup> Excluding 60,398 persons whose literacy was not stated.

Published figures on illiteracy from the 1900 census are not distributed by sex, but the available data for 1920 and 1940 show a substantially larger amount of illiteracy among the female than among the male population. Progress in the reduction of illiteracy between 1920 and 1940 was, however, as rapid among the female population as among the male. For the population 15 years old and over, the reduction of illiteracy by sex is as given in Table 17.

TABLE 17. *Reduction of illiteracy in the population of Brazil, 15 years old and over, by sex: 1920-40*

Sex	Percentage of illiteracy		Reduction of illiteracy 1920-1940	Average decennial rate of progress
	1920	1940		
Both sexes	64.9	56.1	8.8	% 7
Male	57.1	49.7	7.4	7
Female	72.8	62.4	10.4	7

ILLITERACY BY NATIONALITY OR COLOUR

The 1920 report showed illiteracy to be 66.7 per cent among the native Brazilian population of 15 years old and over, as compared with 46.0 per cent among the foreign population.

PROGRESS OF LITERACY

In 1940, the population was reported on literacy not by nationality but by colour, classified as white, black, brown and yellow. The percentage of illiteracy was lowest in the yellow group (34.4), followed by the white group (47.3), then the brown group (70.8), and finally the black group, which had the highest percentage (79.1). It must be noted, however, that the yellow group constituted less than 1 per cent of the total population of Brazil in 1940.

TABLE 18. *Percentage of illiteracy in the population of Brazil at specified age levels by nationality and sex (1920); and by colour and sex (1940)*

Census year and age level	Nationality or colour	Percentage of illiteracy		
		Both sexes	Male	Female
1920: 15 years and over	Brazilian	66.7	59.5	73.7
	Foreign <sup>1</sup>	46.0	35.9	60.8
	White	47.3	42.1	52.6
1940: 10 years and over <sup>2</sup>	Black	79.1	75.1	83.0
	Brown <sup>3</sup>	70.8	66.3	75.2
	Yellow	34.4	26.0	44.4

<sup>1</sup> Including nationality unknown.

<sup>2</sup> Including population of literacy unstated.

<sup>3</sup> Including colour not stated.

ILLITERACY IN DIFFERENT AGE-GROUPS

It is a disturbing fact that the amount of illiteracy among the children of school age in Brazil (7-14 years) is higher than in the post-school-age population (15 years and over); though the relative rate of progress in the reduction of illiteracy among the children

TABLE 19. *Reduction of illiteracy among children of school age (7-14 years) in Brazil: 1920-40*

Sex	Percentage of illiteracy		Reduction of illiteracy 1920-1940	Average decennial rate of progress
	1920	1940		
Both sexes	80.3	67.5	12.8	% 8
Male	79.8	67.9	11.9	8
Female	80.7	67.0	13.7	9

of school age is somewhat better than among the post-school-age population, as is seen by comparing Table 19 with Table 17.

It is noteworthy that, in each of the chief population groups by colour, the lowest percentage of illiteracy is found among males 30-39 years of age and among females 10-19 years of age. The only exception is in the case of the small yellow population group, where the lowest percentage among males is found in the 20-29 age group. It will also be observed that the percentage of illiteracy in the 10-19 age group is about the same between the two sexes (except among the yellow group).

Table 20 gives the percentages of illiteracy in 1940 for the total population of Brazil and for each of the colour groups, 10 years old and over, by specified age groups and by sex.

TABLE 20. *Percentage of illiteracy in the population of Brazil, 10 years old and over, by sex, age, and colour: 1940*

Sex and age group	Percentage of illiteracy				
	Total	White	Black	Brown <sup>1</sup>	Yellow
<b>Male:</b>					
<i>10 years and over</i> <sup>2</sup>	51.5	42.1	75.1	66.3	26.0
10-19	57.3	48.0	78.7	72.2	24.0
20-29	48.2	38.8	71.5	62.3	19.6
30-39	45.8	36.4	70.7	60.7	23.1
40-49	49.0	39.4	73.6	63.5	31.0
50-59	50.7	41.4	76.0	64.8	38.7
60 and over	56.7	46.6	83.5	70.9	55.2
unknown	38.2	35.6	62.0	57.8	36.2
<b>Female:</b>					
<i>10 years and over</i> <sup>2</sup>	61.7	52.6	83.0	75.2	44.4
10-19	57.4	48.5	78.0	71.5	28.5
20-29	58.7	49.3	80.7	72.5	41.2
30-39	63.0	53.6	85.1	76.9	55.6
40-49	68.0	59.0	88.5	80.9	59.3
50-59	69.7	61.3	89.8	82.3	65.9
60 and over	74.0	65.0	93.7	86.8	76.7
unknown	50.2	46.1	76.8	67.6	30.6

<sup>1</sup> Including colour not stated.

<sup>2</sup> Including persons of literacy unspecified.

#### ILLITERACY AND SCHOOL ATTENDANCE

Besides the question on ability to read and write, the Brazilian census of 1940 also asked whether the person enumerated was

PROGRESS OF LITERACY

attending school. The data thus obtained on school attendance may be examined with the data on literacy, and thus shed further light on each of these educational characteristics of the population.

The percentage of illiterates among the population 5-29 years of age, classified by school attendance, is given in Table 21, where it is seen that, in every age group among the children and youth of each sex, the proportion of illiterates attending school was very small indeed compared with the proportion of those who were neither literate nor attending school.

TABLE 21. *Percentage of illiteracy in the population of Brazil, 5-29 years old, by school attendance: 1940*

Sex and age group	Percentage of illiteracy in population 5-29 years old		
	Total	Attending school	Not attending school
<b>Male:</b>			
5-9	86.5	7.1	79.5
10-14	60.7	5.0	55.8
15-19	53.8	0.9	52.9
20-24	49.3	0.3	48.9
25-29	47.5	0.1	47.4
<b>Female:</b>			
5-9	85.9	6.6	79.3
10-14	59.7	4.2	55.6
15-19	55.5	0.7	54.8
20-24	57.9	0.2	57.8
25-29	60.1	0.1	60.0

CONSISTENCY AND RELIABILITY OF DATA

The census data on literacy in 1940 were obtained from a single question in the schedule on ability to read and write: 'Question 21: Can you read and write? Answer "yes" if the person enumerated can read and write and "no" if illiterate.'

It seems that the census results for 1900 and 1920 were obtained in a similar manner, judging by the tabulations given. However, the 1900 results were given only for two age groups: under 15, and 15 years and over. The data for 1920 were tabulated for the age groups: under 7, 7-14, 15 and over. The data by age from the 1940 census are sufficiently detailed to be combined in different groups for comparative purposes.

The data for 1900 used in this study were taken from a retros-

pective table published in 1925. In this table figures for the Federal District from a census in 1906 had been substituted for those from the 1900 census, as the results of the 1900 census had not been officially accepted.

## BULGARIA: 1900-34

## ILLITERACY IN THE TOTAL POPULATION

The number of illiterate persons in Bulgaria, 10 years old and over, was a little under one and a half million in 1934, the latest year for which census data on literacy are available. This represents 31.4 per cent illiteracy among the total population at that age level.

The percentage of illiteracy had been 70.4 in 1900; thus there was a reduction of 39 per cent in 34 years. In relative terms, this means an average rate of progress of 21 per cent per decade.

TABLE 22. *Number and percentage of illiterates in the population of Bulgaria, 10 years old and over: 1900-34*

Census year	Population 10 years old and over		
	Total No. of persons	No. of illiterates	Per cent illiterate
1900	2 707 108	1 906 874	70.4
1905	2 917 439	1 910 371	65.5
1910	<sup>1</sup> 3 118 131	1 803 283	57.8
1920	<sup>1</sup> 3 726 522	1 738 743	46.7
1926	<sup>1</sup> 4 128 757	1 637 292	39.7
1934	<sup>1</sup> 4 642 141	1 457 365	31.4

<sup>1</sup> Excluding persons of literacy unspecified, numbering 17,120 in 1910; 5,961 in 1920; 31 in 1926; 1,553 in 1934.

Considering only the population 15 years old and over, the percentage of illiteracy is between three and four per cent higher, being 73.6 in 1900 and 35.1 in 1934. The relative rate of progress in this case is approximately 20 per cent per decade.

PROGRESS OF LITERACY

TABLE 23. *Number and percentage of illiterates in the population of Bulgaria, 15 years old and over: 1900-34*

Census year	Population 15 years old and over		
	Total No. of persons	No. of illiterates	Per cent illiterate
1900	2 239 458	1 648 881	73.6
1905	2 446 704	1 678 161	68.6
1910	<sup>1</sup> 2 598 658	1 616 825	62.2
1920	<sup>1</sup> 3 085 961	1 550 726	50.3
1926	<sup>1</sup> 3 564 256	1 528 069	42.9
1934	<sup>1</sup> 3 917 444	1 377 246	35.1

<sup>1</sup> Excluding persons of literacy unspecified, numbering 14,642 in 1910; 4,905 in 1920; 30 in 1926; 1,553 in 1934.

ILLITERACY AMONG THE MALE AND FEMALE POPULATIONS

Illiteracy among the female population has been consistently higher than among the male. Whereas the percentage of illiteracy among the male population 10 years old and over decreased from 54.6 in 1900 to 19.5 in 1934, it was reduced among the female population from 87.0 in 1900 to 43.3 in 1934. However, in relative terms, the average rate of progress during this period was higher for the male population, being 26 per cent per decade compared with a rate of 19 per cent per decade for the female.

Considering the population 15 years old and over, the per-

TABLE 24. *Reduction of illiteracy in the population of Bulgaria 10 years old and over, and 15 years old and over, by sex: 1900-34*

Census year	Percentage of illiteracy					
	10 years and over			15 years and over		
	Both sexes	Male	Female	Both sexes	Male	Female
1900	70.4	54.6	87.0	73.6	58.0	90.0
1905	65.5	48.8	83.0	68.6	51.6	86.5
1910	57.8	40.8	75.6	62.2	44.0	81.1
1920	46.7	31.8	61.3	50.3	33.4	66.6
1926	39.7	25.3	53.9	42.9	26.8	58.6
1934	31.4	19.5	43.3	35.1	21.2	49.0
Reduction of illiteracy 1900-34	39.0	35.1	43.7	38.5	36.8	41.0
Average decennial rate of progress	21%	26%	19%	20%	26%	16%

tage of illiteracy among the male population decreased from 58.0 in 1900 to 21.2 in 1934, showing a relative rate of progress of 26 per cent per decade. For the female population, the corresponding percentages were 90.0 in 1900 and 49.0 in 1934, showing a relative rate of progress, in this case, of only 16 per cent per decade.

Table 24 shows the reduction of illiteracy, by sex, for the population 10 years old and over and 15 years old and over, and the average decennial rates of progress, during the period 1900-34.

#### ILLITERACY IN DIFFERENT AGE GROUPS

Table 25 shows the percentage of illiteracy by different age groups and by sex, at each of the census years from 1900 to 1934. It may be seen that the percentage of illiteracy has been lowest for the 10-14 age group throughout this period, with each older group generally registering a higher percentage of illiteracy.

The difference between the two sexes tends to be more and more

TABLE 25. *Reduction of illiteracy in the population of Bulgaria, 10 years old and over, by sex and age groups: 1900-34*

Sex and age group	Percentage of illiteracy					
	1900	1905	1910	1920	1926	1934
<b>Male</b>						
<i>10 years and over</i> <sup>1</sup>	54.6	48.8	40.8	31.8	25.3	19.5
10-14	38.2	34.3	24.6	24.5	16.1	10.4
15-19	39.4	36.4	27.9	23.7	18.8	12.8
20-24	39.0	31.5	27.2	17.7	16.9	13.5
25-34	45.7	38.3	29.8	20.7	16.4	15.2
35-44	61.4	50.6	41.1	27.4	20.6	16.0
45-54	73.9	65.9	57.3	40.3	31.0	21.2
55-64	82.1	78.6	73.6	58.1	46.1	36.5
65 and over	89.1	87.3	84.7	78.1	72.4	59.9
<b>Female</b>						
<i>10 years and over</i> <sup>1</sup>	87.0	83.0	75.6	61.3	53.9	43.3
10-14	72.8	64.9	47.7	34.5	22.8	11.8
15-19	77.9	71.8	61.3	37.9	31.2	16.7
20-24	83.9	77.1	70.1	45.0	36.1	25.6
25-34	88.9	85.2	78.8	61.8	47.9	34.2
35-44	94.1	91.2	87.0	76.5	67.9	52.6
45-54	97.1	95.8	93.4	86.3	82.1	71.8
55-64	98.5	98.1	97.0	93.2	90.2	84.9
65 and over	99.3	99.0	98.4	96.7	95.9	93.1
Including age unknown.						

PROGRESS OF LITERACY

marked for each older age group. For example, in 1934, the illiteracy percentage among the 10-14 age group was only 1.4 per cent higher for females than for males; but among persons 65 years old and over, the difference was 33.2 per cent.

ILLITERACY BY SELECTED COHORTS

When the age data are examined from the point of view of the progress made by cohorts, i.e., persons born during the same period of time, it will be seen from Table 26 that progress was registered by each of the specified cohorts (more for the male than for the female) in each of the given decennial periods. The highest rates of progress were achieved by the youngest cohorts, i.e. cohort III, who were 15-24 years old in 1900, and cohort IV, who were in that age-group in 1910.

TABLE 26. *Reduction of illiteracy in the population of Bulgaria among specified cohorts: 1900-20*

Cohort	Percentage of illiteracy			Reduction of illiteracy		Decennial rate of progress	
	1900	1910	1920	1900-10	1910-20	1900-10	1910-20
I. Persons born 1856-65						%	%
Im. Male	61.4	57.3	.	4.1	.	7	.
If. Female	94.1	93.4	.	0.7	.	1	.
II. Persons born 1866-75							
IIm. Male	45.7	41.1	40.3	4.6	0.8	10	2
IIf. Female	88.9	87.0	86.3	1.9	0.7	2	1
III. Persons born 1876-85							
IIIIm. Male	39.2	29.8	27.4	9.4	2.4	24	8
IIIIf. Female	80.3	78.8	76.5	1.5	2.3	2	3
IV. Persons born 1886-95							
IVIm. Male	.	27.6	20.7	.	6.9	.	25
IVIf. Female	.	65.4	61.8	.	3.6	.	6

ILLITERACY IN URBAN AND RURAL AREAS

The population of Bulgaria, during the period under consideration, was about 20 per cent urban and 80 per cent rural. In



the urban population of 10 years old and over the percentage of illiteracy was reduced from 46.6 in 1900 to 18.8 in 1934. In rural areas, the reduction was from 76.8 per cent in 1900 to 35.2 per cent in 1934. The relative rate of progress for urban areas was slightly more than for rural areas during the same period.

TABLE 27. *Reduction of illiteracy in the population of Bulgaria, 10 years old and over, by urban and rural areas and by sex: 1900-34*

Area and sex	Percentage of illiteracy						Average decennial rate of progress
	1900	1905	1910	1920	1926	1934	
<i>Urban</i>							%
Both sexes	46.6	41.5	35.5	28.1	23.8	18.8	23
Male	32.4	28.3	23.8	18.7	14.4	11.3	27
Female	62.2	56.0	48.2	38.1	33.6	26.5	22
<i>Rural</i>							
Both sexes	76.8	71.9	63.7	51.7	44.1	35.2	21
Male	60.7	54.4	45.4	35.5	28.5	21.9	26
Female	93.5	90.0	82.6	67.3	59.5	48.3	18

#### ILLITERACY BY LINGUISTIC GROUPS

At the census of 1934, the population was classified by language spoken into eight groups, giving the following proportions of the population of 10 years old and over: Bulgarian, 87.5%; other Slavonic, 0.3%; Turkish, Tartar and Romany, 10.7%; Greek, 0.2%; Rumanian, 0.2%; Jewish, 0.5%; Armenian, 0.4%; other non-Slavonic, 0.1%.

Among these groups, the highest percentage of illiteracy reported at each census shown in Table 28 was for the group speaking Turkish, Tartar and Romany, followed next in order by the Rumanian, Greek, Bulgarian and Armenian groups. The Jewish, other Slavonic and other non-Slavonic groups, together making up about one per cent of the total population, had the lowest percentages of illiteracy. Between the two largest linguistic groups—the Bulgarian, and the Turkish, Tartar and Romany—the rate of progress over the period from 1910 to 1934 was obviously much higher among the Bulgarian-speaking group.

PROGRESS OF LITERACY

TABLE 28. *Reduction of illiteracy in the population of Bulgaria, 10 years old and over, by language spoken and by sex: 1910-34*

Language spoken and sex	Percentage of illiteracy			Reduction of illiteracy 1910-34	Average decennial rate of progress
	1910	1926	193		
<i>All groups</i>					%
<i>Both sexes</i>	57.8	39.7	31.4	26.4	22
<i>Male</i>	40.8	25.3	19.5	21.3	26
<i>Female</i>	75.6	53.9	43.3	32.3	21
Bulgarian					
Both sexes	52.0	33.2	25.3	26.7	26
Male	32.4	17.8	12.5	19.9	33
Female	72.4	48.4	38.0	34.4	24
Other Slavonic					
Both sexes	33.4	7.1	6.2	27.2	50
Male	29.5	5.9	5.2	24.3	51
Female	38.7	10.7	8.1	30.6	48
Turkish, Tartar and Romany					
Both sexes	92.5	85.4	81.7	10.8	5
Male	88.7	78.0	75.0	13.7	7
Female	96.6	92.9	88.7	7.9	3
Greek					
Both sexes	57.8	42.4	51.6	6.2	5
Male	42.9	32.4	42.1	0.8	1
Female	72.9	51.2	60.2	12.7	8
Rumanian					
Both sexes	76.0	62.2	72.1	3.9	2
Male	59.3	38.0	58.2	1.1	1
Female	92.9	84.9	85.2	7.7	4
Jewish					
Both sexes	26.8	17.2	18.0	8.8	15
Male	9.7	6.5	7.8	1.9	9
Female	43.5	27.1	27.4	16.1	18
Armenian					
Both sexes	30.8	28.8	23.8	7.0	10
Male	21.6	19.2	16.3	5.3	11
Female	42.8	38.7	31.0	11.8	13
Other non-Slavonic <sup>1</sup>					
Both sexes	22.5	14.2	11.4	11.1	25
Male	27.3	15.1	13.8	13.5	25
Female	16.6	13.2	9.2	7.4	22

<sup>1</sup> Including language not specified.

## BURMA: 1901-31

## ILLITERACY IN THE TOTAL POPULATION

Considering only persons 10 years old and over, the percentage of illiteracy in Burma has decreased from 71.6 in 1901 to 59.8 in 1931. However, owing to the increase in the total population, the number of illiterate persons has actually increased by almost one million between 1901 and 1931, as is shown in Table 29.

TABLE 29. *Number and percentage of illiterates in the population of Burma 10 years old and over: 1901-31*

Census year	Population 10 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1901	7 613 489	5 450 768	71.6
1911	8 869 556	6 260 438	70.6
1921	9 899 712	6 362 799	64.3
1931	10 828 282	6 480 378	59.8

Considering only the population 15 years old and over, the percentage of illiteracy has decreased from 70.1 in 1901 to 57.6 in 1931; the number of illiterates has nevertheless increased from about four and a half million in 1901 to about five and a quarter million in 1931.

TABLE 30. *Number and percentage of illiterates in the population of Burma, 15 years old and over: 1901-31*

Census year	Population 15 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1901	6 508 976	4 559 956	70.1
1911	7 492 047	5 136 062	68.6
1921	8 395 414	5 232 009	62.3
1931	9 167 275	5 276 193	57.6

The relative rate of progress thus registered by Burma in the reduction of illiteracy during this period of 30 years averaged about six per cent per decade. This rate of progress, as was seen, was not enough to stop the number of illiterates from increasing.

## PROGRESS OF LITERACY

To attain this minimum objective, it would have been necessary to show an average decennial rate of progress of about 11 per cent. In other words, the percentage of illiteracy in 1931 should have been reduced to 50.3 for the population 10 years old and over, or to 49.7 for the population 15 years old and over.

### ILLITERACY AMONG THE MALE AND FEMALE POPULATION

The percentage of illiteracy has been much higher among the female population than among the male. Furthermore, the relative rate of progress over the 30-year period has been twice as high among the male than among the female population. Table 31 shows that, for the population 10 years old and over, the percentage of illiteracy among the male population was reduced from 50.2 in 1901 to 38.6 in 1931, representing an average decennial rate of progress of eight per cent. During the same period, the percentage of illiteracy among the female population decreased from 94.3 to 82.5, representing an average rate of progress of only four per cent per decade.

TABLE 31. *Reduction of illiteracy in the population of Burma, 10 years old and over, and 15 years old and over, by sex: 1901-31*

Age level and sex	Percentage of illiteracy				Reduction of illiteracy 1901-31	Average decennial rate of progress
	1901	1911	1921	1931		
<i>10 years and over</i>						%
Both sexes	71.6	70.6	64.3	59.8	11.8	6
Male	50.2	50.4	42.4	38.6	11.6	8
Female	94.3	92.1	87.7	82.5	11.8	4
<i>15 years and over</i>						
Both sexes	70.1	68.6	62.3	57.6	12.5	6
Male	47.0	46.6	38.8	34.5	12.5	10
Female	94.4	92.0	87.5	82.2	12.2	5

### ILLITERACY IN DIFFERENT AGE GROUPS

The census reports tabulated separately the age groups 10-14, 15-19, 20 and over. It appears, from Table 32, that the percentage of illiteracy has been highest among children 10-14 years old, both male and female, and that their relative rate of progress over

the three decades has been lowest. Relatively more progress has been made among male adults 15 years old and over.

TABLE 32. *Reduction of illiteracy in the population of Burma, 10 years old and over, by sex and age groups: 1901-31*

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1901-31	Average decennial rate of progress
	1901	1911	1921	1931		
Male						%
10 years and over	50.2	50.4	42.4	38.6	11.6	8
10-14	68.5	71.4	62.7	61.5	7.0	4
15-19	51.5	52.1	43.1	38.2	13.3	9
20 and over	46.3	45.6	38.0	33.8	12.5	10
Female						
10 years and over	94.3	92.1	87.7	82.5	11.8	4
10-14	93.9	92.6	88.5	83.9	10.0	4
15-19	92.3	89.1	84.4	79.0	13.3	5
20 and over	94.7	92.5	88.2	82.9	11.8	4

In addition to the age groups shown in Table 32, the census report of 1921 made a separate tabulation for the age group 20-29. These persons, being born between 1892 and 1901, were 10-19 years old in 1911. Progress of literacy in this cohort, between the census years 1911 and 1921, was at the rate of 38 per cent for males and only six per cent for females, as follows:

Cohort	Percentage of illiteracy		Reduction of illiteracy 1911-21	Decennial rate of progress
	1911	1921		
Persons born 1892-1901				%
Male	63.0	39.2	23.8	38
Female	91.0	85.3	5.7	6

#### ILLITERACY AMONG PRINCIPAL ETHNIC GROUPS

About two-thirds of the population of Burma may be classified into three principal ethnic groups: Burmese, Shan, and Karen. In these groups, the percentage of illiteracy has been lowest for the Burmese, and the rate of progress relatively highest. However,

PROGRESS OF LITERACY

the Karen group, though more illiterate than the Burmese, have shown almost as much progress between 1901 and 1931. The group with the highest percentage of illiteracy and the lowest rate of progress have been the Shan. Owing to considerable variation in the classification of the other (minor) racial groups, it is not possible to compare either the extent of illiteracy or the relative rates of progress for such groups.

TABLE 33. *Reduction of illiteracy among persons of all ages in the three principal ethnic groups of Burma: 1901-31*

Ethnic group and sex	Percentage of illiteracy				Reduction of illiteracy 1901-31	Average decennial rate of progress
	1901	1911	1921	1931		
<i>All groups</i>						%
<i>Both sexes</i>	78.5	77.8	72.3	68.3	10.2	5
<i>Male</i>	62.2	62.4	55.1	51.4	10.8	6
<i>Female</i>	95.5	93.9	90.3	85.9	9.6	3
<b>Burmese</b>						
<i>Both sexes</i>	73.2	...	65.1	60.5	12.7	6
<i>Male</i>	51.0	...	41.3	38.1	12.9	9
<i>Female</i>	94.5	...	87.8	81.9	12.6	5
<b>Shan</b>						
<i>Both sexes</i>	92.1	89.9	87.8	88.5	3.6	1
<i>Male</i>	84.8	81.9	77.4	78.5	6.3	3
<i>Female</i>	99.1	97.8	98.2	98.6	0.5	0
<b>Karen</b>						
<i>Both sexes</i>	90.9	87.4	84.9	75.8	15.1	6
<i>Male</i>	85.7	80.9	77.8	65.9	19.8	8
<i>Female</i>	96.3	93.8	92.2	85.6	10.7	4

CONSISTENCY AND RELIABILITY OF DATA

The definition of literacy used in 1901 was ability to read and write in any language. In 1911 and later censuses, the enumerators were instructed not to enter a person as literate 'unless he was able to write a letter to a friend and read his answer to it'. In view of the more definite and stringent criterion of literacy introduced after 1901, it is likely that the percentage of illiteracy reported for 1901 was too low, hence the rate of progress in the reduction of illiteracy since 1901 may be somewhat higher than is indicated in the above analysis.

The census report for 1921 contains a statement listing some of

the considerations which show the need for caution in any comparison of statistics of literacy at different times and places. These considerations are generally applicable to all analyses of literacy data from census enumerations:

1. The effects of differences in age distribution of the population at different times or in different places or among different classes.
2. Changes in the criterion of literacy used in different censuses.
3. Possible variations in the application of any criterion at different places, among different classes or at different times, and the probability that it is applied more stringently where and when literacy is higher.

Nevertheless, as to the accuracy of the statistics obtained from the census enumeration in Burma, the same report concludes: 'it is safe to say that there will have been no deliberate misrepresentation, and that generally the enumeration record represented the honest opinion of the head of each household whether each member should be considered literate or not.'

#### CANADA: 1901-1941 (including NEWFOUNDLAND: 1901-45)

##### ILLITERACY IN THE TOTAL POPULATION

It is not possible here to treat in detail the progress of literacy in the various provinces of Canada. However, Newfoundland,

TABLE 34. *Number and percentage of illiterates in the population of Canada, 5 years old and over, 1901-31; and 10 years old and over, 1921-31*

Census year	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
<i>Population 5 years old and over</i>			
1901	4 728 631	809 716	17.1
1911	6 319 160	696 316	11.0
1921	7 730 833	773 421	10.0
1931	9 302 371	712 441	7.7
<i>Population 10 years old and over</i>			
1921	6 682 072	383 368	5.7
1931	8 169 622	347 803	4.3

<sup>1</sup> Including Yukon and Northwest Territories, and including the Indian population.

PROGRESS OF LITERACY

which became a province of Canada only in 1949, will be treated separately at the end of this section after the data from the Canadian censuses during the period 1901-41 have been examined.

At the census of 1901, there were 809,716 persons in Canada returned as not able to read and to write. This was 17.1 per cent of the total population of 5 years old and over. By 1931, the number of illiterates had fallen to 712,441 (in spite of the considerable increase in the total population), and the percentage of illiteracy had been reduced to 7.7. The reduction in percentage of illiteracy came to 9.4 per cent in 30 years, and the relative rate of progress for that period averaged 23 per cent per decade.

In the population 10 years old and over, the percentage of illiteracy was reduced from 5.7 in 1921 to 4.3 in 1931, showing a relative rate of progress of almost 25 per cent in a decade.

REDUCTION OF ILLITERACY, BY SEX

Throughout this period, the female population led the male in having both a lower rate of illiteracy and a higher relative rate of progress. Between 1911 and 1931, the percentage of illiteracy among male persons 5 years old and over was reduced from 11.6 to 8.1, showing an average decennial rate of progress of 16 per cent. The comparable rate of progress among female persons was 17 per cent, the percentage of illiteracy being reduced from 10.4 in 1911 to 7.2 in 1931.

In the population 10 years old and over, the rate of progress between 1921 and 1931 was 25 per cent among male persons and 28 per cent among female persons.

TABLE 35. *Reduction of illiteracy in the population of Canada, by sex, 5 years old and over, 1911-31; 10 years old and over, 1921-31*

Age level and sex	Percentage of illiteracy			Reduction in percentage of illiteracy during period	Average decennial rate of progress
	1911	1921	1931		
<i>5 years and over</i>					%
Both sexes	11.0	10.0	7.7	3.3	16
Male	11.6	10.6	8.1	3.5	16
Female	10.4	9.4	7.2	3.2	17
<i>10 years and over</i>					
Both sexes	...	5.7	4.3	1.4	25
Male	...	6.4	4.8	1.6	25
Female	...	5.0	3.6	1.4	28



## ILLITERACY BY NATIVITY AND ORIGIN

During the period 1911-21, the total population of Canada was about 78 per cent Canadian-born, 12 per cent British-born, and 10 per cent foreign-born. Illiteracy was lowest among the British-born, and highest among the foreign-born. The advantage of the female population over the male seemed to hold only among the Canadian-born. In terms of relative rates of progress, the British-born, starting with a low initial percentage of illiteracy, far outpaced the other two population groups.

TABLE 36. *Reduction of illiteracy in the population of Canada, 5 years old and over, by nativity and sex: 1911-21*

Nativity and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1911	1921		
Canadian				%
Both sexes	11.2	11.0	0.2	2
Male	12.0	11.8	0.2	2
Female	10.4	10.1	0.3	3
British				
Both sexes	4.2	1.5	2.7	64
Male	4.0	1.5	2.5	63
Female	4.5	1.5	3.0	67
Foreign				
Both sexes	17.5	13.9	3.6	21
Male	17.5	13.1	4.4	25
Female	17.5	15.0	2.5	14

Among the principal ethnic groups, the lowest illiteracy (defined here as inability to read) was found among persons of British origin,

TABLE 37. *Reduction of illiteracy in the population of Canada, 10 years old and over, by ethnic origin and sex: 1921-31*

Ethnic origin and sex	Percentage of illiteracy <sup>1</sup>		Reduction in percentage of illiteracy	Decennial rate of progress
	1921	1931		
<i>All groups</i> <sup>2</sup>				%
Both sexes	4.5	3.4	1.1	24
Male	5.2	3.9	1.3	25
Female	3.8	2.8	1.0	26

<sup>1</sup> Including only persons who could neither read nor write.

<sup>2</sup> Excluding Yukon and Northwest Territories, and aborigines (Eskimo and Indian).

PROGRESS OF LITERACY

Ethnic origin and sex	Percentage of illiteracy <sup>1</sup>		Reduction in percentage of illiteracy	Decennial rate of progress
	1921	1931		
British				%
Both sexes	1.1	0.9	0.2	18
Male	1.3	1.1	0.2	15
Female	0.9	0.7	0.2	22
European				
Both sexes	8.9	6.2	2.7	30
Male	9.9	7.0	2.9	29
Female	7.8	5.3	2.5	32
Asian				
Both sexes	26.6	15.3	11.3	42
Male	26.4	15.3	11.1	42
Female	27.9	15.3	12.6	45
Negro				
Both sexes	8.4	8.1	0.3	4
Male	9.0	9.0	—	—
Female	7.8	7.1	0.7	9
Various				
Both sexes	18.8	8.3	.	.
Male	23.2	8.9	.	.
Female	8.2	7.6	.	.
Unspecified				
Both sexes	5.1	5.0	.	.
Male	4.6	5.3	.	.
Female	5.5	4.7	.	.

and the highest among those of Asian origin. Between 1921 and 1931, all these groups showed some reduction of illiteracy except the Negro males. The relative rate of progress was highest among the Asian group, both male and female, except for the male persons in the miscellaneous group 'various'.

In 1921, the Indian population of Canada numbered 110,814 persons of all ages and was about 1.26 per cent of the total population. Illiteracy among the Indian population 10 years old and over was 52.1 per cent (male, 49.2; female, 55.1), higher than any of the other ethnic groups identified in the census reports.

In 1931, there were 87,298 Indians 10 years old and over, of whom 39.3 per cent were illiterate (male, 36.8; female, 42.0). This represents a relative rate of progress of 25 per cent during the decade, a rate equivalent to that for the total population of Canada during that period.

## REDUCTION OF ILLITERACY IN URBAN AND RURAL AREAS

In 1931 about 55 per cent of the population 10 years old and over lived in urban areas, defined as 'incorporated cities, towns and villages of all sizes'. The percentage of illiteracy (i.e., persons unable to read) among the urban male population had been reduced from 3.6 to 2.7 and among the female from 2.7 to 2.0 between 1921-31. The rural population, both male and female, had a higher percentage of illiteracy than the urban. The rate of progress among the rural population, though somewhat less than that of the urban population, was quite considerable.

TABLE 38. *Reduction of illiteracy in the population of Canada, 10 years old and over, by urban and rural areas and by sex: 1921-31*

Area and sex	Percentage of illiteracy <sup>1</sup>		Reduction in percentage of illiteracy	Decennial rate of progress
	1921	1931		
<i>Urban</i>				%
Male	3.6	2.7	0.9	25
Female	2.7	2.0	0.7	26
<i>Rural</i>				
Male	7.7	6.1	1.6	21
Female	6.5	4.9	1.6	25

<sup>1</sup> Including only persons who could neither read nor write.

## REDUCTION OF ILLITERACY IN DIFFERENT AGE GROUPS

The age groups 10-14 and 15-19 have the lowest illiteracy percentage and the highest rates of progress between 1921 and 1931. In

TABLE 39. *Reduction of illiteracy in the population of Canada 10 years old and over, by sex and age groups: 1921-31*

Sex and age groups	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1921	1931		
Male				%
10 years and over	6.4	4.8	1.6	25
10-14	2.3	1.3	1.0	43
15-19	<sup>1</sup> 3.6	2.1	1.5	42
20-34	<sup>2</sup> 5.0	3.6	1.4	28
35-64	8.1	6.1	2.0	25
65 years and over <sup>3</sup>	16.6	13.8	2.8	17

PROGRESS OF LITERACY

Sex and age groups	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1921	1931		
Female				%
10 years and over	5.0	3.6	1.4	28
10-14	1.9	1.1	0.8	42
15-19	<sup>1</sup> 2.6	1.4	1.2	46
20-34	<sup>2</sup> 3.9	2.6	1.3	33
35-64	6.4	4.7	1.7	27
65 years and over <sup>3</sup>	14.9	11.3	3.6	24

<sup>1</sup> 15-20 years.  
<sup>2</sup> 21-34 years.  
<sup>3</sup> Including age unknown.

general, the female population leads the male both in having a lower illiteracy rate and a higher rate of progress for each of the age groups shown in Table 39. The only apparent exception is in the age group 10-14, where the sexes are becoming more equal, with the male rate of progress slightly exceeding the female rate.

ILLITERACY IN CANADA, 1941

At the census of 1941, the question on literacy was discontinued and replaced by a question on the total number of years of schooling received by the person enumerated. The returns were tabulated separately for the population 5-24 years of age attending school, the population 10 years old and over not attending school, and the gainfully occupied population, 14 years old and over.

The relationship between illiteracy and number of years of schooling has not been directly ascertained for the population of Canada. Somewhat comparable data, however, are available from a sample survey, conducted in the United States in 1947, of illiteracy in the civilian non-institutional population 14 years old and over, by years of school completed. See the section on the United States.

The United States data refer to persons 15 years old and over. Hence it will be necessary to assume that persons 10-14 years old with no schooling were all illiterate, and that those in this age group with one to four years schooling had the same percentage of illiteracy as persons 15 years old and over.

Table 40 shows the method of computing the estimated number of illiterates in each sex and age group, by urban and rural

residence and by years of schooling. The result gives a total estimated number of illiterates 10 years old and over as about 377,000.

The results of the United States survey, adapted for application to the data from the 1941 census of Canada, are as follows :

Area and sex	Percentage of illiteracy among persons	
	Completing no years of school	Completing 1-4 years of school
Urban: Male	73.5	15.6
Female	77.5	15.6
Rural: Male	85.1	29.0
Female	85.6	17.7

TABLE 40. Estimated number of illiterates in the population of Canada, 10 years old and over, based on number of years of schooling and assumed percentage of illiteracy, by urban and rural residence, sex and age groups: 1941

Area, sex and age group	Persons with no schooling			Persons with 1-4 years schooling		
	No. of Persons	Assumed % of illiteracy	Est. No. of illiterates	No. of persons	Assumed % of illiteracy	Est. No. of illiterates
<b>Urban: male</b>						
10-14 years	1 123	100	1 123	60 726	16	9 716
15-19 years	901	73	658	5 805	16	929
20 years and over	41 521	73	30 310	147 008	16	23 521
Total (10 years and over)			32 091			34 166
<b>Urban: female</b>						
10-14 years	996	100	996	57 785	16	9 246
15-19 years	986	77	759	6 634	16	1 061
20 years and over	36 718	77	28 273	121 569	16	19 451
Total (10 years and over)			30 028			29 758
<b>Rural: male</b>						
10-14 years	4 203	100	4 203	88 047	29	25 534
15-19 years	3 767	85	3 202	16 436	29	4 766
20 years and over	70 082	85	59 570	215 506	29	62 497
Total (10 years and over)			66 975			92 797
<b>Rural: female</b>						
10-14 years	3 506	100	3 506	79 738	18	14 353
15-19 years	3 201	86	2 753	11 225	18	2 021
20 years and over	54 494	86	46 865	122 350	18	22 023
Total (10 years and over)			53 124			38 397

PROGRESS OF LITERACY

Relating these estimated numbers to the enumerated population 10 years old and over at the 1941 census, we obtain:

Sex	Enumerated population 10 years old and over	Estimated No. of illiterates	Estimated percentage of illiteracy
Both sexes	9 408 981	377 336	4.0
Male	4 837 541	226 029	4.7
Female	4 571 440	151 307	3.3

These estimated percentages are probably too high when compared with the results of the 1921 and 1931 censuses. If the decennial rates of progress found between 1921 and 1931 were applied to the period between 1931 and 1941, the following estimates would have been obtained:

Sex	Population 10 years old and over			
	Percentage of illiteracy 1931	Decennial rate of progress	Reduction in percentage of illiteracy	Estimated percentage of illiteracy 1941
		%		
Both sexes	4.3	25	1.1	3.2
Male	4.8	25	1.2	3.6
Female	3.6	28	1.0	2.6

From the above analysis, it can be stated that the percentage of illiteracy remaining in Canada in 1941 was probably between three and four per cent among the population 10 years old and over, with the male percentage nearer four and the female percentage nearer three.

PROGRESS OF LITERACY IN NEWFOUNDLAND

The only data available on literacy in Newfoundland from the censuses of 1901 and 1911 are as follows:

Census year and sex	Population of all ages		
	Total No. of persons	Persons able to read	Persons able to write
1901 : Male	112 697	57 079	49 260
Female	106 910	58 851	48 823
1911 : Both sexes	242 619	...	134 672

If the last column is taken to include persons able both to read and to write, then the illiteracy rate in the total population of all ages would be about 55.3 per cent in 1901 and 44.5 per cent in 1911.

Between 1921 and 1945 the percentage of illiteracy in the population 10 years old and over was reduced from 24.1 to 13.2, showing an average rate of progress of about 22 per cent. This is a little less than the rate of progress in the rest of Canada between 1921 and 1931.

TABLE 41. *Number and percentage of illiterates in the population of Newfoundland, 10 years old and over: 1921-45*

Census year	Population 10 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1921 <sup>1</sup>	190 714	45 922	24.1
1935	221 384	47 047	21.3
1945	242 025	31 961	13.2

<sup>1</sup> Persons 11 years old and over.

Between 1935 and 1945, the rate of progress was considerably higher, being about 38 per cent for both sexes, 36 per cent for the male population and 40 per cent for the female.

TABLE 42. *Reduction of illiteracy in the population of Newfoundland, 10 years old and over, by sex: 1935-45*

Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1935	1945		
Both sexes	21.3	13.2	8.1	% 38
Male	24.2	15.4	8.8	36
Female	18.1	10.9	7.2	40

The population of Newfoundland in 1935 and 1945 was over 98 per cent native, with most of the remainder born in Canada, the United Kingdom or the United States. However, the isolated living conditions of this population are shown by the fact that only about one-third of the people in 1945 lived within settlements of 1,000 or more inhabitants. Actually there were only seven settlements exceeding 2,500 inhabitants, besides the city of

## PROGRESS OF LITERACY

St. John's. This factor must obviously be taken into account in considering the progress of literacy in Newfoundland.

### CONSISTENCY AND RELIABILITY OF DATA

The instructions to Canadian census enumerators in 1911 and 1921 relating to the question on literacy were as follows:

'If the person can read in any language the question will be answered in the proper column by writing "yes", and "no" if unable to read.'

'If the person can write in any language the question will be answered in the proper column by "yes", and "no" if unable to write.'

In the 1931 census, however, the two questions 'can read' and 'can write' were combined in one, 'can read and write', with the following instructions given to the enumerators:

'If the person can *read* and *write* in any language the question will be answered by writing "W", but if the person is able to read *only* in any language write "R". For a person who cannot read nor write enter "No". For a blind person write "Yes" if the person could read and write in any language before becoming blind or if, being born blind, he or she has been taught to read and write.'

'Do not return any person as able to read and write simply because he can write his own name. For persons under 5 years of age leave the column blank.'

The report of the Newfoundland census of 1945 contains the following explanation:

'Every person enumerated was asked if he could read and write, not only his own name, but whether he had a knowledge of reading and writing. For persons who could read and write, the entry was "RW"; for those who could read only, the entry was "R"; and for persons who could neither read nor write, the entry was "No".'

## CEYLON: 1901-46

### CRITERION OF LITERACY

The report of the census of Ceylon, 1946, contains the following statement, which is understood to apply to previous censuses



also: 'For census purposes, a "literate" person is one who can both read *and* write a language, and the instructions to enumerators required that persons who had learnt to read and not write a language, and persons who had learnt to sign or write their names but not to read other script, should be excluded from the category of "literates".'

In the census reports during the period under consideration, literacy data have been tabulated for the population 5 years old and over, thus excluding those who are 'regarded as being too young for instruction'.

REDUCTION OF ILLITERACY IN THE TOTAL POPULATION

Using the above definition, and considering only the population 5 years old and over, the number and percentage of illiterates in Ceylon at each census year from 1901 to 1946 are given in Table 43.

TABLE 43. *Number and percentage of illiterates in the population of Ceylon, 5 years old and over: 1901-40*

Census year	Population 5 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1901	2 927 178	2 153 982	73.6
1911	3 498 375	2 415 547	69.0
1921	3 854 394	2 317 446	60.1
1946	5 795 900	2 443 111	42.2

The reduction in the percentage of illiteracy during each period between censuses, expressed in absolute and relative terms, is

TABLE 44. *Reduction of illiteracy in the population of Ceylon, 5 years old and over, by decennial periods: 1901-40*

Period	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
	At beginning of period	At end of period		
1901-11	73.6	69.0	4.6	% 6
1911-21	69.0	60.1	8.9	13
1921-46	60.1	42.2	17.9	13
1901-46	73.6	42.2	31.4	12

PROGRESS OF LITERACY

shown in Table 44. In 45 years between 1901 and 1946, more than two-fifths of the illiteracy existing in 1901 had been eliminated, at an average decennial rate of progress of 12 per cent.

REDUCTION OF ILLITERACY, BY SEX

Illiteracy among the female population has been much higher than among the male in all the successive censuses, and the rate of progress in literacy among the female population has also lagged behind that of the male. As may be seen from Table 45, even though the percentage of illiteracy decreased more among the female population than among the male during the whole period of 45 years between 1901 and 1946, the average decennial rate of progress for the female population was only 10 per cent compared with 14 per cent for the male population.

TABLE 45. *Reduction of illiteracy in the population of Ceylon, 5 years old and over, by sex: 1901-46*

Sex	Percentage of illiteracy				Reduction in illiteracy 1901-1946	Average decennial rate of progress
	1901	1911	1921	1946		
Both sexes	73.6	69.0	60.1	42.2	31.4	% 12
Male	58.0	52.8	43.7	29.9	28.1	14
Female	91.5	87.5	78.8	56.2	35.3	10

ILLITERACY AMONG ETHNIC GROUPS

The census report for 1921 shows the relative proportions of the principal ethnic groups in the population as follows: Low-country Sinhalese, 42.8%; Kandyan Sinhalese, 24.2%; Ceylon Tamils, 11.5%; Indian Tamils, 13.4%; Ceylon Moors, 5.6%; Indian Moors, 0.7%; Europeans, 0.2%; Burghers and Eurasians, 0.7%; Malays, 0.3%; Veddas, 0.1%; others, 0.5%.

According to the same report, the percentage of illiteracy among these ethnic groups for the census years 1901, 1911, and 1921, among the male and female population 5 years old and over, were as given in Table 46. It is evident that there is great variation in the amount of illiteracy among these ethnic groups, ranging from the Europeans with one to three per cent illiteracy in

1921, to the Veddas with 90 to 98 per cent illiteracy at the same census.

TABLE 46. *Percentage of illiteracy in the population of Ceylon, 5 years old and over, by sex and ethnic groups: 1901-21*

Ethnic group	Percentage of illiteracy					
	1901		1911		1921	
	Male	Female	Male	Female	Male	Female
<i>All groups</i>	58.0	91.5	52.8	87.5	43.7	78.8
Low-country Sinhalese	49.5	86.2	43.1	79.3	34.7	67.8
Kandyan Sinhalese	61.8	98.0	56.7	96.7	46.3	91.3
Ceylon Tamils	67.7	95.2	46.3	87.2	37.7	76.3
Indian Tamils			77.7	98.3	69.4	93.5
Ceylon Moors			62.4	96.9	52.8	93.9
Indian Moors	59.7	96.8	46.4	97.8	35.8	94.5
Europeans	1.0	1.4	1.3	4.0	1.2	2.7
Burghers and Eurasians	15.3	21.3	18.9	22.3	13.8	15.3
Malays	35.3	79.6	37.5	82.9	28.8	65.8
Veddas	95.6	99.8	90.5	99.1	89.5	98.3
Others	52.1	80.0	56.0	85.8	39.9	72.2

Considering only the six largest groups, which together constituted over 93 per cent of the total population in 1921, it may be seen from Table 46 that relatively more progress was made during the decade 1911-21 among the male population of the two Sinhalese groups, the Ceylon Tamils and the Indian Moors. Except among the Low-country Sinhalese and the Ceylon Tamils, the female population lagged far behind the male in each group.

TABLE 47. *Reduction of illiteracy among the six principal ethnic groups of the population of Ceylon, 5 years old and over: 1911-21*

Ethnic group and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1911	1921		
Low-country Sinhalese				%
Male	43.1	34.7	8.4	19
Female	79.3	67.8	11.5	15
Kandyan Sinhalese				
Male	56.7	46.3	10.4	18
Female	96.7	91.3	5.4	6

PROGRESS OF LITERACY

Ethnic group and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1911	1921		
Ceylon Tamils				%
Male	46.3	37.7	8.6	19
Female	87.2	76.3	10.9	13
Indian Tamils				
Male	77.7	69.4	8.3	11
Female	98.3	93.5	4.8	5
Ceylon Moors				
Male	62.4	52.8	9.6	15
Female	96.9	93.9	3.0	3
Indian Moors				
Male	46.4	35.8	10.6	23
Female	97.8	94.5	3.3	3

LITERACY IN THE ENGLISH LANGUAGE

The census reports give separate tabulations of the population regarding literacy in the English language. In the total population 5 years old and over, the percentage of persons able to read and write English increased from 2.6 in 1901 to 6.3 in 1946, with the male population surpassing the female by more than 2 to 1 at every census during this period.

TABLE 48. *Literacy in English among the population of Ceylon 5 years old and over: 1901-46*

Census year	Percentage of persons literate in English		
	Both sexes	Male	Female
1901	2.6	3.7	1.4
1911	2.7	3.8	1.5
1921	3.7	5.2	2.1
1946	6.3	8.4	4.0

LITERACY AMONG THE URBAN POPULATION

The 1946 census report, for the first time, made separate mention of the extent of literacy among the urban population, which constituted about 15 per cent of the total population.

'Literacy in towns was, of course, decidedly better, and a percentage of 73 of the urban population, 5 years of age and over, was returned in 1946 as being able both to read and write.

'The highest percentage of literates was found within the Wattegama (85.2) and the Jaffna (82.2) urban council areas. . . . The majority of both males and females in the Island's urban population was found to be literate.' (*Census of Ceylon, 1946*, Vol. I, Part. I, pp. 189, 190.)

#### CONSISTENCY AND RELIABILITY OF DATA

In the census reports during this period, the population tabulated for literacy always excluded the military and shipping population, and in the census of 1901, also excluded about 5,000 prisoners of war. In general, the percentage of illiteracy has been computed on the population 5 years old and over.

The census report for 1921 contains the following statement on the margin of error which is of course inherent in all census statistics on illiteracy.

'A common example of literacy given to the enumerators was that of ability to read and write a short letter, but it is doubtful to what extent the enumerators adhered to some such standard, or used it to test claims to literacy on the part of the persons enumerated. . . . It is probable that untested statements were often accepted, and it is clear that the definition of literacy might tend to vary with the mentality of the enumerator. The possibility of this variation must, therefore, be borne in mind when the figures of literacy are being utilized, but no estimate can be made of the amount of the error, though it may be presumed that the literacy figures would tend to be somewhat overstated.' (*Census of Ceylon, 1921*, Vol. I, Part II, p. 60.)

CHILE: 1907-40

#### CRITERION OF LITERACY

The question on literacy asked in the Chilean censuses during this period is simply whether the person is able to read. No reference is made, either in the census schedule or in the reports, to the person's ability to write. Nor is any criterion indicated as to what

## PROGRESS OF LITERACY

constituted 'ability to read'. Hence there may be included among the literates thus defined many persons who would have been considered as illiterates under a more rigid criterion.

### ILLITERACY IN THE TOTAL POPULATION

For the censuses of 1907 and 1920, the number of persons able to read and those not able to read were reported for the total population of all ages. In 1930, the question was limited to persons 8 years old and over; in 1940, to persons 7 years old and over. In order to bring the results of these four censuses into comparison, the following analysis will be based on the number and percentage of illiterates among the total population 10 years old and over.

The number of persons 10 years old and over not able to read was 1,202,150 in 1907, but had fallen to 971,449 in 1940, even though the total population had increased by about 50 per cent during that period. Thus the illiteracy rate was reduced from 49.9 to 26.4 per cent in a period of 33 years, which represents an average rate of progress of 18 per cent per decade.

TABLE 49. *Number and percentage of illiterates in the population of Chile, 10 years old and over: 1907-40*

Census year	Population 10 years old and over		
	Total No. of persons <sup>1</sup>	Persons not able to read	Percentage illiterate <sup>2</sup>
1907	2 408 497	1 202 150	49.9
1920	2 773 110	1 023 996	36.9
1930	3 055 658	746 154	24.4
1940	3 675 119	971 449	26.4

<sup>1</sup> Excluding persons of literacy unspecified, numbering 106,503 in 1930 and 91,560 in 1940.

<sup>2</sup> These percentages, referring to those who cannot read, are not directly comparable with percentages of illiteracy computed on a different criterion.

This average rate of progress over the period 1907-40 is less than that shown for either of the two earlier intercensal periods between 1907 and 1930 appearing in Table 50. This is due to an apparent setback between 1930 and 1940, which will be discussed below.

TABLE 50. *Reduction of illiteracy in the population of Chile, 10 years old and over by decennial periods: 1907-40*

Period	Percentage of illiteracy		Reduction of illiteracy <sup>1</sup>	Decennial rate of progress
	At beginning of period	At end of period		
1907-20	49.9	36.9	13.0	21
1920-30	36.9	24.4	12.5	34
1930-40	24.4	26.4	+ 2.0	.
1907-40	49.9	26.4	23.5	18

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

## REDUCTION OF ILLITERACY BY SEX

The percentage of illiteracy has been higher among the female population than among the male during the entire period under consideration. Although the amount of illiteracy was reduced slightly more among the females yet, because of their higher initial illiteracy, their relative rate of progress is slightly less than that of the males.

TABLE 51. *Reduction of illiteracy in the population of Chile, 10 years old and over, by sex: 1907-40*

Sex	Percentage of illiteracy				Reduction of illiteracy 1907-40	Average decennial rate of progress
	1907	1920	1930	1940		
Both sexes	49.9	36.9	24.4	26.4	23.5	18
Male	46.9	35.4	22.2	24.6	22.3	18
Female	52.9	38.4	26.6	28.2	24.7	17

## ILLITERACY IN THE URBAN AND RURAL POPULATION

The only tabulation on literacy by urban and rural classification was given in the 1907 census report, relating to the population of all ages. This showed an illiteracy percentage of 45.7 for the urban population compared with 71.0 for the rural population. No such tabulations have been given in the later census reports.

PROGRESS OF LITERACY

ILLITERACY IN THE SCHOOL-AGE POPULATION

Effectiveness in enforcing the laws of compulsory education can be measured by an analysis of the amount of illiteracy in the school-age population. The census reports for 1907 and 1920 gave a definition of school-age as from 6 to 14 years. The 1940 census report defined school-age as from 7 to 15 years. But comparative figures for 1930 are available only for the age-group 8-15, since the question on literacy in the census of 1930 was confined to persons 8 years old and over. Table 52 shows the percentage of illiterates in the school-age population thus defined, for each of the census years between 1907 and 1940.

TABLE 52. *Percentage of illiteracy in the school-age population of Chile: 1907-40*

Census year	Age level	Total school age population	Percentage of illiteracy		
			Both sexes	Male	Female
1907	6-14	715 202	62.7	63.0	62.5
1920	6-14	863 777	50.3	52.1	50.8
1930	8-15	<sup>1</sup> 756 390	23.8	24.0	23.6
1940	7-15	<sup>1</sup> 1 095 057	34.4	34.9	33.8

<sup>1</sup> Including persons whose literacy status was unknown (54,575 in 1930; 43,125 in 1940). The percentages of illiteracy are computed on the basis of the total population, less persons of literacy unspecified.

ILLITERACY IN DIFFERENT AGE GROUPS

The females in the two youngest age groups are shown in Table 53 to have had lower illiteracy rates than the males at each of the censuses between 1920 and 1940. Every age group registered progress during this period, male persons showing a slightly more rapid rate of progress for age groups from 40 up. It seems from this analysis that male persons born before 1900 had better educational opportunities than female persons of the same age, but that among those born after 1900 the advantage was gradually shifting to the females.



TABLE 53. *Reduction of illiteracy in the population of Chile, 10 years old and over, by sex and age groups: 1920-40*

Sex and age group	Percentage of illiteracy			Reduction of illiteracy 1920-40	Average decennial rate of progress
	1920	1930	1940		
<b>Male</b>					%
<i>10 years and over</i>	35.4	22.2	24.6	10.8	17
10-14	39.3	19.7	23.4	15.9	23
15-19	33.3	18.1	23.0	10.3	17
20-24	28.8	18.5	20.0	8.8	17
25-29	29.4		20.3	9.1	17
30-39	31.4	20.4	22.0	9.4	16
40-49	36.3	24.5	25.7	10.6	16
50-59	41.3	29.4	30.5	10.8	14
60 and over	53.3	40.8	41.9	11.4	11
<b>Female</b>					
<i>10 years and over</i>	38.4	26.6	28.2	10.2	14
10-14	37.7	19.2	22.5	15.2	22
15-19	30.5	16.6	20.9	9.6	17
20-24	30.6	21.6	21.2	9.4	17
25-29	33.8		22.9	10.9	18
30-39	38.4	27.2	27.7	10.7	15
40-49	42.8	33.7	34.0	8.8	11
50-59	46.7	38.4	40.1	6.6	7
60 and over	58.1	49.6	49.8	8.3	7

This conclusion is further borne out by comparing the illiteracy rates of selected cohorts at each of the censuses between 1920 and 1940, as shown in Table 54.

TABLE 54. *Reduction of illiteracy in the population of Chile by selected cohorts: 1920-40*

Cohort	Percentage of illiteracy			Reduction of illiteracy <sup>1</sup>		Decennial rate of progress	
	1920	1930	1940	1920-30	1930-40	1920-30	1930-40
<b>I. Persons born 1881-90</b>						%	
Im. Male	31.4	24.5	.	6.9	.	22	.
If. Female	38.4	33.7	.	4.7	.	12	.
<b>II. Persons born 1891-1900</b>							
IIm. Male	29.1	20.4	25.7	8.7	+ 5.3	30	.
IIf. Female	32.2	27.2	34.0	5.0	+ 6.8	15	.

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

PROGRESS OF LITERACY

Cohort	Percentage of illiteracy			Reduction of illiteracy		Decennial rate of progress	
	1920	1930	1940	1920-30	1930-40	1920-30	1930-40
III. Persons born 1901-10						%	
III m. Male	36.5	18.5	22.0	18.0	+ 3.5	49	.
III f. Female	34.2	21.6	27.7	12.6	+ 6.1	37	.
IV. Persons born 1911-20							
IV m. Male	.	18.9	20.2	.	+ 1.3	.	.
IV f. female	.	17.9	22.0	.	+ 4.1	.	.

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

CONSISTENCY AND RELIABILITY OF DATA

Examination of the figures in Tables 53 and 54 shows that, without exception, each cohort seems to have increased in illiteracy between 1930 and 1940. This may be partly explained by an actual relapse into illiteracy by some of the older persons. But it is hardly believable that, while persons who were 10-19 years old in 1920 (cohort III) reduced their illiteracy rate almost by half during the next decade, the same group of persons showed more illiteracy 10 years later. Similarly, the 20-29 age group in 1920 (cohort II) became about one-third less illiterate 10 years later, but again the same group appeared as more illiterate at the 1940 census. This leads to a suspicion that there may have been serious errors in enumeration of literacy in the various censuses of this period, or possibly some radical change in criterion of literacy between the 1930 and 1940 censuses.

COLOMBIA: 1918-38

ILLITERACY IN THE TOTAL POPULATION

The census report of 1938 shows that 92.5 per cent of all children under 10 years of age were not able to read. If these children are excluded, the percentage of illiteracy, considering only the population 10 years old and over, was 44.2 in 1938, compared with 48.4 per cent in 1928. Assuming that 92.5 per cent of the children under 10 were also illiterate in 1918 and that all persons of unspecified literacy status in 1918 were 10 years old and over, then the comparable percentage of illiteracy in 1918 would be

57.6. This would mean an average rate of progress of about 12 per cent per decade during the period 1918-48.

TABLE 55. *Number and percentage of illiterates in the population of Colombia, 10 years old and over: 1918-38*

Census year	Population 10 years old and over		
	Total No. of persons	Persons not able to read	Percentage illiterate
1918	<sup>1</sup> 3 846 283	<sup>*2</sup> 2 15 654	*57.6
1928	5 610 715	2 717 585	48.4
1938	<sup>2</sup> 6 112 712	<sup>*2</sup> 2 699 374	44.2

<sup>1</sup> Excluding 158,428 indigenous and 313,179 other persons unspecified for literacy.  
<sup>2</sup> Excluding 4,775 indigenous persons in Norte de Santander, reported as all illiterate.

ILLITERACY BY SEX AND AGE

The percentage of illiteracy among the female population has been higher than among the male by about five per cent. The relative rate of progress, however, has been almost equal for both sexes, with a slight advantage for the male population.

TABLE 56. *Reduction of illiteracy in the population of Colombia, 10 years old and over, by sex: 1918-38*

Sex	Percentage of illiteracy			Reduction of illiteracy 1918-38	Average decennial rate of progress
	1918	1928	1938		
					%
Both sexes	*57.6	48.4	44.2	13.4	12
Male	*54.5	46.2	41.7	12.8	13
Female	*60.4	50.7	46.5	13.9	12

Data for the computation of percentages of illiteracy by certain age groups are available only for 1938. At that census the percentage of illiteracy among all children of school age (7-14 years old) was found to be 57.7, with the percentage for male children (58.3) a little higher than that for female children (57). In the adult age groups, however, the percentages of illiteracy in the female population were higher than those in the male population for both the age groups 15-29 years, and 30 years and over.

PROGRESS OF LITERACY

TABLE 57. *Percentage of illiteracy in the population of Colombia, 7 years old and over, by sex and broad age groups: 1938*

Age group	Percentage of illiteracy		
	Both sexes	Male	Female
7 years and over	47.7	45.7	49.7
7-14	57.7	58.3	57.0
15-29	37.4	35.7	38.9
30 and over	50.2	45.6	54.7

ILLITERACY IN THE URBAN AND RURAL AREAS

Considering only the children of school age (7-14 years), the percentage of illiteracy for all urban areas was 37.2 (male, 37.8; female, 36.7); and for all rural areas was 66.1 (male 66.2; female 65.9). It is seen that the percentage of illiteracy in rural areas, among children of school age, was considerably higher than that in urban areas, thus reflecting the inequality of educational opportunities in the urban and rural areas of the country. Similar comparisons for the adult age groups are not possible, owing to lack of separate data for urban and rural areas.

ILLITERACY AND SEMI-LITERACY

The above analysis is based on the definition of illiteracy as inability to read, which is the only basis possible for comparisons of data from the different censuses of Colombia. In the 1918 census report, however, a separate classification was given of persons 'able to read only', who amounted to 2.0 per cent of the total population (1.7 per cent of the male population; 2.3 per cent of the female). Because of the absence of this classification in the 1938 census, it is not possible to assess the amount of semi-literacy in the population at that time. Since the criterion of literacy in most countries is 'ability both to read and write', it should be noted that the extent of illiteracy in Colombia, as given in the tables above, is understated by an unknown amount, perhaps about two per cent.

## CUBA: 1899-1943

## CRITERION OF LITERACY

Definitions of literacy and illiteracy are not available for the censuses prior to 1943. However, the literacy tabulations in the various census reports enable certain interpretations to be made of the criterion of literacy used in those censuses.

In the census report for 1899, the total population was classified as follows:

<i>Total population</i> . . . . .	1 572 797
Under 10 years of age:	
Attended school . . . . .	40 559
Did not attend school . . . . .	316 428
10 years of age and over:	
Attended school . . . . .	47 376
Can neither read nor write . . . . .	690 565
Can read, but cannot write . . . . .	32 772
Can read and write . . . . .	443 670
Not stated . . . . .	1 427

In connexion with the summary table on literacy, it was stated that all children attending school were assumed able to read and write, and that all those under 10 years of age and not attending school were assumed not able to read.

In the census of 1907, the population was classified by literacy as follows:

<i>Total population</i> . . . . .	2 048 980
Under 10 years of age:	
Attending school . . . . .	64 111
Not attending school . . . . .	503 296
10 years of age and over:	
Attending school . . . . .	107 258
Not attending school:	
Literate . . . . .	725 894
Illiterate . . . . .	643 615
Not stated . . . . .	4 806

Again it was stated that no serious error could be made by assuming that all children attending school were able to read and all under 10 years of age and not attending school were not able to read.

A similar assumption seems to have been made in the 1919 census. Information is not available as to the criterion of literacy used at the 1931 census. The 1943 census contained the

## PROGRESS OF LITERACY

question, 'Can you read and write?', to be answered 'yes' for all persons 7 years old and over who could read and write in any language.

However, the results were tabulated to show only the number and percentage of persons able to read.

### ILLITERACY IN THE TOTAL POPULATION

The available data on the number and percentage of illiterates in the population 10 years old and over, at each census between 1899 and 1943 are summarized in Table 48.

TABLE 48. *Number and percentage of illiterates in the population of Cuba, 10 years old and over: 1899-43*

Census year	Population 10 years old and over		
	Total No. of persons	Persons not able to read	Percentage illiterate
1899	1 214 383	<sup>2</sup> 690 565	56.9
1907	1 476 767	<sup>2</sup> 643 615	43.6
1919	2 029 824	<sup>2</sup> 784 659	38.7
1931	2 920 392	824 556	28.2
1943	3 340 148	789 301	23.6

<sup>1</sup> Excluding persons unspecified for literacy, numbering 1,427 in 1899; 4,806 in 1907; 12,147 in 1919; 4,145 in 1931; 235,286 in 1943.

<sup>2</sup> Not attending school and not able to read.

Thus, if the criterion of literacy is taken as ability to read, the progress of literacy between 1899 and 1943 may be shown by the reduction of the illiteracy rate from 56.9 to 23.6 per cent in 44 years at an average relative rate of progress of 18 per cent per decade.

### REDUCTION OF ILLITERACY, BY SEX

The female population had a higher percentage of illiteracy than the male between 1899 and 1919, but in more recent years it seems to have outstripped the male population in literacy. The average decennial rate of progress among the female population for the entire period 1899-1943 was 21 per cent, compared with 17 per cent among the male.

TABLE 59. *Reduction of illiteracy in the population of Cuba, 10 years old and over, by sex: 1899-1943*

Sex	Percentage of illiteracy					Reduction of illiteracy 1899-1943	Average decennial rate of progress
	1899	1907	1919	1931	1943		
Both sexes	56.9	43.6	38.7	28.2	23.6	33.3	% 18
Male <sup>1</sup>	55.4	41.7	37.9	29.9	24.9	30.5	17
Female <sup>1</sup>	58.3	45.4	39.0	26.1	22.2	36.1	21

<sup>1</sup> Percentage of illiteracy, 1899-1931, based on total population including persons of literacy unspecified.

In this connexion the census report of 1943 offers the following observations:

'It is observed that, both in 1931 and in 1943, the proportion of literates was higher among female persons in every province except Pinar del Rio. This is due essentially to the fact that boys start to work at younger ages and in larger numbers than girls, thus affecting their education. Girls, working at home and generally under more severe discipline from their parents, have more opportunity than boys to acquire the rudiments of knowledge. The exception of Pinar del Rio—and to a certain degree that of Havana, where the proportion of literate persons is about equal among males and females—could be due to the same reason, that is, the proportion of women who work is larger in these two provinces than in the others.' (*Censo de 1943*, p. 780.)

#### ILLITERACY AMONG DIFFERENT ETHNIC GROUPS

Still more marked are the differences in the extent of illiteracy among the various ethnic groups. The census reports give separate figures on literacy for the native white, foreign white and coloured groups. In 1899, these groups constituted 55 per cent, 11 per cent and 33 per cent respectively. The proportions at the 1943 census were: native white 71 per cent; foreign white 4 per cent; coloured 25 per cent. The respective rates of progress among these population groups are shown in Table 60.

The coloured group started in 1899 with a much higher illiteracy rate than the two white groups, but by 1943 the gap had been all but closed. However, the Cuban census report of 1943 observes that the apparent increase of literacy among the coloured population between 1931 and 1943 was due to a decrease in the number

PROGRESS OF LITERACY

TABLE 60. *Reduction of illiteracy in the population of Cuba, 10 years old and over, by ethnic groups and by sex: 1899-1943*

Ethnic group and sex	Percentage of illiteracy <sup>1</sup>				Reduction of illiteracy 1899-1943	Average decennial rate of progress
	1899	1907	1919	1943		
<i>Native white</i>						%
Both sexes	53.4	41.4	37.3	22.4	31.0	18
Male	55.0	42.0	37.8	23.5	31.5	17
Female	51.8	40.8	36.9	21.1	30.7	20
<i>Foreign white</i>						
Both sexes	29.3	25.6	24.7	22.4	6.9	6
Male	25.4	22.3	22.7	20.4	5.0	5
Female	46.9	39.9	30.7	26.0	20.9	13
<i>Coloured</i>						
Both sexes	72.0	55.0	46.9	27.4	44.6	20
Male	73.8	55.3	48.1	30.0	43.8	19
Female	70.4	54.6	45.6	25.0	45.4	21

<sup>1</sup> For 1899-1919, based on total population including persons of literacy unspecified.

of illiterate persons among them as a consequence of the expulsion from Cuba of many Haitians and Jamaicans, among whom the proportion of illiterates was relatively higher.

Again according to the census report, the illiteracy rate among the foreign white population had been affected by a change in the nationality law, by which persons born in Cuba of foreign parents were classified as natives and not as foreigners in the 1943 census. Since the proportion of illiterates was relatively lower among such persons, this had the effect of decreasing the percentage of illiteracy among the native white group and increasing the percentage among the foreign white group.

ILLITERACY IN THE URBAN POPULATION

As is to be expected, the illiteracy rates among the population in the larger cities have been consistently lower than in the country as a whole. The census report for 1907 did not give separate literacy figures for cities other than Havana, which showed an illiteracy rate of 16.1 per cent among the population 10 years old and over. From the other census reports, it is possible to compare the illiteracy rates among the population in all cities of 25,000 or more inhabitants. The rate of progress in the five largest cities



has been in each case greater than the rate for the population of Cuba as a whole.

TABLE 61. *Reduction of illiteracy in the population of Cuba, 10 years old and over, in cities of 25,000 or more inhabitants: 1899-1943*

City	Percentage of illiteracy <sup>1</sup>				Reduction of illiteracy 1899-1943	Average decennial rate of progress
	1899	1919	1931	1943		
						%
Havana	24.9	14.0	7.4	5.4	19.5	29
Santiago	30.5	13.5	8.7	7.5	23.0	27
Cienfuegos	30.2	14.7	10.8	7.8	22.4	26
Camagüey	26.2	15.7	9.6	8.0	18.2	24
Matanzas	33.5	18.8	11.3	8.8	24.7	26
Guanabacoa	.	.	.	8.8	.	.
Guantánamo	.	.	11.6	10.7	.	.
Santa Clara	.	.	12.5	10.8	.	.
Cárdenas	.	19.8	13.5	11.4	.	.
Sancti-Spiritus	.	.	.	11.7	.	.
Pinar del Rio	.	.	.	13.3	.	.
Holguin	.	.	.	15.7	.	.
Manzanillo	.	.	15.4	17.3	.	.
Marianao	.	17.0	9.4	25.1	.	.

<sup>1</sup> For 1919-43, based on total population including persons of literacy unspecified.

If all the cities of 25,000 or more inhabitants are compared with the rest of the country, it is seen that the rate of progress registered by the cities is 22 per cent per decade, as compared with 14 per cent per decade for the rest of the country.

TABLE 62. *Reduction of illiteracy in the population of Cuba, 10 years old and over, in cities of 25,000 or more inhabitants, and in the rest of the country: 1899-1943*

Census year	No. of cities of 25,000 or more inhabitants	Percentage of literacy	
		In cities of 25,000 or more	In rest of the country
1899	5	26.8	66.7
1919	7	14.8	46.3
1931	10	8.9	35.6
1943	14	9.1	33.8
Reduction in percentage of illiteracy: 1899-1943		17.7	32.9
Average decennial rate of progress		22 %	14 %

PROGRESS OF LITERACY

ILLITERACY IN DIFFERENT AGE GROUPS

Data for comparison of illiteracy by detailed age groups are available only for the three earlier censuses. If, for the present purpose, 'able to read, or attending school' is taken as the criterion of literacy, then the data for 1899, 1907 and 1919 may be compared by sex and age groups as shown in Table 63.

TABLE 63. *Reduction of illiteracy in the population of Cuba, 10 years old and over, by sex and age groups: 1899-1919*

Sex and age group	Percentage of illiteracy <sup>1</sup>			Reduction of illiteracy 1899-1919	Average decennial rate of progress
	1899	1907	1919		
<b>Male</b>					%
<i>10 years and over</i>	55.4	41.7	37.9	17.5	17
10-14	66.9	30.3	49.8	17.1	14
15-19	56.9	34.6	32.0	24.9	25
20-24	48.3	39.0	27.1	21.2	25
25-34	47.7	40.3	27.9	19.8	24
35-44	50.1	44.5	37.1	13.0	14
45-54	56.7	50.0	43.3	13.4	13
55-64	65.2	58.0	50.9	14.3	12
65 and over	72.3	69.0	62.0	10.3	7
<b>Female</b>					
<i>10 years and over</i>	58.3	45.4	39.0	19.3	18
10-14	60.9	28.4	43.2	17.7	16
15-19	51.5	31.0	25.5	26.0	30
20-24	51.1	41.3	25.3	25.8	30
25-34	55.8	48.0	31.9	23.9	24
35-44	60.7	54.8	45.1	15.6	14
45-54	66.2	60.7	52.2	14.0	11
55-64	68.3	63.9	56.8	11.5	9
65 and over	71.5	68.0	63.6	7.9	6

<sup>1</sup> Based on total population including persons of literacy unspecified.

The female population in the two youngest age groups had lower illiteracy rates than the male, and registered a higher rate of progress during the two decades between the censuses of 1899 and 1919. In 1919, the females also surpassed the males in the 20-24 age group by showing a higher rate of progress. The effect of this is seen in the fact that in the next two censuses the illiteracy rate for the female population fell below that for the males (see Table 59 on page 79).

## EGYPT: 1907-37

## CRITERION OF LITERACY

The question on literacy in the censuses of Egypt is confined to persons 5 years old and over. As defined by the census department, illiterates are persons not able both to read and to write. The census schedule for 1917 contained two separate questions: 'Whether the enumerated person is able to read fluently a printed paper in some one language', and 'Whether the enumerated person is able to write by himself or from dictation a short letter in some one language.'

## ILLITERACY IN THE TOTAL POPULATION

From available census reports we obtain the number and percentage of illiterates in the census years 1907, 1917, 1927 and 1937 as shown in Table 64.

TABLE 64. *Number and percentage of illiterates in the population of Egypt, 5 years old and over and 10 years old and over: 1907-37*

Census years	Total No. of persons <sup>1</sup>	Persons not able to read and write	Per cent illiterate
<b>Population 5 years old and over</b>			
1907	9 413 539	8 804 373	93.5
1917	<sup>2</sup> 10 814 061	9 950 855	92.0
1927	<sup>2</sup> 12 124 564	10 453 669	86.2
1937	<sup>2</sup> 13 812 228	11 241 732	81.4
<b>Population 10 years old and over</b>			
1907	7 848 024	7 277 303	92.7
1917	9 161 944	8 357 461	91.2
1927	<sup>3</sup> 10 268 404	8 816 601	85.9
1937	<sup>3</sup> 11 603 488	9 885 300	85.2

<sup>1</sup> Excluding the nomadic population, estimated at 40,000 in 1927 and 12,000 in 1937.

<sup>2</sup> Excluding persons unspecified for literacy, numbering 150,003 in 1917; 22,605 in 1927 and 892 in 1937.

<sup>3</sup> Excluding persons unspecified for literacy, 19,374 in 1927; 785 in 1937.

It is seen that although the percentage of illiteracy has steadily decreased during the three decades, the number of illiterates has been steadily increasing. Obviously the educational facilities

## P R O G R E S S   O F   L I T E R A C Y

of the country have not been enough to meet the demands of a growing population.

Table 65 shows the reduction in percentage of illiteracy and the decennial rate of progress for each of the intercensal decades. The total reduction amounts to 7.5 per cent in 30 years. The average rate of progress is three per cent per decade.

TABLE 65. *Reduction of illiteracy in the population of Egypt, 10 years old and over, by decennial periods: 1907-37*

Period	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
1907-17	92.7	91.2	1.5	2
1917-27	91.2	85.9	5.3	6
1927-37	85.9	85.2	0.7	1
1907-37	92.7	85.2	7.5	3

To prevent the number of illiterates from growing during this period would have taken an average rate of progress of about 12 per cent per decade. Only if the rate of progress had been more than that could the number of illiterate persons have been reduced.

### R E D U C T I O N   O F   I L L I T E R A C Y ,   B Y   S E X

Considering the progress of literacy separately for each sex, it is found that while the male illiteracy rate fell about 10 per cent, the female rate fell less than five per cent in the same period of time. The average rate of progress was four per cent per decade for the male population, and two per cent per decade for the female.

TABLE 66. *Reduction of illiteracy in the population of Egypt, 10 years old and over, by sex: 1907-37*

Sex	Percentage of illiteracy				Reduction of illiteracy 1907-37	Average decennial rate of progress
	1907	1917	1927	1937		
Both sexes	92.7	91.2	85.9	85.2	7.5	3
Male	87.0	84.8	76.1	76.6	10.4	4
Female	98.6	97.7	95.6	93.9	4.7	2

## ILLITERACY BY NATIONALITY

The foreign population, constituting less than two per cent of the total population of Egypt, has a much lower illiteracy rate than the Egyptians. Their rate of progress also has been correspondingly higher, as shown in Table 67.

TABLE 67. *Reduction of illiteracy in the population of Egypt, 5 years old and over, by nationality and sex: 1917-37*

Nationality and sex	Percentage of illiteracy			Reduction of illiteracy 1917-37	Average decennial rate of progress
	1917	1927	1937		
<i>Total population</i>					%
<i>Both sexes</i>	92.0	86.2	81.4	10.6	6
<i>Male</i>	86.5	77.1	72.8	13.7	8
<i>Female</i>	97.9	95.3	90.0	7.9	4
<i>Egyptian</i>					
<i>Both sexes</i>	93.0	87.4	82.2	10.8	6
<i>Male</i>	87.3	78.2	73.6	13.7	8
<i>Female</i>	98.8	96.5	90.9	7.9	4
<i>Foreign</i>					
<i>Both sexes</i>	41.9	25.5	19.1	22.8	32
<i>Male</i>	34.7	19.3	12.8	21.9	39
<i>Female</i>	48.9	31.7	25.1	23.8	28

## ILLITERACY IN DIFFERENT AGE GROUPS

In general, the illiteracy rate is highest in the oldest age group, and becomes lower with each younger age group, thus showing the effects of improved educational opportunities as each new generation passes through the school-going ages. The reduction of illiteracy within each age group over a period of years shows the extent to which an earlier, more illiterate generation, is being replaced by a newer, less illiterate group of persons. Table 68 shows that this improvement is more evident among the male population than among the female.

When each cohort, or group of persons born within a specified period of time, is followed through successive census years, then the reduction of illiteracy tends to show how each particular group of persons becomes more literate, either from the benefits of school education or from other means. Thus Table 69 shows that male persons who were 10-19 years old in 1917 (cohort III m.) had

PROGRESS OF LITERACY

TABLE 68. *Reduction of illiteracy in the population of Egypt, 10 years old and over, by sex and age groups: 1917-37*

Sex and age group	Percentage of illiteracy			Reduction of illiteracy 1917-37	Average decennial rate of progress
	1917	1927	1937		
<b>Male</b>					
<i>10 years and over</i>	84.8	76.1	76.6	8.2	% 5
10-19	84.2	75.7	74.2	10.0	6
20-29	82.6	73.6	75.7	6.9	4
30-39	84.7	75.3	76.8	7.9	5
40-49	84.1	76.3	77.3	6.8	4
50-59	85.0	76.9	78.8	6.2	4
60 and over <sup>1</sup>	91.0	83.1	83.3	7.7	4
<b>Female</b>					
<i>10 years and over</i>	97.7	95.6	93.9	3.8	2
10-19	96.3	92.0	87.4	8.9	5
20-29	97.5	95.2	94.2	3.3	2
30-39	98.1	96.6	96.4	1.7	1
40-49	98.5	97.1	97.0	1.5	1
50-59	98.8	97.6	97.5	1.3	1
60 and over <sup>1</sup>	99.4	98.4	98.4	1.0	1

<sup>1</sup> Including age unknown.

improved in literacy by 13 per cent during the next decade, and male persons who were 20-29 years old in 1917 (cohort II<sub>m</sub>.) had improved at the rate of nine per cent during the decade.

TABLE 69. *Reduction of illiteracy in the population of Egypt among selected cohorts: 1917-37*

Cohort	Percentage of illiteracy			Reduction of illiteracy <sup>1</sup>		Decennial rate of progress	
	1917	1927	1937	1917-27	1927-37	1917-27	1927-37
<b>I. Persons born 1878-87</b>						%	%
Im. Male	84.7	76.3	.	8.4	.	10	.
If. Female	98.1	97.1	.	1.0	.	1	.
<b>II. Persons born 1888-97</b>							
II <sub>m</sub> . Male	82.6	75.3	77.3	7.3	(+) 2.0	9	.
II <sub>f</sub> . Female	97.5	96.6	97.0	0.9	(+) 0.4	1	.

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

## FINLAND: 1900-30

Cohort	Percentage of illiteracy			Reduction of illiteracy <sup>1</sup>		Decennial rate of progress	
	1917	1927	1937	1917-27	1927-37	1917-27	1927-47
III. Persons born 1898-1907						%	%
III <sub>m</sub> . Male	84.2	73.6	76.8	10.6	(+) 3.2	13	.
III <sub>f</sub> . Female	96.3	95.2	96.4	1.1	(+) 1.2	1	.
IV. Persons born 1908-17							
IV <sub>m</sub> . Male	.	75.7	75.7	.	—	.	0
IV <sub>f</sub> . Female	.	92.0	94.2	.	(+) 2.2	.	.

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

Even those who were already long past school age (cohort I<sub>m</sub>.) showed similar improvement. In the case of female persons, however, there was very little progress (one per cent) during the same period of time. Between 1927 and 1937 each cohort seems to have increased in illiteracy, with the possible exception of cohort IV<sub>m</sub>, whose illiteracy percentage remained unchanged.

## CONSISTENCY AND RELIABILITY OF DATA

Some relapse into illiteracy owing to lack of practice may indeed have occurred among the older age groups, but it is astonishing to find such a condition among young persons, 10-19 years old for instance, who must be presumed to have acquired their knowledge of reading and writing only recently. One may be led to suppose that there had been either serious errors in the census results, or else a marked change in the application of a criterion of literacy as between the 1927 and 1937 censuses.

## FINLAND: 1900-30

## CRITERION OF LITERACY

Census reports from Finland give data on the literacy of persons under 15 years of age and those 15 years old and over, classified in the following groups: persons having received more than primary education; other persons able to read and write; persons able to read only; persons unable either to read or to write.

For the purpose of the present study, the first two groups will

## PROGRESS OF LITERACY

be considered as literate persons, and the last two groups as illiterate. However, an exceptionally large proportion of the population has been reported as able to read only. Further reference will be made to this fact at the end of this section.

The question on literacy has not been asked in the censuses taken after 1930.

### ILLITERACY IN THE TOTAL POPULATION

Referring to the population 15 years old and over, the extent of illiteracy, defined as inability both to read and to write, has decreased from 61.2 per cent in 1900, to 15.9 per cent in 1930. This represents an average rate of progress of about 36 per cent per decade in the reduction of illiteracy during this period of 30 years.

TABLE 70. *Number and percentage of illiterates in the population of Finland, 15 years old and over: 1910-30*

Census year	Population 15 years old and over		
	Total No. of persons	Persons not able to read and write	Per cent illiterate
1900	1 775 626	1 087 216	61.2
1910	1 874 036	837 777	44.7
1920	2 057 227	619 367	30.1
1930	2 375 102	377 085	15.9

### ILLITERACY AMONG THE MALE AND FEMALE POPULATION

Comparative figures for the male and female populations 15 years old and over for the census years between 1900 and 1930 show an

TABLE 71. *Reduction of illiteracy in the population of Finland, 15 years old and over, by sex: 1900-30*

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
1900-10				%
Both sexes	61.2	44.7	16.5	27
Male	58.4	42.5	15.9	27
Female	64	46.8	17.2	27



FINLAND: 1900-30

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
1910-20				%
Both sexes	44.7	30.1	14.6	33
Male	42.5	28.9	13.6	32
Female	46.8	31.2	15.6	33
1920-30				
Both sexes	30.1	15.9	14.2	47
Male	28.9	15.1	13.8	48
Female	31.2	16.6	14.6	47
1900-1930				
Both sexes	61.2	15.9	45.3	36
Male	58.4	15.1	43.3	36
Female	64.0	16.6	47.4	36

equal rate of progress in the reduction of illiteracy for both sexes. The illiteracy rate for the female population, however, remains slightly above that for the male.

ILLITERACY AMONG THE URBAN AND RURAL POPULATIONS

While the difference in illiteracy rates has not been great between the male and female population, considerable difference does exist between the urban and rural population. For persons 15 years old and over, the percentage of illiteracy among the urban and rural population for all the census years between 1900 and 1930 are shown in Table 72. It is noteworthy that illiteracy in

TABLE 72. *Reduction of illiteracy in the urban and rural population of Finland, 15 years old and over, by sex: 1900-30*

Area and sex	Percentage of illiteracy				Reduction in percentage of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
Urban						%
Both sexes	24.0	15.1	9.4	4.3	19.7	44
Male	21.1	13.7	7.7	3.3	17.8	46
Female	26.9	16.2	10.6	5.0	21.9	43
Rural						
Both sexes	67.0	50.3	34.5	19.0	48.0	34
Male	63.8	47.4	32.9	17.9	45.9	35
Female	70.3	53.1	36.1	20.0	50.3	34

## PROGRESS OF LITERACY

rural areas has been greatly reduced during the period of 30 years, though the relative rate of progress was still higher for urban areas. The proportion of the population of Finland living in rural areas, however, has decreased from 87.5 per cent in 1900 to 81.6 per cent in 1930.

### ILLITERACY AMONG LINGUISTIC GROUPS

The two chief linguistic groups—Finnish and Swedish—made up over 99.5 per cent of the population of Finland in 1930, with the Finnish group alone accounting for 89.4 per cent. The other linguistic groups, with their reported percentages of population in 1930, are: Russian (0.2), German (0.1), Lapp and other (0.1). The amount and rate of reduction of illiteracy among these linguistic groups, in the census years 1900-30, are given in Table 73.

TABLE 73. *Reduction of illiteracy in the population of Finland, 15 years old and over, by linguistic groups: 1900-30*

Linguistic group	Percentage of illiteracy				Reduction in percentage of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
<i>All groups</i>	61.2	44.7	30.1	15.9	45.3	% 36
Finnish	63.9	46.9	31.9	16.8	47.1	36
Swedish	45.9	29.5	16.8	8.6	37.3	43
Russian	16.4	22.7	16.0	6.1	10.3	28
German	0.9	0.9	0.3	0.2	0.7	39
Lapp	69.2	55.5	26.8	34.4	34.8	21
Other	27.6	20.2	22.1	10.7	16.9	27

### LITERACY, SEMI-LITERACY AND ILLITERACY

As stated at the beginning of this section, the census reports of Finland classify separately persons having received more than primary education, other persons able to read and write, persons able to read only, and persons unable either to read or to write. In all the foregoing analyses, the proportion of persons who cannot both read and write has been taken as indicating the extent of illiteracy in the various population groups.

Figures on the illiterate population of Finland have frequently been published, but they refer only to those persons unable to

read, thus leaving out the group of semi-literates, i.e. those who can read but not write. In order to show the numerical importance of this group in the population of Finland, Table 74 gives the number and percentage of persons in each of the categories by level of education or literacy, for the census years 1910, 1920 and 1930.

TABLE 74. *Population of Finland, 15 years old and over, by sex and level of education or literacy: 1910-30*

Sex and level of education or literacy	Population 15 years old and over					
	1910		1920		1930	
	Number	Per cent	Number	Per cent	Number	Per cent
<b>Both sexes</b>						
<i>Total population</i>	1 874 036	100.0	2 057 227	100.0	2 375 102	100.0
Persons having more than primary education	93 885	5.0	109 163	5.3	156 878	6.6
Other persons able to read and write	942 374	50.3	1 328 697	64.6	1 841 139	77.5
Able to read only	816 217	43.6	598 821	29.1	355 228	15.0
Not able to read or write	21 560	1.1	20 546	1.0	21 857	0.9
<b>Male</b>						
<i>Total population</i>	904 388	100.0	978 644	100.0	1 139 375	100.0
Persons having more than primary education	46 551	5.1	53 220	5.4	73 258	6.4
Other persons able to read and write	473 387	52.3	642 226	65.6	894 290	78.5
Able to read only	373 367	41.3	272 274	27.8	160 147	14.1
Not able to read or write	11 083	1.2	11 024	1.1	11 680	1.0
<b>Female</b>						
<i>Total population</i>	969 648	100.0	1 078 583	100.0	1 235 727	100.0
Persons having more than primary education	47 334	4.9	55 943	5.2	83 620	6.8
Other persons able to read and write	468 987	48.4	686 471	63.6	946 849	76.6
Able to read only	442 850	45.7	326 647	30.3	195 081	15.8
Not able to read or write	10 477	1.1	9 522	0.9	10 177	0.8

## PROGRESS OF LITERACY

It will be seen that the sums of the figures in the last two categories of Table 74 correspond to the percentages of illiteracy as given in Table 70 and 71. On the other hand, the number and percentage of illiterates given in the publications of the International Statistical Institute and of the United Nations, relating to the censuses of 1920 and 1930, correspond only to those given in the last category of Table 74, and do not in fact represent the proportion of the population who were not fully literate as defined in this study.

### FRANCE: 1901-46

#### CRITERION OF LITERACY AND METHOD OF TABULATION

The census schedule for the 1901 census had one question on literacy: 'Can you read and write?' In the subsequent censuses from 1911 to 1936 the question was amended to: 'Can you both read and write?' For the 1946 census the literacy question was divided into two parts: 'Can you read? (Yes or no); Can you write? (Yes or no).'

The tables on literacy given in the various census reports show that all persons not able both to read and to write, including those who can read only, are considered as illiterate. Thus the definition of illiteracy is consistent throughout the various censuses during this period.

The returns for 1901 and 1911 were tabulated for each sex, both by year of birth and by age, in five year age groups. For the censuses of 1921-36, however, literacy data are only available for three broad age groups: less than 5, 5-9, 10 and over, the last group including those of unknown age. The only tabulation so far available for the 1946 census gives the data for the age groups 5-9, 10-13, 14-59, 60 and over, and age unknown.

In addition, separate figures were given for the French and foreign population in the censuses of 1901 and 1911. From 1921 to 1936, the French population was subdivided into native and naturalized persons. Literacy data by nationality are not yet available from the 1946 census.

#### ILLITERACY IN THE TOTAL POPULATION

Considering only the population 10 years old and over, there were 1,115,268 persons who could not both read and write, according

to the 1946 census. This represents 3.4 per cent of the total population at this age level, excluding 1,378,623 persons unspecified for literacy. The percentage of illiteracy in the population 10 years old and over has decreased from 16.5 in 1901 to 3.4 in 1946, a reduction of 13.1 per cent illiteracy in a period of 45 years. In relative terms, the rate of progress between 1901 and 1946 averaged about 30 per cent per decade. In other words, the extent of illiteracy was being reduced every 10 years by about 30 per cent of the amount remaining at the beginning of each decade.

TABLE 75. *Number and percentage of illiterates in the population of France, 10 years old and over: 1901-46*

Census year	Population 10 years old and over		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Per cent illiterate
1901	31 082 932	5 128 299	16.5
1911	31 810 124	3 792 566	11.9
1921	32 437 082	2 657 271	8.2
1926	33 120 971	2 026 222	6.1
1931	32 919 488	1 730 809	5.3
1936	33 486 667	1 326 469	4.0
1946	32 853 800	1 115 268	3.3

<sup>1</sup> Excluding persons unspecified for literacy, whose numbers range from 579,916 in 1901 to 1,378,623 in 1946.

In this connexion, it must be observed that an unusually large number of persons have been returned at each census as unspecified for literacy. This number was 579,916 in 1901 and increased with each successive census until, in 1946, it actually exceeded the number of persons returned as illiterates! What the true percentage of illiteracy would be if all such persons had been classified by literacy can only be guessed, but it is obviously a point for consideration in interpreting the percentage shown in Table 75.

#### REDUCTION OF ILLITERACY, BY SEX

When each sex is considered separately, it is seen that, although the female population had a larger percentage of illiteracy in 1901 than the male, they came to be almost equal in 1946. Thus the

PROGRESS OF LITERACY

relative rate of progress among the female population (31 per cent reduction per decade) is higher than the male rate of progress (27 per cent per decade).

TABLE 76. *Reduction of illiteracy in the population of France, 10 years old and over, by period and sex: 1901-46*

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
	At beginning of period	At end of period		
1901-11				%
Both sexes	16.5	11.9	4.6	28
Male	13.5	9.7	3.8	28
Female	19.4	14.1	5.3	27
1911-21				
Both sexes	11.9	8.2	3.7	31
Male	9.7	6.9	2.8	29
Female	14.1	9.3	4.8	34
1921-31				
Both sexes	8.2	5.3	2.9	35
Male	6.9	4.8	2.1	30
Female	9.3	5.7	3.6	39
1931-46				
Both sexes	5.3	3.4	1.9	26
Male	4.8	3.2	1.6	24
Female	5.7	3.6	2.1	26
1901-46				
Both sexes	16.5	3.4	13.1	30
Male	13.5	3.2	10.3	27
Female	19.4	3.6	15.8	31

REDUCTION OF ILLITERACY AMONG CHILDREN 5-9 YEARS OLD

Since detailed data on literacy by age are not available for any census after 1911, it is not possible to analyse the reduction of illi-

TABLE 77. *Percentage of illiteracy among children in France, 5-9 years old, by sex: 1901-46*

Sex	Percentage of illiteracy						
	1901	1911	1921	1926	1931	1936	1946
Both sexes	30.9	29.0	22.7	31.1	20.0	20.2	16.3
Male	31.5	29.4	23.4	31.7	20.6	20.5	17.4
Female	30.3	28.5	22.0	30.5	19.3	19.8	15.3

teracy among each separate age group, except the group of children 5-9 years old. Table 77 shows the amount and rate of progress in the reduction of illiteracy among this age group as a whole and for each sex.

It may be observed that among young children of this age, the percentage of illiteracy is merely a measure of the proportion not attending school. The census reports for 1901 and 1911 noted the fact that, up to the ages of 20 and 25 respectively in those years, the girls were less illiterate than the boys, indicating that boys were attending school less assiduously, either because they were more useful to their parents at home or for other reasons. Whatever the reason, this condition seems to have persisted to the present time.<sup>1</sup>

#### REDUCTION OF ILLITERACY, BY NATIONALITY

Throughout the period under consideration, the percentage of illiteracy among the foreign population of France has been notably higher than among the French, whether native or naturalized. The proportion of the total population 10 years old and over by these national groups at each census between 1901 and 1936 is given in Table 78, and the respective percentages of illiteracy among these groups are shown in Table 79.

TABLE 78. *Distribution of the population of France, 10 years old and over, enumerated for literacy, by nationality: 1901-36*

Census year	Percentage of population 10 years old and over			Foreign
	French		Naturalized	
	Native			
1901		97.2		2.8
1911		96.9		3.1
1921	95.4		0.7	3.9
1926	93.5		0.7	5.8
1931	92.5		1.0	6.5
1936	93.1		1.4	5.5

It is seen that between 1921 and 1936, native French persons showed a uniform rate of progress of 44 per cent per decade and, the comparable rates of progress for naturalized and foreign persons were 17 and 14 respectively.

<sup>1</sup> The census of 1946 also shows, for the age group 10-13, excluding some 170,000 unspecified cases, the following number and percentage of illiterates of each sex: boys (10-13), 15,979 illiterates (1.4 per cent); girls (10-13), 11,895 (illiterates 1.1 per cent).

PROGRESS OF LITERACY

TABLE 79. *Reduction of illiteracy in the population of France, 10 years old and over, by sex and by nationality: 1901-36*

Sex and nationality	Percentage of illiteracy						Reduction of illiteracy 1921-36	Average decennial rate of progress
	1901	1911	1921	1926	1931	1936		
Both sexes								
<i>All classes</i>	16.5	11.9	8.2	6.1	5.3	4.0	4.2	38
French: Native	16.3	11.7	7.8	5.5	4.4	3.3	4.5	44
Naturalized			10.7	10.0	8.9	8.1	2.6	17
Foreign	22.9	19.5	17.8	15.7	16.2	14.3	3.5	14
Male								
<i>All classes</i>	13.5	9.7	6.9	5.3	4.8	3.5	3.4	36
French: Native	13.2	9.4	6.4	4.4	3.7	2.7	3.7	44
Naturalized			8.7	8.8	7.4	6.9	1.8	14
Foreign	21.7	18.5	17.6	15.6	16.2	14.5	3.1	12
Female								
<i>All classes</i>	19.4	14.1	9.3	6.9	5.7	4.3	5.0	40
French: Native	19.3	13.9	9.0	6.4	5.1	3.8	5.2	44
Naturalized			11.9	10.7	10.0	9.0	2.9	17
Foreign	24.3	20.8	18.1	15.8	16.3	13.9	4.2	16

GREECE: 1907-46

CRITERION OF LITERACY AND AVAILABILITY OF DATA

The census question on literacy relates to a person's ability both to read and write. Data are available only from the census reports for 1907, 1920 and 1928. Results of the last two censuses, taken in 1940 and 1951, have not yet been tabulated. Some figures on illiteracy in 1946 are taken from a report based on a population sample survey conducted by the Second Allied Mission for the Observation of Greek Elections.<sup>1</sup>

ILLITERACY IN THE TOTAL POPULATION

According to the 1907 census there were 1,219,730 persons 8 years old and over who were unable to read and write. This

<sup>1</sup> 'A Population Sample for Greece', by Jessen, Blythe, Kempthorne and Deming, in the *Journal of the American Statistical Association*, Washington, D.C., Vol. 42, 1947, pp. 357-84.



was 59.7 per cent of the total population at that age level. This percentage was reduced to 45.7 in 1920, referring to the population within the same boundaries as at the 1907 census.

With the addition of a large population as a result of territorial changes after the Balkan wars and the first world war, the number of illiterates almost doubled, and the illiteracy rate was increased to 51.6 per cent. This was again reduced to 40.9 per cent in 1928, the latest year for which census data on illiteracy are available.

TABLE 80. *Number and percentage of illiterates in the population of Greece, 8 years old and over: 1907-28*

Census year	Population 8 years old and over		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
1907	2 042 077	1 219 730	59.7
1920 <sup>2</sup>	2 316 442	1 058 615	45.7
1920 <sup>3</sup>	4 007 005	2 066 666	51.6
1928	4 908 181	2 009 709	40.9

<sup>1</sup> Excluding persons of literacy unspecified.  
<sup>2</sup> Old boundaries, i.e. excluding territories added to Greece after the Balkan wars and the first world war.  
<sup>3</sup> New boundaries, i.e. according to the Treaty of Lausanne.

REDUCTION OF ILLITERACY, BY SEX

Illiteracy has been more prevalent among the female than among the male population throughout the period under consideration.

TABLE 81. *Reduction of illiteracy in the population of Greece, 8 years old and over, by sex: 1907-28*

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
	At beginning of period	At end of period		
1907-20 <sup>1</sup>				%
Both sexes	59.7	45.7	14.0	19
Male	39.7	26.3	13.4	27
Female	79.7	64.8	14.9	15

Old boundaries.

PROGRESS OF LITERACY

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
	At beginning of period	At end of period		
1920-28 <sup>1</sup>				%
Both sexes	51.6	40.9	10.7	25
Male	34.0	23.5	10.5	37
Female	68.8	58.0	10.8	19
1907-28	(Average of rates for above two periods)			
Both sexes				22
Male				32
Female				17

<sup>1</sup> New boundaries.

Also, the relative rate of progress has been higher for the males, who showed an average rate of progress of 32 per cent per decade, as against 17 per cent per decade for the females.

ILLITERACY IN DIFFERENT AGE GROUPS

Table 82 shows the reduction of illiteracy by sex and age groups for the period 1907-28. The most rapid progress is shown by the age groups between 8 and 14, both male and female, which

TABLE 82. *Reduction of illiteracy in the population of Greece, 8 years old and over, by sex and age groups: 1907-28*

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1920-28	Average decennial rate of progress 1920-28
	1907	1920 <sup>1</sup>	1920 <sup>2</sup>	1928		
Male					%	%
8 years and over	39.7	26.3	34.0	23.5	10.5	37
8-9	29.3	28.4	35.9	16.4	19.5	62
10-14	26.5	16.9	25.8	10.5	15.3	67
15-19	34.6	16.6	24.4	18.4	6.0	30
20-24	38.3	15.4	20.2	16.3	3.9	24
25-29	39.2	18.1	26.1	15.8	10.3	47
30-39	41.4	26.0	33.8	20.7	13.1	46
40-49	46.6	32.7	40.4	29.9	10.5	31
50-59	50.3	39.2	47.0	35.7	11.3	29
60 and over	56.1	47.3	55.2	47.5	7.7	17

<sup>1</sup> Old boundaries.

<sup>2</sup> New boundaries.

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1920-28	Average decennial rate of progress 1920-28
	1907	1920 <sup>1</sup>	1920 <sup>2</sup>	1928		
Female					%	%
8 years and over	79.7	64.8	68.8	58.0	10.8	19
8-9	67.7	50.4	54.1	27.2	26.9	58
10-14	68.3	46.1	50.2	28.3	21.9	51
15-19	73.0	49.3	54.3	42.2	12.1	27
20-24	76.6	56.1	59.6	47.2	12.4	25
25-29	80.8	63.0	67.3	54.9	12.4	22
30-39	84.2	71.0	75.6	64.8	10.8	18
40-49	87.8	78.3	81.6	74.4	7.2	11
50-59	89.7	82.4	85.5	79.8	5.7	8
60 and over	92.6	86.2	89.3	86.3	3.0	4

<sup>1</sup> Old boundaries.  
<sup>2</sup> New boundaries.

reflects the increased educational opportunities for the children. Both in absolute reduction of the illiteracy rate and in their relative rate of progress, the male groups aged 30 and above did much better than female groups at the same age level. These persons passed their school-going ages near the beginning of the century; evidently the girls at that time did not take as much advantage of the greater opportunities for education as the boys.

ILLITERACY IN URBAN AND RURAL AREAS

If we consider as urban areas all the municipalities and communes of 10,000 or more inhabitants, the illiteracy rate for those areas is

TABLE 83. *Reduction of illiteracy in the population of Greece, 8 years old and over, by urban and rural areas and by sex: 1920-28*

Area and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
	1920	1928		
Urban areas <sup>1</sup>				%
Both sexes	35.1	29.0	6.1	21
Male	23.9	17.2	6.7	34
Female	48.5	41.0	7.5	19
Rural areas <sup>2</sup>				
Both sexes	58.2	46.9	11.3	24
Male	38.7	26.7	12.0	37
Female	76.0	66.4	9.6	16

<sup>1</sup> Municipalities and communes of 10,000 or more inhabitants.  
<sup>2</sup> Rest of the country.

## PROGRESS OF LITERACY

much lower than for the rest of the country. However, rather more progress is noted among the rural population than among the urban between 1920 and 1928, thus lessening the gap between these areas as far as literacy of the population is concerned.

### ILLITERACY IN GREECE, 1946

Since census data on literacy are not available after 1928, it would be useful to examine some figures based on a sample population survey conducted in 1946 by the Second Allied Mission for the Observation of Greek Elections. One of the population characteristics included in the survey was the ability to read and write. The resulting figures, estimated for the total population, are given in Table 84. It must be remembered that they are subject to sampling errors, and provide only rough comparisons with the census data for earlier years.

TABLE 84. Estimated number and percentage of illiterates in the population of Greece, 8 years old and over, by sex and age groups: 1946<sup>1</sup>

Sex and age group	Total No. of persons	Persons not able to read and write	Percentage illiterate
<b>Male</b>			
8 years and over	3 042 000	472 000	15.5
8-13	505 000	95 000	18.8
14-19	479 000	47 000	9.8
20-39	1 056 000	90 000	8.5
40 and over	1 002 000	240 000	24.0
<b>Female</b>			
8 years and over	3 177 000	1 277 000	40.2
8-13	479 000	115 000	24.0
14-19	521 000	89 000	17.1
20-39	1 149 000	358 000	31.2
40 and over	1 028 000	715 000	69.6

<sup>1</sup> Based on a sample population survey conducted by the Second Allied Mission for the Observation of Greek Elections.

In order to assess the progress of literacy in Greece between 1928 and 1946, let us assume that the relative rates of progress found for the period 1920-28 were continued till 1946. Then the percentage of illiteracy for male persons 8 years and over could be estimated at 10.2 in 1946, and for female persons at 39.5. This estimate of the female illiteracy in 1946 agrees fairly well with

the estimate based on the sample survey, but the male illiteracy estimated by this method is much lower than that based on the sample survey.

TABLE 85. Estimated percentage of illiteracy in the population of Greece, 8 years old and over, 1946, based on relative rate of progress, 1920-28, by sex and age groups

Sex and age group	Average decennial rate of progress 1920-28	Percentage of illiteracy		
		At census of 1928	Estimated reduction 1928-46	Estimated for 1946
	%			
Male				
8 years and over	37	23.5	13.3	10.2
8-14	66	12.1	10.4	1.7
15-19	30	18.4	8.7	9.7
20-39	42	18.0	11.2	6.8
40 and over	25	37.3	15.0	22.3
Female				
8 years and over	19	58.0	18.5	39.5
8-14	53	28.0	20.9	7.1
15-19	27	42.2	18.3	23.9
20-39	21	56.7	20.0	36.7
40 and over	8	79.9	10.8	69.1

The greatest discrepancy between the estimates given in Table 85 and those in Table 84, is for the age groups 8-14 in Table 85 and 8-13 in Table 84. Even though the age groups are not identical, the difference between the two sets of estimated percentages for either sex is too great to be explained merely by sampling errors in the population survey. There was most likely a real setback in the progress of literacy on the part of the young children of school age, due to the effects of the recent war.

## HONDURAS: 1926-45

### ILLITERACY IN THE TOTAL POPULATION

The census of 1926 reported a total of 518,240 persons unable to read, this being 73.9 per cent of the total population of all ages. Beginning in 1930, the census tabulations permit the calculation

## P R O G R E S S O F L I T E R A C Y

of percentages of illiteracy, defined as inability either to read or to write, for the population 7 years old and over, or 15 years old and over. Tables 86 and 87 give the number and percentage of illiterates at these age levels for each of the census years 1930, 1935, 1940 and 1945.

TABLE 86. *Number and percentage of illiterates in the population of Honduras, 7 years old and over: 1930-45*

Census year	Population 7 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1930	<sup>1</sup> 668 649	467 005	69.8
1935	770 684	<sup>2</sup> 537 902	69.8
1940	860 409	580 861	67.5
1945	937 748	622 049	66.3

<sup>1</sup> Excluding 849 persons of literacy unspecified.

<sup>2</sup> Persons not able to write.

TABLE 87. *Number and percentage of illiterates in the population of Honduras, 15 years old and over: 1930-45*

Census year	Population 15 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1930	492 046	326 999	66.6
1935	585 419	<sup>1</sup> 394 812	67.4
1940	636 143	415 309	65.3
1945	699 421	445 586	63.7

<sup>1</sup> Persons not able to write.

Among the population 7 years old and over, the percentage of illiteracy decreased from 69.8 in 1930 to 66.3 in 1945, showing an average rate of progress of about three per cent in a decade. The same relative rate of progress is shown if only the population 15 years old and over is considered. On the other hand, it will be observed that the number of illiterate persons has been constantly increasing, which indicates that the opportunities of rudimentary education have not been enough to meet the demands of an increasing population.

REDUCTION OF ILLITERACY, BY SEX

The illiteracy rate for the female population is somewhat higher than for the male, but the female population had a slightly higher rate of progress during the period 1930-45, as shown in Table 88.

TABLE 88. *Reduction of illiteracy in the population of Honduras, 7 years old and over, by sex: 1930-45*

Sex	Percentage of illiteracy				Reduction of illiteracy 1930-45	Average decennial rate of progress
	1930	1935	1940	1945		
Both sexes	69.8	69.8	67.5	66.3	% 3.5	% 3
Male	66.7	67.1	66.1	64.5	2.2	2
Female	72.9	72.5	69.0	68.2	4.7	4

ILLITERACY IN DIFFERENT AGE GROUPS

Tabulations on literacy in the census reports since 1930 give data on the following broad age groups: under 7, 7-14, 15-19, 20-24,

TABLE 89. *Reduction of illiteracy in the population of Honduras, by sex and age groups: 1930-45*

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1930-45 <sup>2</sup>	Average decennial rate of progress
	1930	1935 <sup>1</sup>	1940	1945		
Male					%	%
7 and over	66.7	67.1	66.1	64.5	2.2	2
7-14	78.5	77.0	73.7	73.4	5.1	4
15-19	69.1	68.1	63.1	64.4	4.7	5
20-24	61.1	64.3	57.2	61.6	+ 0.5	.
25 and over	60.1	62.2	64.7	60.2	+ 0.1	.
Unknown	87.5	75.3	95.1	.	.	.
Female						
7 and over	72.9	72.5	69.0	68.2	4.5	4
7-14	79.3	77.5	73.9	74.7	4.6	4
15-19	70.4	71.2	62.7	61.9	8.5	8
20-24	69.7	69.2	60.5	61.1	8.6	8
25 and over	71.0	71.3	70.2	68.7	2.3	2
Unknown	88.2	73.1	96.2	.	.	.

<sup>1</sup> Referring to persons not able to write.

<sup>2</sup> A plus sign in this column indicates increase of illiteracy.

## PROGRESS OF LITERACY

25 and over, and age unknown. Percentages of illiteracy in these age groups, excluding the first, for each of the census years are shown in Table 89.

It may be observed that the lowest percentage of illiteracy is found among male persons 25 years old and over, and among female persons 20-24 years old. The percentage of illiteracy among children 7-14 years old has been consistently higher than for any of the older age groups. This seems to indicate a lack of adequate educational opportunities for this crucial age group, and this is borne out by the fact that the 1945 census report also shows that among children 7-15 years old, 74.4 per cent of the boys, and 76.2 per cent of the girls, were not attending school.

## HUNGARY: 1900-41

### HISTORICAL NOTE

Many changes have occurred in the territorial boundaries of Hungary since the beginning of the century. As far as the census statistics on literacy are concerned, it is possible to present two series of figures—one referring to the territory of the former Kingdom of Hungary at the 1900 and 1910 censuses, from which figures relating to the population of Croatia and Slavonia have been subtracted; the other referring to the territory of Hungary according to the Trianon Treaty, which approximates to the territorial extent of Hungary at the present time.

### CRITERION OF LITERACY

The census reports during the whole period classify the population by literacy according to the following categories, with some variations from one census to another: persons having completed specified levels of schooling (variously given); other persons able to read and write; persons able to read only; persons unable to read or write; persons of literacy unspecified.

In the present analysis, all persons reported as unable either to read or write have been considered as illiterate, and the percentage of illiteracy has been computed, whenever possible, on the total population excluding persons of literacy unspecified.

All children under 6 years of age have been excluded, but per-



sons of unknown age have been included, if their literacy status is given.

ILLITERACY IN THE TOTAL POPULATION

According to the above definitions, the number of illiterate persons 6 years old and over in the old territory of Hungary at the census of 1900 was about five and a half million, this being 38.6 per cent of the total population at that age level. At the census of 1910, the number of illiterates had been reduced to 4.8 million, and the illiteracy rate had gone down to 31.3 per cent. This was a reduction of almost one-fifth of the initial illiteracy rate in the course of a decade.

At the 1920 census, with the loss of large areas and more than half of the population, the illiteracy rate had been further reduced to 15.2 per cent among persons 6 years old and over. This is to be compared with an illiteracy rate of 19.7 per cent in 1910 referring to the same territory as the 1920 census. Thus the rate of progress in the second decennial period was about 23 per cent.

Further progress was reported at the 1930 and 1941 censuses, bringing the illiteracy rate down to 7.4 per cent in 1941. The average decennial rate of progress for the whole period 1900-41 is computed at 26 per cent, taking into consideration the changes in the size of the population involved in the changing of territorial boundaries.

TABLE 90. *Number and percentage of illiterates in the population of Hungary, 6 years old and over: 1900-41*

Census year	Population 6 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1900 <sup>1</sup>	5 141 529	2 000 674	38.6
1910 <sup>1</sup>	4 561 648	1 420 228	31.3
1920 <sup>2</sup>	7 189 272	1 090 715	15.2
1930 <sup>2</sup>	7 621 825	735 076	9.6
1941 <sup>2</sup>	4 837 179	357 605	7.4

<sup>1</sup> Territory of former Kingdom of Hungary, less Croatia and Slavonia.

<sup>2</sup> Excluding 2,839 persons of literacy unspecified.

<sup>3</sup> Territory of Hungary by the Trianon Treaty. The percentage of illiteracy for the same territory in 1910 was 19.7, according to the *Annuaire Statistique Hongrois, 1939*.

<sup>4</sup> Excluding 12,172 persons of literacy unspecified.

PROGRESS OF LITERACY

TABLE 91. *Reduction of illiteracy in the population of Hungary, 6 years old and over, by decennial periods: 1900-41*

Period	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
				%
1900-10 <sup>1</sup>	38.6	31.3	7.3	19
1910-20 <sup>2</sup>	19.7	15.2	4.5	23
1920-30 <sup>2</sup>	15.2	9.6	5.6	37
1930-41 <sup>2</sup>	9.6	7.4	2.2	<sup>3</sup> 23
1900-41	(average decennial rate of progress)			26

<sup>1</sup> Territory of former Kingdom of Hungary, less Croatia and Slavonia.

<sup>2</sup> Territory of Hungary by the Trianon Treaty.

<sup>3</sup> The period between the two censuses, from 31 December 1930 to 31 January 1941, is treated as a decade for this computation.

REDUCTION OF ILLITERACY, BY SEX

The percentage of illiteracy has been consistently higher among the female population, but the gap between the two sexes has been diminishing. While in 1900, female illiteracy was 44.6 per cent compared with a male illiteracy rate of 32.5 per cent, the difference between the illiteracy percentages of the male and female populations in 1941 was only two per cent. During the period 1920-41, the relative rate of progress was about 30 per cent per decade for each sex.

TABLE 92. *Reduction of illiteracy in the population of Hungary, 6 years old and over, by sex: 1900-41*

Sex	Percentage of illiteracy <sup>1</sup>		Percentage of illiteracy <sup>2</sup>			Reduction in percentage of illiteracy 1920-41	Average decennial rate of progress
	1900	1910	1920	1930	1941		
							%
Both sexes	38.6	31.3	15.2	9.6	7.4	7.8	30
Male	32.5	26.6	13.1	7.9	6.4	6.7	30
Female	44.6	35.9	17.1	11.3	8.4	8.7	30

<sup>1</sup> For 1900 and 1910: territory of the former Kingdom of Hungary, less Croatia and Slovenia.

<sup>2</sup> For 1920-41: territory of Hungary by the Trianon Treaty.

ILLITERACY BY LINGUISTIC GROUPS

At the 1920 and 1930 censuses, the total population 6 years old and over was distributed by mother tongue in the following proportions:

	1920 %	1930 %
Hungarian . . . . .	89.4	92.0
German . . . . .	7.0	5.6
Slovak . . . . .	1.8	1.2
Other . . . . .	1.8	1.2

The small differences in the proportional distribution of the population by these major linguistic groups do not invalidate a comparison of their illiteracy rates as given in Table 93. Table 93 shows the German-speaking group to have the lowest rate of illiteracy, followed by the Hungarian-speaking group, then the Slovak-speaking group, and lastly all other persons. Within each group the female illiteracy rate was higher than the male.

Relative to their respective literacy levels in 1920, the rate of progress in the reduction of illiteracy between 1920 and 1930 was nearly the same for the three major linguistic groups—about 40 per cent among males and about 33 per cent among females.

TABLE 93. *Reduction of illiteracy in the population of Hungary, 6 years old and over, by mother tongue and sex: 1920-30*

Mother tongue and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1920	1930		
<i>All groups</i>				%
Male	13.1	7.9	5.2	40
Female	17.1	11.3	5.8	34
Hungarian				
Male	13.1	7.9	5.2	40
Female	17.2	11.3	5.9	34
German				
Male	8.6	5.2	3.4	40
Female	11.8	7.9	3.9	33
Slovak				
Male	14.4	8.0	6.4	44
Female	19.9	13.3	6.6	33
Other <sup>1</sup>				
Male	26.7	21.4	5.3	20
Female	34.5	27.3	7.2	21

<sup>1</sup> Including Rumanian, Ruthenian, Croatian, Serbian and language unspecified.

PROGRESS OF LITERACY

ILLITERACY IN DIFFERENT AGE GROUPS

Table 94 shows the reduction of illiteracy by sex and age groups between the census years 1920 and 1941. As is to be expected, the lowest percentages of illiteracy are found in the age groups between 12 and 29. The average decennial rate of progress has been remarkably high among the 12-14 age group (male, 53 per cent; female, 48 per cent), and the 15-19 age group (male, 48 per cent; female, 43 per cent).

TABLE 94. *Reduction of illiteracy in the population of Hungary, 6 years old and over, by sex and age groups: 1920-41*

Sex and age group	Percentage of illiteracy			Reduction in percentage of illiteracy 1920-41	Average decennial rate of progress
	1920	1930	1941		
<b>Male</b>					
<i>6 years and over</i> <sup>1</sup>	13.1	7.9	6.4	6.7	% 30
6-11	27.3	9.1	18.2	9.1	18
12-14	8.6	2.5	1.9	6.7	53
15-19	6.3	4.3	1.7	4.6	48
20-29	4.8	5.5	2.4	2.4	29
30-39	6.3	4.7	4.5	1.8	15
40-49	10.0	6.3	4.1	5.9	36
50-59	17.0	10.2	5.9	11.1	41
60 and over	26.2	20.8	13.3	12.9	29
Unknown	52.7	47.6	35.8	.	.
<b>Female</b>					
<i>6 years and over</i> <sup>1</sup>	17.1	11.3	8.4	8.7	30
6-11	27.4	9.5	18.0	9.4	19
12-14	7.1	2.5	1.9	5.2	48
15-19	5.3	4.0	1.7	3.6	43
20-29	6.2	6.0	2.8	3.4	33
30-39	10.4	6.7	5.3	5.1	29
40-49	17.6	10.9	6.0	11.6	42
50-59	29.1	17.9	10.2	18.9	41
60 and over	43.8	34.7	21.5	22.3	30
Unknown	39.6	49.7	45.9	.	.

<sup>1</sup> Including age unknown.

The relatively high illiteracy rate among children 6-11 years old is mainly due to the large number of boys and girls 6-9 years old who have not begun their schooling, and who have not yet had therefore an opportunity to learn reading and writing.

This is borne out more clearly in Table 95, which gives, for 1941, the number of boys and girls by the highest grade of school completed and ability to read and write. It is thus seen that the percentage of illiteracy in the age group 10-11 was only 2.1 for either sex, but that most of the children reported unable to read and write were found to be 6-9 years old and not to have started to attend school.

TABLE 95. *Number of boys and girls in Hungary, 6-11 years old, by highest level of education, and percentage of illiteracy: 1941*

Level of education	Boys		Girls	
	6-9 years old	10-11 years old	6-9 years old	10-11 years old
<i>Total number</i> <sup>1</sup>	320 581	171 602	314 032	168 214
1st year secondary	—	7 463	—	7 458
5th year elementary	—	27 748	—	<sup>2</sup> 28 982
4th year elementary	—	66 348	—	66 305
3rd year elementary	38 218	45 891	39 048	44 698
2nd year elementary	72 255	15 504	72 439	13 292
1st year elementary	81 370	4 473	87 497	3 461
Others able to read and write	<sup>3</sup> 42 741	620	<sup>3</sup> 40 600	501
Not able to read and write	85 997	3 555	83 448	3 517
<i>Percentage illiterate</i>	26 8	2 1	26 6	2 1

<sup>1</sup> Excluding 75 boys and 67 girls whose level of education is unknown.

<sup>2</sup> Including one girl who has completed the 6th year elementary.

<sup>3</sup> Including children 6 and 7 years old attending 1st form of elementary school at time of census.

## INDIA: 1901-41

### ILLITERACY IN THE TOTAL POPULATION

In 1931, the latest year for which literacy figures are available for the whole of India, there were some 219 million persons 10 years old and over who could neither read nor write, being 90.9 per cent of the total population at that age level. These figures refer, of course, to pre-partition India, which includes present-day Pakistan, but does not include Burma.

Comparative figures on the illiterate population of India from the census reports of 1901-31 are given in Table 96, from which

PROGRESS OF LITERACY

it can be seen that the percentage of illiteracy in the total population has steadily decreased from 93.8 in 1901 to 90.9 in 1931. This represents an average decennial rate of progress of about one per cent. Yet, owing to the increase in the total population, the actual number of illiterates has constantly been increasing and stood in 1931 at almost 25 million more than in 1901.

TABLE 96. *Number and percentage of illiterates in the population of India, 10 years old and over: 1901-31*

Census year	Population 10 years old and over		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
1901	207 070 426	194 160 614	93.8
1911	218 189 879	202 885 717	93.0
1921	219 751 721	201 603 832	91.7
1931	240 716 606	218 754 042	90.9

<sup>1</sup> Excluding those not enumerated on literacy, who numbered approximately 800,000 in 1901; 1,700,000 in 1911; 2,800,000 in 1921; 3,000,000 in 1931.

ILLITERACY AMONG THE MALE AND FEMALE POPULATION

There is considerably more illiteracy among the female population. The rate of progress is also relatively lower for the female population, as shown in Table 97.

TABLE 97. *Reduction of illiteracy in the population of India, 10 years old and over, by sex: 1901-31*

Sex	Percentage of illiteracy				Reduction of illiteracy 1901-31	Average decennial rate of progress
	1901	1911	1921	1931		
Both sexes	93.8	93.0	91.7	90.9	% 2.9	% 1.0
Male	88.5	87.4	85.8	84.7	3.8	1.4
Female	99.3	98.9	98.2	97.6	1.7	0.6

## ILLITERACY IN DIFFERENT AGE GROUPS

The census reports tabulated the population on literacy in five broad age groups: 0-9, 10-14, 15-19, 20 and over, and age unknown. Leaving out the population less than 10 years old, relatively more progress was made over the 30. year period in the 15-19 age group, particularly among the male population. This would seem to reflect the results of the extension of education among children during those decades. On the other hand, the reduction in illiteracy among the adult population 20 years old and over may be due entirely to the replacement of some of the older, more illiterate generation, by persons of the younger, less illiterate population.

TABLE 98. *Reduction of illiteracy in the population of India, 10 years old and over, by sex and broad age groups: 1901-31*

Sex and age group	Percentage of illiteracy				Reduction in percentage of illiteracy 1901-1931	Average decennial rate of progress
	1901	1911	1921	1931		
						%
<b>Male</b>						
10 years and over	88.5	87.4	85.8	84.7	3.8	1.4
10-14	92.3	91.3	90.0	90.2	2.1	0.8
15-19	88.1	87.0	84.6	82.4	5.7	2.2
20 and over	87.6	86.6	84.9	83.7	3.9	1.5
Unknown	97.9	97.7	97.3	98.2	.	.
<b>Female</b>						
10 years and over	99.3	98.9	98.2	97.6	1.7	0.6
10-14	99.2	98.6	97.6	97.2	2.0	0.7
15-19	98.9	98.3	97.1	96.4	2.5	0.9
20 and over	99.4	99.1	98.4	97.9	1.5	0.5
Unknown	99.5	100.0	100.0	100.0	.	.

## LITERACY IN ENGLISH

Separate tabulations are given in the census reports on persons able to read and to write in the English language. Among persons 10 years old and over, literacy in English increased from 0.5 per cent in 1901 to 1.4 per cent in 1931. Among male persons at this age level the percentage increased from 0.9 to 2.4 during this period; among female persons from 0.1 to 0.3 per cent. The percentage among the male population is considerably higher

## PROGRESS OF LITERACY

than among the female for each of the age groups shown in Table 99.

TABLE 99. Literacy in the English language among the population of India 10 years old and over, by sex and broad age groups: 1901-31

Sex and age group	Percentage of illiteracy in English			
	1901	1911	1921	1931
Both sexes				
10 years and over <sup>1</sup>	0.5	0.7	1.1	1.4
10-14	0.4	0.5	0.8	0.8
15-19	0.7	1.0	1.7	1.9
20 and over <sup>1</sup>	0.5	0.7	1.0	1.4
Male				
10 years and over <sup>1</sup>	0.9	1.3	1.9	2.4
10-14	0.6	0.8	1.2	1.3
15-19	1.3	1.8	3.0	3.4
20 and over <sup>1</sup>	0.9	1.3	1.9	2.5
Female				
10 years and over	0.1	0.1	0.2	0.3
10-14	0.1	0.1	0.2	0.3
15-19	0.1	0.2	0.3	0.5
20 and over <sup>1</sup>	0.1	0.1	0.2	0.3

<sup>1</sup> Including age unknown.

## PROGRESS OF LITERACY IN CERTAIN STATES

Results of the 1941 census are not available for the whole of India. Partial results given for a number of States show a general reduction of illiteracy between 1931 and 1941, ranging from one per cent in some States to more than 12 per cent in others. It is not possible, however, to generalize for the whole country without more complete information.

Comparative figures on the progress of literacy from between 1901 and 1941 are available, in particular, for the States of Cochin, Jaipur, Rajputana and Ajmer-Merwara, as given in Table 100. These States together, however, only accounted for about 19 million people, or less than five per cent of the total population.



TABLE 100. *Reduction of illiteracy in the States of Cochin, Jaipur, Rajputana and Ajmer-Merwara: 1901-41*

State, age level and sex	Percentage of illiteracy					Reduction in illiteracy 1901-41
	1901	1911	1921	1931	1941	
<i>Cochin</i> (all ages)						%
Both sexes	86.7	84.9	81.5	71.8	64.7	22.0
Male	77.6	75.7	72.6	61.7	...	.
Female	95.5	93.9	90.1	81.5	...	.
<i>Jaipur</i> (10 and over)						
Male	94.1	92.1	91.8	91.7	87.5	6.6
Female	99.9	99.7	99.5	99.4	98.9	1.0
<i>Rajputana</i> (10 and over)						
Male	92.5	92.1	91.9	91.4	88.3	4.2
Female	99.8	99.7	99.5	99.4	98.7	1.1
<i>Ajmer-Merwara</i> (10 and over)						
Male	85.8	83.7	79.0	77.7	74.9	10.9
Female	99.0	98.3	97.2	96.3	94.6	4.4

## ILLITERACY IN URBAN AND RURAL AREAS

Separate tabulations on literacy in urban and rural areas are available for three States—Assam, Baroda and Mysore—from the census of 1941. Differences in percentage of illiteracy for urban and rural areas were in each instance greater among the male population than among the female.

TABLE 101. *Percentage of illiteracy in urban and rural areas of Assam, Baroda and Mysore, by sex: 1941*

State, age level and area	Percentage of illiteracy		
	Both sexes	Male	Female
<i>Assam</i> <sup>1</sup> (all ages)	88.4	81.5	96.0
Towns	64.3	54.4	78.3
Villages	89.5	82.8	96.7
<i>Baroda</i> (5 years and over)	73.3	62.0	85.5
Towns	60.9	47.3	76.3
Rest of State	77.6	67.2	88.6
<i>Mysore</i> (all ages)	87.0	79.6	94.7
Urban	68.0	56.7	80.3
Rural	91.2	84.9	97.9

<sup>1</sup> Excluding population of tea plantations, railway areas, and floating population.

## PROGRESS OF LITERACY

### CONSISTENCY AND RELIABILITY OF DATA

The instruction to enumerators relating to literacy in the census of 1901 reads as follows: 'Enter against all persons, of whatever age, whether they can or cannot both read and write any language.' In 1911, the wording of the instruction was slightly altered: 'Enter against all persons who can both read and write any language the word "literate". Against persons who cannot read and write any language make a cross in this column.'

No specific instructions had been given to the enumerators in 1901 as to the degree of proficiency in reading and writing which should be held to qualify a person to be entered as literate. In 1911, however, a supplementary explanation was given that only those persons should be entered as literate who could write a letter to a friend and read his reply. Because of the application of this standard in the 1911 census, the report of the census commissioner mentioned the difficulty in comparing the results of that census with the preceding one.

The criterion adopted in the 1911 census appears to have been retained for the censuses of 1921 and 1931. The census report of 1921 contains the following statement regarding the general accuracy of the statistics on literacy:

'It is not easy to compute the degree of accuracy which the statistics represent. There are a considerable number of persons who can read but not write, chiefly Mohammedans who have learnt enough Arabic to be able to read the Koran. This class has some pretension to literacy. . . . It does not, however, qualify under the definition laid down. So far as the human equation is concerned, ambition on the part of the public to be recorded as literate was probably met by exclusiveness on the part of the educated enumerator, who had the last word in the matter. . . . On the whole there is a consensus of opinion that the simple criterion laid down was easily understood and sensibly interpreted.'

## ITALY: 1901-31

### CRITERION OF LITERACY AND METHOD OF TABULATION

The censuses of Italy during this period contained a question on whether the person enumerated could or could not read. There is no specification as to what he could read, nor any indication

as to whether or not he could also write. Therefore, the figures on the number and percentage of illiterates in Italy may be understated to the extent that persons who can read but cannot write have not been included in the count.

The returns on literacy have not been uniformly tabulated for the different censuses. For the 1901 census, those who could read and those who could not read were tabulated by sex and by year of birth. Persons whose year of birth was unknown were included in the total.

In the report for the census of 1911, those who could read, those who could not read, and, in addition, those whose literacy was not stated, were tabulated by sex and age groups, including a group for unknown age.

For 1921, the census tabulation showed only the number of persons who could read, by sex and by age-groups, excluding those whose age was unknown. Since the extent of territory had changed between 1911 and 1921, a separate table was given of the data according to the old boundaries, in comparison with data from previous censuses in 1882, 1901 and 1911.

Finally, for 1931, the last census for which literacy data are available, the tabulation is given in a reduced number of age groups, but again including a group of unknown age. The census schedule for 1936 did not contain a question on literacy.

#### ILLITERACY IN THE TOTAL POPULATION

The number and percentage of persons who cannot read, according to the Italian censuses of 1901-31, among the total population 6 years old and over and 10 years old and over, are given in Table 102.

TABLE 102. *Number and percentage of illiterates in the population of Italy, 6 and 10 years old and over: 1901-31*

Census year	Total No. of persons	Persons who cannot read	Percentage illiterate
<i>Population 6 years old and over</i>			
1901	27 536 713	13 351 821	48.5
1911	29 409 261	11 073 014	37.7
1921 <sup>1</sup>	32 812 896	9 262 046	28.2
1921 <sup>2</sup>	34 223 361	9 401 341	27.5
1931	35 709 101	7 458 912	20.9

<sup>1</sup> Old boundaries, i.e., excluding Venezia Tridentina and Venezia Giulia.

<sup>2</sup> New boundaries, i.e., including Venezia Tridentina and Venezia Giulia.

PROGRESS OF LITERACY

Census year	Total No. of persons	Persons who cannot read	Percentage illiterate
<i>Population 10 years old and over</i>			
1901	24 705 851	11 910 468	48.2
1911	26 456 390	9 842 872	37.2
1921 <sup>1</sup>	29 478 154	8 111 594	27.5
1921 <sup>2</sup>	30 758 420	8 228 264	26.8
1931	32 120 508	6 948 351	21.6

<sup>1</sup> Old boundaries, i.e., excluding Venezia Tridentina and Venezia Giulia.

<sup>2</sup> New boundaries, i.e., including Venezia Tridentina and Venezia Giulia.

It must be observed that the data for 1931 are comparable only with the 1921 data for the new boundaries, whereas the data for the old boundaries in 1921 are to be compared with those from previous censuses.

REDUCTION OF ILLITERACY, BY SEX

Thus it is seen, from Table 103, that the percentage of illiteracy in the population of Italy 10 years old and over decreased from 48.2 in 1901 to 27.5 in 1921; and again from 26.8 in 1921 (for the new boundaries) to 21.6 in 1931. This represents an average decennial rate of progress of 24 per cent between 1901 and 1931; and of 19 per cent during the decade 1921-31.

TABLE 103. *Reduction of illiteracy in the population of Italy, 10 years old and over, by sex: 1901-31*

Census year	Percentage of illiteracy		
	Both sexes	Male	Female
1901	48.2	41.7	54.6
1911	37.2	31.6	42.5
1921 (old boundaries)	27.5	24.0	30.9
Reduction in percentage of illiteracy: 1901-21	20.7	17.7	23.7
Average decennial rate of progress: 1901-21	24.0	24.0	25.0
1921 (new boundaries)	26.8	23.3	30.0
1931	21.6	17.8	25.2
Reduction in percentage of illiteracy: 1921-31	5.2	5.5	4.8
Decennial rate of progress: 1921-31	19.0	24.0	16.0
Average decennial rate of progress: 1901-31	22.0	24.0	21.0

The percentage of illiteracy has been always lower among the male population than among the female. The rate of progress among the male population has averaged 24 per cent per decade throughout the period under consideration. Among the female population the rate of progress was greater during the period 1901-21, but slowed down appreciably during the following decade, so that the rate of progress for the whole period averaged only 21.

## REDUCTION OF ILLITERACY, BY AGE GROUPS

Table 104 shows the percentage of illiteracy among comparable age groups for each census between 1901 and 1931. It is clear that the greatest amount of progress has been registered among the younger age groups. So much so, that in the 1931 census the percentage of illiteracy for the 6-9 age group is for the first time lower than that for the population 10 years old and over. Hence the inclusion of this age group in the total population considered for literacy in 1931 brings the over-all percentage down from 17.8 to 17.4, whereas in previous years the effect was always in the opposite direction.

TABLE 104. *Percentage of illiteracy in the population of Italy 6 years old and over, by sex and age groups: 1901-31*

Sex and age group	Percentage of illiteracy				
	1901	1911	1921 <sup>1</sup>	1921 <sup>2</sup>	1931
Male					
6 years and over	42.5	32.6	25.1	24.4	17.4
6-9	49.3	40.9	34.0	33.3	13.7
10 years and over	41.7	31.6	24.0	23.3	17.8
10-14	36.4	23.0	19.0	18.4	8.3
15-19	<sup>3</sup> 36.1	25.0	17.5	17.0	11.3
20-29	<sup>4</sup> 34.8	24.3	16.2	15.7	11.7
30-39	38.1	28.0	20.5	19.9	13.8
40-49	42.4	34.0	26.1	25.4	18.7
50-64	52.5	42.6	34.0	33.2	27.9
65 and over	59.8	53.7	45.2	44.4	41.1
Unknown	43.1	56.5	...	...	41.0

<sup>1</sup> Old boundaries.

<sup>2</sup> New boundaries.

<sup>3</sup> Age group 15-20.

<sup>4</sup> Age group 21-29.

PROGRESS OF LITERACY

Sex and age group	Percentage of illiteracy				
	1901	1911	1921 <sup>1</sup>	1921 <sup>2</sup>	1931
<b>Female</b>					
6 years and over	54.4	42.4	31.3	30.5	24.2
6-9	52.5	42.4	35.1	34.4	14.8
10 years and over	54.6	42.5	30.9	30.0	25.2
10-14	38.9	24.8	19.6	19.0	9.2
15-19	<sup>3</sup> 40.0	28.3	18.4	17.9	12.2
20-29	<sup>4</sup> 44.8	32.8	22.0	21.4	15.1
30-39	53.6	39.7	28.2	27.4	21.3
40-49	63.1	49.5	35.0	43.0	29.4
50-64	72.4	61.7	46.0	44.9	40.2
65 and over	78.8	71.6	59.4	58.2	57.0
Unknown	59.4	67.8	...	...	53.0

<sup>1</sup> Old boundaries.  
<sup>2</sup> New boundaries.  
<sup>3</sup> Age group 15-20.  
<sup>4</sup> Age group 21-29.

TABLE 105. *Reduction of illiteracy in the population of Italy, among selected cohorts: 1911-31*

Cohort	Percentage of illiteracy				Reduction of illiteracy <sup>2</sup>		Average decennial rate of progress	
	1911	1921 <sup>1</sup>	1921 <sup>2</sup>	1931	1911-21	1921-31	%	%
%								
%								
I. Persons born 1872-81								
Im. Male	28.0	26.1	.	.	1.9	.	7	.
If. Female	39.7	35.0	.	.	4.7	.	12	.
II. Persons born 1882-91								
IIIm. Male	24.3	20.5	19.9	18.7	3.8	1.2	16	6
IIIf. Female	32.8	28.2	27.4	29.4	4.6 + 2.0		14	.
III. Persons born 1892-1901								
IIIIm. Male	23.9	16.2	15.7	13.8	7.7	1.9	32	12
IIIIf. Female	26.5	22.0	21.4	21.3	4.5	0.1	17	0
IV. Persons born 1902-11								
IVIm. Male	.	.	17.8	11.7	.	6.1	.	34
IVIf. Female	.	.	18.5	15.1	.	3.4	.	18

<sup>1</sup> Old boundaries.  
<sup>2</sup> New boundaries.  
<sup>3</sup> A plus sign in this column indicates increase of illiteracy.

## REDUCTION OF ILLITERACY, BY COHORTS

Table 105 shows the reduction of illiteracy among selected cohorts during successive census years between 1911 and 1931. With one exception, each cohort has shown progress in literacy between censuses. The exception concerns cohort II f., that is, female persons born between 1882 and 1891, who, being 40-49 years old in 1931, had a higher percentage of illiteracy than they had in 1921, when they were all 10 years younger. It is possible that, for lack of opportunity to read, a certain number of such persons may have lost the art of reading once acquired, and relapsed into illiteracy.

## MEXICO: 1900-40

## ILLITERACY IN THE TOTAL POPULATION

Considering only the population 10 years old and over, and counting as illiterates all persons who cannot both read and write, the percentage of illiteracy in Mexico has decreased from 77.7 in 1900 to 54 in 1940. This represents a relative rate of progress of nine per cent per decade during the period of 40 years.

TABLE 106. *Number and percentage of illiterates in the population of Mexico, 10 years old and over: 1900-40*

Census year	Population 10 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1900 <sup>1</sup>	9 822 220	7 636 459	77.7
1910 <sup>1</sup>	10 809 090	7 817 064	72.3
1921 <sup>2</sup>	10 538 622	6 973 855	66.2
1930	11 748 936	7 223 901	61.5
1940	13 960 139	7 543 951	54.0

<sup>1</sup> Data on literacy in the censuses of 1900 and 1910, originally tabulated for persons 12 years old and over, were adjusted by the Dirección General de Estadística to a comparable basis and published, as given here, in the 1930 census report.

<sup>2</sup> The 1921 census data do not include the populations of certain 'municipios' in six states and the territory of Quintana Roo, who were not enumerated.

However, it may be seen from Table 106 that, in spite of the steady decrease in percentage of illiteracy during this period,

PROGRESS OF LITERACY

the number of illiterate persons still remains at 7.5 million in 1940, being almost as many as in 1900. This, of course, is due to the increase in total population during this period at such a rate that the progress in reduction of illiteracy has barely been enough to keep the number of illiterates from growing.

REDUCTION OF ILLITERACY, 1900-40

Table 107 shows that the relative rate of progress has been accelerating with each intercensal period, starting with seven per cent per decade during the first decennial period until it was 12 per cent per decade for the period 1930-40.

TABLE 107. *Reduction of illiteracy in the population of Mexico, 10 years old and over by decennial periods: 1900-40*

Period	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
1900-10	77.7	72.3	5.4	7
1910-21	72.3	66.2	6.1	8
1921-30	66.2	61.5	4.7	8
1930-40	61.5	54.0	7.5	12
1900-40	77.7	54.0	23.7	9

REDUCTION OF ILLITERACY, BY SEX

The percentage of illiteracy among the female population has been consistently higher than among the male throughout this period. As may be seen from Table 108, approximately the same

TABLE 108. *Reduction of illiteracy in the population of Mexico, 10 years old and over, by sex: 1900-40*

Sex	Percentage of illiteracy					Reduction of illiteracy 1900-40	Average decennial rate of progress
	1900	1910	1921	1930	1940		
Both sexes	77.7	72.3	66.2	61.5	54.0	23.7	9
Male	73.5	68.2	63.0	56.7	50.0	23.5	9
Female	81.8	76.3	69.1	66.0	57.9	23.9	8



amount of reduction has been shown for each sex, although, because of the initial difference in percentage of illiteracy between the two sexes, the average decennial rate of progress is slightly more in favour of the male population.

#### ILLITERACY IN DIFFERENT AGE-GROUPS

In the 1921 census report, a separate tabulation on literacy was given for the male population over 21 years old. Of a total 4,417,279 persons in this category 3,170,858 were reported unable to read and write. Hence the percentage of illiteracy among male persons over 21 years old in 1921 was 71.8 per cent, as compared with 63 per cent among all male persons 10 years old and over.

The 1930 report tabulated the literacy status of the population 10 years old and over in four age groups: 10-14, 15-29, 30 and over, and age unknown. In 1940, the age-groups used for tabulation on literacy were: 6-9, 10-14, 15-39, 40 and over, and age unknown. Percentages of illiteracy in the population 10 years old and over, by these age-groups, are given in Table 109.

TABLE 109. *Percentage of illiteracy in the population of Mexico, 10 years old and over, by sex and age groups: 1930 and 1940*

Census year and age-groups	Percentage of illiteracy		
	Both sexes	Male	Female
1930:			
10 years and over <sup>1</sup>	61.5	56.7	66.0
10-14	48.7	47.9	49.6
15-29	60.7	57.3	63.8
30 and over	66.2	59.2	72.8
Unknown	38.0	37.8	75.0
1940:			
10 years and over <sup>1</sup>	54.0	50.0	57.9
10-14	54.5	54.6	54.4
15-39	50.9	46.7	54.8
40 and over	60.3	53.8	66.3
Unknown	65.2	63.6	67.2

<sup>1</sup> Including age unknown.

It is worth noting that the age-group 10-14 showed a higher percentage of illiteracy in 1940 than in 1930, for both the male and the female population. On the other hand, the percentage of

PROGRESS OF LITERACY

illiteracy in the 15-39 group in 1940 was considerably lower than that for the 15-29 group in 1930. If these figures are reliable, it would seem that the generation 10-14 years old in 1930, who were less illiterate than the other age-groups, helped to bring down the illiteracy percentage in 1940 among the next older age group, but that a new generation aged 10-14 in 1940 had grown up with less opportunity than the earlier one to acquire a knowledge of reading and writing.

PHILIPPINES: 1918-48

ILLITERACY IN THE TOTAL POPULATION

According to the census of 1948, there were 5,024,482 persons 10 years old and over who could neither read nor write in any language. This was 38.7 per cent of the total population at that age level, and compares with 50.8 per cent illiterates in the total native population of the Islands at the 1918 census, or rather with 51.2 per cent illiterates at the 1939 census.

TABLE 110. *Number and percentage of illiterates in the population of the Philippines, 10 years old and over: 1918-48*

Census year	Population 10 years old and over		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
1918 <sup>2</sup>	6 381 261	<sup>3</sup> 3 242 627	50.8
1939	10 890 400	5 574 254	51.2
1948	12 984 532	5 024 482	38.7

<sup>1</sup> Excluding persons unspecified for literacy, numbering 13,479 in 1939 and 316,429 in 1948.

<sup>2</sup> Native population only.

<sup>3</sup> Not able to read any local dialect.

It should be noted that the criterion of literacy used in the 1918 census was simply ability to read, without reference to ability to write, whereas at the later censuses a person was only considered literate if he could both read and write. Hence the data from the 1918 census are not comparable with those from the following censuses. Between 1939 and 1948 there was a decrease of 12.5 per

cent in illiteracy, which represents a relative rate of progress of 24 per cent during that decade.

REDUCTION OF ILLITERACY, BY SEX AND AGE GROUPS

According to the 1918 census the percentage of illiteracy was 47 for male persons, and 54.6 for female persons, 10 years old and over. However, due to the difference in criteria of literacy between that census and the later ones, comparisons are possible only between the censuses of 1939 and 1948. Furthermore, classification by comparable age groups is available only for these two census years.

TABLE III. *Reduction of illiteracy in the population of the Philippines 10 years old and over, by sex and age-groups : 1939-48*<sup>1</sup>

Sex and age group	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1939	1948		
<b>Male</b>				%
<i>10 years and over</i>	45.6	35.6	10.0	22
10-14	45.7	34.4	11.3	25
15-19	37.5	24.3	13.2	35
20-24	35.6	25.0	10.6	30
25-34	38.9	31.5	7.4	19
35-44	47.5	36.9	10.6	22
45-54	56.4	47.6	8.8	16
55-64	65.2	58.8	6.4	10
65 and over	74.5	72.0	2.5	3
Unknown	42.3	9.5	.	.
<b>Female</b>				
<i>10 years and over</i>	56.8	41.7	15.1	27
10-14	45.4	32.1	13.3	29
15-19	41.6	25.2	16.4	39
20-24	45.6	30.9	14.7	32
25-34	52.6	38.9	13.7	26
35-44	67.3	48.5	18.8	28
45-54	78.3	64.6	13.7	17
55-64	84.6	76.2	8.4	10
65 and over	89.9	83.7	6.2	7
Unknown	65.8	12.4	.	.

<sup>1</sup> The census dates were 1 January 1939 and 1 October 1948 respectively; thus the inter-censal period was almost, though not exactly, a decade.

PROGRESS OF LITERACY

HIGHEST GRADE OF SCHOOL COMPLETED

The censuses in 1939 and again in 1948 also reported on the population 5 years old and over according to the highest grade of school completed. Table 112 gives, for male and female persons 10 years old and over, and for the different age-groups, the percentage of those who had completed no grade, of those who had completed the first grade, the second grade, the third grade and higher.

TABLE 112. *Percentage of the population of the Philippines 10 years old and over, according to highest grade of school completed, by sex and age groups: 1939 and 1948*

Sex and age group	Percentage of persons having completed							
	No grade <sup>1</sup>		1st grade		2nd grade		3rd grade and higher	
	1939	1948	1939	1948	1939	1948	1939	1948
<b>Male</b>								
<i>10 years and over</i>	49.9	37.6	4.0	3.8	7.4	9.2	38.7	49.4
10-14	34.3	21.3	11.8	11.4	15	21.1	38.9	46.2
15-19	35.0	21.6	3.6	3.0	7.6	8.3	53.7	67.1
20-24	37.3	26.7	2.3	1.8	6.8	5.9	53.6	65.6
25-34	43.6	37.9	2.3	1.8	6.7	6.3	47.5	54.1
35-44	57.7	45.0	2.4	1.8	6.6	6.3	33.4	46.9
45-54	74.1	57.1	2.0	1.9	4.3	6.3	19.7	34.7
55-64	87.4	73.1	1.5	1.5	2.3	4.2	8.7	21.1
65 and over <sup>2</sup>	92.2	89.4	1.2	0.9	1.6	1.8	5.0	7.9
<b>Female</b>								
<i>10 years and over</i>	58.7	42.8	3.4	3.3	6.8	8.4	31.2	45.5
10-14	36.1	19.9	9.7	9.5	13.5	19.1	40.6	51.5
15-19	40.8	23.4	2.9	2.4	7.2	7.4	49.1	66.8
20-24	47.1	32.4	2.4	1.8	6.8	6.1	43.8	59.7
25-34	55.7	44.2	2.4	1.8	6.8	6.4	35.0	47.5
35-44	73.5	54.8	2.4	2.0	5.7	6.6	18.4	36.6
45-54	87.9	71.4	1.6	2.0	2.6	5.6	7.9	21.0
55-64	94.6	85.7	1.0	1.3	1.2	2.8	3.1	10.1
65 and over <sup>2</sup>	96.8	94.2	0.7	0.8	0.7	1.1	1.7	3.9

<sup>1</sup> Including persons not reporting grade completed, who represented, in 1939, less than one per cent of the total of 'Persons not completing any grade and persons not reporting grade completed'.

<sup>2</sup> Including age unknown, numbering 1,274 males, 674 females in 1939, and 339 males, 163 females in 1948.

Table 113 shows a comparison of the 1948 census data on illiteracy and on the highest grade of school completed. It shows that, for

the population 10 years old and over, more persons were reported as having failed to complete even the first grade of school than were reported as unable to read and write. This discrepancy is due, on the one hand, to persons beyond school-going ages having learned to read and write without having completed a single grade in school and is counterbalanced, on the other hand, by a considerable proportion of the children and young persons of school-going age not mastering the art of reading and writing till they have completed at least the first two or three grades of school.

For example, among male persons 65 years old and over, about 18 per cent had apparently learned to read and write without having completed the first grade in school; this proportion is about 14 per cent among male persons 55-64 years old, 10 per cent

TABLE 113. *Percentage of illiteracy in the population of the Philippines, 10 years old and over, compared with percentage of persons having completed less than 3 grades of school: 1948*

Sex and age group	Percentage of persons 10 years old and over			
	Not able to read and write	Completed no grade <sup>1</sup>	Completed less than 2nd grade <sup>1</sup>	Completed less than 3rd grade <sup>1</sup>
<b>Male</b>				
<i>10 years and over</i>	35.6	37.6	41.4	50.6
10-14	34.4	21.3	32.7	53.8
15-19	24.3	21.6	24.5	32.9
20-24	25.0	26.7	28.5	34.4
25-34	31.5	37.9	39.6	45.9
35-44	36.9	45.0	46.7	53.1
45-54	47.6	57.1	59.0	65.3
55-64	58.8	73.1	74.6	78.9
65 and over <sup>2</sup>	71.9	89.4	90.3	92.1
<b>Female</b>				
<i>10 years and over</i>	41.7	42.8	46.1	54.5
10-14	32.1	19.9	29.5	48.5
15-19	25.2	23.4	25.8	33.2
20-24	30.9	32.4	34.2	40.3
25-34	38.9	44.2	46.0	52.5
35-44	48.5	54.8	56.8	63.4
45-54	64.6	71.4	73.4	79.0
55-64	76.2	85.7	87.0	89.9
65 and over <sup>3</sup>	83.7	94.2	94.9	96.1

<sup>1</sup> Including grade not reported.

<sup>2</sup> Including age unknown.

## PROGRESS OF LITERACY

among the 45-54 age group, eight per cent among the 35-44 age group, six per cent among the 25-34 age group, and less than two per cent among the 20-24 age group.

Among male persons 15-19 years old, the percentage of illiteracy is approximately the same as the percentage of persons who have completed at least the first grade. Finally, among boys 10-14 years old, apparently some of those who have completed the second grade of school are counted among the illiterates.

## PERSONS READING NEWSPAPERS AND MAGAZINES REGULARLY

According to the 1939 census, the number of persons who reported reading regularly any daily, weekly, or monthly newspaper or magazine was 1,717,457, being 10.7 per cent of the total population, or 15.8 per cent of the population 10 years old and over, or 32.3 per cent of the literate population 10 years old and over. Only in the city of Manila and the province of Negros Occidental was more than half of the literate population 10 years old and over reported as reading newspapers and magazines regularly.

## PORTUGAL: 1900-40

### CRITERION OF LITERACY

The census schedule for 1940 contained only one question on literacy 'Can you read' to be answered, as the case might be, by Yes or No. Literacy data for all the censuses since 1900 have been given in two categories: 'Can read' and 'Illiterate' (or 'Cannot read'). No minimum age limit is stated, but a comparative table on literacy for 1911-40 was given in the 1940 census report, for the population 7 years old and over.

### ILLITERACY IN THE TOTAL POPULATION

Table 114 gives the number and percentage of illiterates (i.e. persons who cannot read) among the population 7 years old and over, and 10 years old and over, at each census between 1900 and 1940. It is to be observed that the number of illiterates has

remained almost the same, even though the percentage of illiteracy has been steadily reduced.

TABLE 114. *Number and percentage of illiterates in the population of Portugal, 7 and 10 years old and over: 1900-40*

Census year	Total No. of persons	Persons who cannot read	Percentage illiterate
<i>Population 7 years old and over</i>			
1900	4 539 918	3 383 917	74.5
1911	4 965 374	3 489 256	70.3
1920	5 158 452	3 415 546	66.2
1930	5 742 399	3 549 231	61.8
1940	<sup>16</sup> 338 335	3 227 929	50.9
<i>Population 10 years old and over</i>			
1900	4 175 972	3 065 764	73.4
1911	4 550 597	3 137 583	68.9
1920	4 747 658	3 095 442	65.2
1930	5 294 048	3 189 234	60.2
1940	<sup>15</sup> 845 609	2 948 157	50.4

Excluding 211,681 persons of literacy unspecified.

Among the population 10 years old and over, the average decennial rate of progress for the period 1900-40 was nine per cent for both sexes, 10 per cent for males at this age level, and eight per cent for females. The rate of progress during the decade 1930-40 was higher than for any previous period.

TABLE 115. *Reduction of illiteracy in the population of Portugal, 10 years old and over, by periods and by sex: 1900-40*

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
1900-1911				%
Both sexes	73.4	68.9	4.5	6
Male	63.9	59.6	4.3	6
Female	81.8	77.0	4.8	5
1911-1920				
Both sexes	68.9	65.2	3.7	6
Male	59.6	56.4	3.2	6
Female	77.0	72.8	4.2	6
1920-1930				
Both sexes	65.2	60.2	5.0	8
Male	56.4	50.4	6.0	11
Female	72.8	68.9	3.9	5

PROGRESS OF LITERACY

Period and sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
1930-1940				
Both sexes	60.2	50.4	9.8	16
Male	50.4	41.5	8.9	18
Female	68.9	58.5	10.4	15
1900-1940				
Both sexes	73.4	50.4	23.0	9
Male	63.9	41.5	22.4	10
Female	81.8	58.5	23.3	8

REDUCTION OF ILLITERACY, BY SEX AND AGE GROUPS

The percentage of illiteracy has been higher for the female population than for the male, in every age group, throughout this period. Relatively more progress has been shown in all the age groups under 25, particularly among the male population.

TABLE 116. *Reduction of illiteracy in the population of Portugal 7 years old and over, by sex and age-groups: 1911-40*

Sex and age group	Percentage of illiteracy				Average decennial rate of progress
	1911	1920	1930	1940 <sup>1</sup>	
Male					%
7 years and over	61.7	58.1	52.8	44.1	11
7-9	82.9	75.8	78.9	54.5	13
10 years and over	59.6	56.4	50.4	43.2	11
10-14	63.1	60.7	53.7	36.0	18
15-19	58.2	55.5	48.3	37.8	14
20-24	56.9	52.5	48.1	35.4	15
25-34	55.8	51.1	45.0	42.2	9
35-44	56.8	54.2	46.8	44.1	8
45-54	59.7	57.4	52.2	47.7	7
55-64	63.9	61.1	56.5	54.4	5
65 and over	68.5	65.5	61.7	59.3	5
Unknown	65.9	55.4	66.2	66.3	.
Female					
7 years and over	77.8	73.3	69.9	60.1	9
7-9	86.8	80.1	81.7	59.1	12

<sup>1</sup> Uncorrected for cases of literacy unspecified, which have been included here with the illiterates. In 1940, 3.2 per cent of the population 7 years old and over were returned as unspecified for literacy. Previous census reports made no mention of this category.



PORTUGAL: 1900-40

Sex and age group	Percentage of illiteracy				Average decennial rate of progress
	1911	1920	1930	1940 <sup>1</sup>	
<i>10 years and over</i>	77.0	72.8	68.9	60.2	% 8
10-14	72.7	68.2	63.2	44.5	16
15-19	70.6	65	62.6	48.5	12
20-24	72.1	65.8	64.0	53.2	10
25-34	74.4	69.6	63.8	58.9	8
35-44	77.7	74.4	69	61.6	8
45-54	81.9	78.8	74.9	68.2	6
55-64	85.2	82.7	78.9	74.0	5
65 and over	87.9	85.6	82.7	77.8	4
Unknown	79.1	67.8	77.0	70.8	.

<sup>1</sup> Uncorrected for cases of literacy unspecified, which have been included here with the illiterates. In 1940, 3.2 per cent of the population 7 years old and over were returned as unspecified for literacy. Previous census reports made no mention of this category.

ILLITERACY AMONG THE FOREIGN POPULATION

Literacy data by nationality for the foreign population were given in 1911 and 1920 for persons of all ages. The 1940 census, however, presents such data only for the population 10 years old and over. Thus comparison between the 1940 and earlier data is not possible. In 1940 illiteracy among the foreign population is noticeably lower than among the total population of Portugal.

TABLE 117. *Percentage of illiteracy among the foreign population of Portugal, 10 years old and over, by nationality and sex: 1940*

Nationality	Total No. of persons	Both sexes	Percentage of illiteracy	
			Male	Female
<i>All foreigners</i>	30 010	13.4	11.1	15.7
Spanish	11 421	16.8	10.7	24.4
Brazilian	4 670	21.6	19.8	23.3
English	3 435	5.6	5.6	5.6
German	1 854	3.5	2.9	4.1
French	1 521	5.6	6.6	5.0
U.S.A.	1 270	23.5	25.2	21.6
Polish	1 043	4.7	5.1	4.3
Belgian	921	4.0	5.2	3.1
Italian	706	7.5	4.7	11.4
All other	3 169	10.3	11.0	9.3

## PROGRESS OF LITERACY

It is interesting to note that the percentages of illiteracy shown here for the foreign population of Portugal are, with the possible exception of the French and Belgian nationals, quite at variance with the illiteracy rates of the total population in their respective home countries. It is possible that certain unknown selective factors were operative in regard to the educational status of the foreigners who were enumerated in Portugal at the 1940 census. General conclusions, however, cannot be drawn, since the number of foreigners involved are relatively small.

TABLE 118. *Percentage of illiteracy among the foreign population of Portugal, 10 years old and over, in 1940, compared with percentage of illiteracy in their respective home countries, for 1940 or the nearest census year*

Nationality	Census of Portugal, 1940	Census of home country	
	Percentage of illiteracy (both sexes, 10 years old and over)	Census year	Percentage of illiteracy (both sexes, 10 years old and over)
Spanish	16.8	1940	23.2
Brazilian	21.6	1940	56.8
French	5.6	1946	3.4
U.S.A.	23.5	1930	4.3
Belgian	4.0	1930	<sup>1</sup> 5.6
Italian	7.5	1931	21.6

<sup>1</sup> 7 years old and over.

## ILLITERACY BY OCCUPATIONAL GROUPS

A very detailed table is given in the 1940 census report on the economically active population, classified by occupation and by literacy. The data are reproduced in condensed form in Table 119, which shows that the two largest groups—agricultural labourers and housewives—have the highest illiteracy rates, followed by the unskilled labourers and industrial workers. The only occupations with little or no illiteracy among their members are naturally the office workers and those in predominantly intellectual occupations.

TABLE 119. *Percentage of illiteracy in the economically active population of Portugal, 10 years old and over, by chief occupational groups and by sex: 1940*

Chief occupational group <sup>1</sup>	Total No. of persons <sup>2</sup>	Percentage of illiteracy		
		Both sexes	Male	Female
<i>All groups</i>	5 026 927	52.5	43.3	59.7
Farmers and farm owners	234 162	50.5	47.9	70.9
Manual or mechanical occupations in agriculture, forestry, etc.	1 150 921	63.2	60.6	77.0
Industry (owners, self-employed, etc.)	12 975	11.3	10.2	33.8
Manual or mechanical occupations in industry	594 844	32.1	29.6	41.7
Merchants, salesmen and commercial agents	142 997	17.6	11.1	50.6
Office workers, bookkeepers and secretaries	50 270	—	—	—
Predominantly intellectual occupations	54 276	—	—	—
Other employees, including those in the service trades	21 385	24.4	24.9	17.7
Subordinate occupations in the armed forces, police, etc.	56 645	8.5	8.5	17.0
Auxiliary occupations of a non-specialized nature (servants, unskilled labourers, etc.)	342 187	56.3	44.9	62.8
Other occupations (barbers, nurses, etc.)	22 526	10.4	11.4	2.4
Occupations ill-defined, unknown, or non-occupational positions (housewives, etc.)	2 343 739	58.4	38.6	59.6

<sup>1</sup> The detailed list of occupations is too long to be reproduced here; for example, the major group 'manual or mechanical occupations in industry' is divided into 12 subgroups and 215 separate occupations.

<sup>2</sup> Excluding persons unspecified for literacy.

PROGRESS OF LITERACY

THE PHYSICALLY OR MENTALLY DEFICIENT

The 1940 census report also gives the number of persons who can read among the blind, deaf-mute and insane population, 10 years old and over, classified by broad age group. It is not stated exactly how the criterion of literacy was applied to these persons, but over 20 per cent were reported as able to read. Among the blind and deaf-mutes the percentage of those able to read was highest in the younger age groups, while among the insane persons those in the age groups 30-39 and 40-49 had the highest rates of literacy.

TABLE 120. *Percentage of blind, deaf-mute and insane persons able to read, among the population of Portugal, 10 years old and over, by sex and age groups: 1940*

Type of deficiency and age group	Total No. of persons	Percentage able to read		
		Both sexes	Male	Female
<b>Blind</b>				
<i>10 years and over</i>	11 214	23.2	29.1	17.6
10-19	831	30.3	32.9	26.8
20-29	855	32.4	37.0	24.4
30-39	888	27.5	31.3	21.1
40-49	1 144	22.6	27.1	16.9
50 and over	7 496	21.0	27.3	16.1
<b>Deaf-mute</b>				
<i>10 years and over</i>	5 864	20.7	25.2	14.9
10-19	1 407	28.6	33.9	20.7
20-29	1 380	18.1	20.7	14.6
30-39	984	19.6	23.2	15.0
40-49	837	17.9	20.6	14.4
50 and over	1 256	17.4	24.6	10.0
<b>Insane</b>				
<i>10 years and over</i>	12 785	23.8	27.7	19.1
10-19	1 946	14.6	15.8	12.9
20-29	2 456	20.0	21.3	18.1
30-39	2 563	26.7	29.4	23.1
40-49	2 133	29.5	35.4	22.0
50 and over	3 687	26.0	34.6	18.4

SPAIN: 1900-40

CRITERION OF LITERACY

The censuses of Spain during this period contained two separate questions on the ability to read and the ability to write. The returns were given by the following classification: able to read and write; able to read only; unable to read or write; not stated.

In the analysis which follows, all persons unable both to read and to write are considered illiterate, and the percentage of illiteracy is computed on the total number of persons less those of literacy unstated.

ILLITERACY IN THE TOTAL POPULATION

The number of illiterate persons 6 years old and over decreased from 9,779,377 in 1900 to 8,676,418 in 1920. There was a reduction of illiteracy at this age level from 61.1 to 46.7 per cent in 20 years. Among the population 10 years old and over, the reduction of illiteracy between 1900 and 1940 was from 58.7 to 23.2 per cent. In relative terms, this means an average rate of progress of 21 per cent per decade.

TABLE 121. *Number and percentage of illiterates in the population of Spain, 6 years old and over, 1900-20, and 10 years old and over, 1900-40*

Census year	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
<i>Population 6 years old and over</i>			
1900	15 999 652	9 779 377	61.1
1910	17 103 396	9 399 893	55.0
1920	18 562 989	8 676 418	46.7
<i>Population 10 years old and over</i>			
1900	14 324 449	8 408 579	58.7
1910	15 250 408	7 954 824	52.2
1920	16 700 750	7 542 200	44.0
1940	20 870 455	4 834 741	23.2

<sup>1</sup>Excluding persons of literacy unspecified, numbering 20,190 in 1900; 56,484 in 1910; and 112,717 in 1920 among the population 6 years old and over.

PROGRESS OF LITERACY

REDUCTION OF ILLITERACY, BY SEX

The reduction in percentage of illiteracy, between 1900 and 1940, amounted to about 30 per cent for the male population and 41 per cent for the female. However, owing to the lower initial percentage of illiteracy in the male population, their average rate of progress was slightly better than that of the female population.

TABLE 122. *Reduction of illiteracy in the population of Spain, 10 years old and over, by sex: 1900-40*

Sex	Percentage of illiteracy				Reduction of illiteracy 1900-40	Average decennial rate of progress
	1900	1910	1920	1940		
Both sexes	58.7	52.2	44.0	23.2	35.5	21
Male	47.2	42.3	35.7	17.3	29.9	22
Female	69.4	61.3	51.6	28.5	40.9	20

ILLITERACY IN DIFFERENT AGE GROUPS

Comparable tabulations by age groups are available for the censuses between 1900 and 1920. For 1940, the age groups given

TABLE 123. *Reduction of illiteracy in the population of Spain, 10 years old and over, by sex and age groups: 1900-40*

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1900-40	Average decennial rate of progress
	1900	1910	1920	1940 <sup>1</sup>		
Male						%
10 years and over <sup>2</sup>	47.2	42.3	35.7	17.3	29.9	22
10-15	52.4	48.1	42.6	19.5	32.9	22
16-20	45.2	39.9	33.5	14.3	30.9	25
21-30	43.5	38.1	29.5	9.4	34.1	32
31-40	43.5	38.5	32.1	13.1	30.4	26
41-50	44.9	40.5	34.4	17.3	27.6	21
51-60	49.8	43.7	38.1	23.3	26.5	17
61 and over	55.9	51.2	44.8	32.5	23.4	13
Unknown	56.0	40.0	37	.	.	.

<sup>1</sup> Age groups in this column are: 10-14, 15-19, 20-29, 30-39, 40-49, 50-59, 60 and over; no figures were reported for any group of age unknown.

<sup>2</sup> Including age unknown, except for 1940.

Sex and age group	Percentage of illiteracy				Reduction of illiteracy 1900-40	Average decennial rate of progress
	1900	1910	1920	1940 <sup>1</sup>		
						%
Female						
10 years and over <sup>2</sup>	69.4	61.3	51.6	28.5	40.9	20
10-15	63.2	55.5	48.0	20.9	42.3	24
16-20	60.2	51.4	41.6	16.0	44.2	28
21-30	63.9	54.8	44.1	18.5	45.4	27
31-40	69.1	60.4	50.1	25.7	43.4	22
41-50	73.7	65.7	55.4	32.1	41.6	19
51-60	80.0	71.5	62.1	40.0	40.0	16
61 and over	84.4	79.0	69.7	52.4	32.0	11
Unknown	64.6	50.9	41.1	.	.	.

<sup>1</sup> Age groups in this column are : 10-14, 15-19, 20-29, 30-39, 40-49, 50-59, 60 and over; no figures were reported for any group of age unknown.

<sup>2</sup> Including age unknown, except for 1940.

were slightly different, but the data are believed to be fairly comparable with those from previous censuses. Table 123 shows that relatively more rapid improvement was shown in the male group aged 21-30 and in the female age groups aged 16-20 and 21-30. Furthermore, both the amount and rate of improvement were in favour of the female population over the male up to the age of 20; after that the rate of progress was higher for male persons in each age group, though the reduction in percentage of illiteracy continued to be greater for each female age group.

#### REDUCTION OF ILLITERACY BY COHORTS

Table 124 shows the progress in the reduction of illiteracy among selected cohorts between 1900 and 1920. Of male persons 11-20 years old in 1910 (cohort IVm.), 43.5 per cent were illiterate; this percentage of illiteracy decreased to 29.5 by 1920, showing a rate of progress of 32 per cent in a decade. This rate of progress is higher than for any other cohort shown in this table. It is noteworthy that even persons who were 31-40 years old in 1900 (cohorts Im. and If.) showed rates of progress of five to seven per cent in a decade.

PROGRESS OF LITERACY

TABLE 124. *Reduction of illiteracy in the population of Spain, by selected cohorts: 1900-20*

Cohort	Percentage of illiteracy			Reduction of illiteracy		Average decennial rate of progress	
	1900	1910	1920	1900-10	1910-20	1900-10	1910-20
						%	%
I. Persons born 1860-69							
Im. Male	43.5	40.5	•	3.0	•	7	•
If. Female	69.1	65.7	•	3.4	•	5	•
II. Persons born 1870-79							
IIIm. Male	43.5	38.5	34.4	5.0	4.1	11	11
IIIf. Female	63.9	60.4	55.4	3.5	5.0	5	8
III. Persons born 1880-89							
IIIIm. Male	48.4	38.1	32.1	10.3	6.0	21	16
IIIIf. Female	61.1	54.8	50.1	6.3	4.7	10	9
IV. Persons born 1890-99							
IVm. Male	•	43.5	29.5	•	4.0	•	32
IVf. Female	•	52.8	44.1	•	8.7	•	16

TURKEY: 1927-45

CRITERION OF LITERACY

In the census of 1927, there was only one question asked on literacy: 'Can the person read something in print?' The 1935 census schedule included two separate questions: 'Can or cannot read in the new characters?' 'Can or cannot write in the new characters?' The instructions to enumerators specified that persons able to read or to write any Western language were also to be returned in the affirmative. The census schedule and instructions for the 1945 census are not available, but it is assumed that the criterion used was the same as for 1935.

ILLITERACY IN THE TOTAL POPULATION

According to the 1927 census, there were 12,517,992 persons of all ages who were not able to read. This was 91.8 per cent of the



total population. Deducting from this number all children under 7 years of age, the percentage of persons not able to read is reduced to 89.4 per cent of the population 7 years old and over (male, 82.6 per cent; female, 95.4 per cent). Since detailed data on literacy are not available for the 1927 census, and since the criterion of literacy was changed after that census, the following analysis will be based entirely on the results of the 1935 and 1945 censuses.

The number and percentage of illiterates in the population 7 years old and over and 10 years old and over, in 1935 and 1945, are shown in Table 125.

TABLE 125. *Number and percentage of illiterates in the population of Turkey, 7 years old and over, and 10 years old and over: 1935 and 1945*

Census year	Total No. of persons	Persons not able to read and write	Percentage illiterate
<i>Population 7 years old and over</i>			
1935	12 366 833	9 892 059	80.0
1945	15 166 911	10 620 117	70.0
<i>Population 10 years old and over</i>			
1935	11 089 747	8 824 277	79.6
1945	13 727 943	9 542 170	69.5

It will be noted that the extent of illiteracy has been reduced by about 10 per cent between 1935 and 1945, but that, due to the increase in total population, the actual number of illiterates was higher in 1945 than in 1935. A reduction of about 15 per cent between 1935 and 1945 would have been necessary to prevent an increase in the number of illiterates.

#### REDUCTION OF ILLITERACY, BY SEX

The reduction in the percentage of illiteracy between 1935 and 1945 represents a decennial rate of progress of about 13 per cent. Among the male population, illiteracy was reduced in 10 years from 68 to 55 per cent; among females from 90.1 to 83.8 per cent. The relative rate of progress for males is 19 per cent in a decade, as compared with a rate of seven per cent for females.

PROGRESS OF LITERACY

TABLE 126. *Reduction of illiteracy in the population of Turkey, 10 years old and over, by sex: 1935-45*

Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1935	1945		
Both sexes	79.6	69.5	10.1	% 13
Male	68.0	55.0	13.0	19
Female	90.1	83.8	6.3	7

REDUCTION OF ILLITERACY, BY AGE GROUPS

The most rapid progress seems to have been made in the 20-24 age group, both male and female. Among the males in the other age groups relatively more improvement is seen in the age groups 25-34, 15-19, 35-44, and 10-14. Comparable but smaller improvement was shown by females in each of the age groups under 35.

TABLE 127. *Reduction of illiteracy in the population of Turkey, 7 years old and over, by sex and age groups: 1935-45*

Sex and age group	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1935	1945		
Male				%
7 years and over <sup>1</sup>	69.4	56.6	12.8	18
7-9	80.2	71.0	9.2	11
10 years and over <sup>1</sup>	68.0	55.0	13.0	19
10-14	62.1	51.7	10.4	17
15-19	61.8	47.6	14.2	23
20-24	58.0	38.5	19.5	34
25-34	60.9	45.8	15.1	25
35-44	73.2	60.1	13.1	18
45-54	79.9	72.4	7.5	9
55-64	87.6	80.6	7.0	8
65 and over	94.4	88.0	6.4	7
Unknown	97.8	82.5	.	.
Female				
7 years and over <sup>1</sup>	89.8	83.4	6.4	7
7-9	87.3	79.2	8.1	9
10 years and over <sup>1</sup>	90.1	83.8	6.3	7
10-14	77.5	69.3	8.2	11
15-19	79.3	72.8	6.5	8
20-24	85.1	76.0	9.1	11

<sup>1</sup> Including age unknown.

TURKEY: 1927-45

Sex and age group	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	1935	1945		
25-34	91.2	85.2	6.0	% 7
35-44	94.0	90.8	3.2	3
45-54	97.1	94.4	2.7	3
55-64	98.5	97.0	1.5	2
65 and over	99.1	98.1	1.0	1
Unknown	99.5	93.5	.	.

REDUCTION OF ILLITERACY, BY COHORTS

It is more instructive, however, to compare the illiteracy rates of selected cohorts in the two censuses. It is thus seen, from Table 128, that cohort Vm., boys who were 10-14 years old in 1935 and 20-24 years old in 1945, showed the most rapid progress, followed by cohort IVm., boys who were 15-24 years old in 1935 and 25-34 years old in 1945. Some improvement was still shown by males between the ages of 25 and 44 (cohorts IIIm. and IIm.), though male persons 45-54 years old seem to have become more illiterate 10 years later.

On the other hand, among female persons the only notable progress was shown by the youngest cohort (Vf., girls 10-14 years old in 1935). All the other groups showed either very little improvement (cohorts IIIf. and If.), or even some relapse into illiteracy (cohorts IVf. and IIf.). This may be due either to unequal educational opportunities between the sexes, or to unequal degrees of inaccuracy in the census statistics.

TABLE 128. *Reduction of illiteracy in the population of Turkey, by selected cohorts: 1935-45*

Cohort	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Decennial rate of progress <sup>2</sup>
	1935	1945		
I. Persons born 1881-90				%
Im. Male	79.9	80.6	+ 0.7	.
If. Female	97.1	97.0	0.1	0
II. Persons born 1891-1900				
IIm. Male	73.2	72.4	0.8	1
IIIf. Female	94.0	94.4	+ 0.4	.

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

PROGRESS OF LITERACY

Cohort	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Decennial rate of progress
	1935	1945		
III. Persons born 1901-10				%
III m. Male	60.9	60.1	0.8	1
III f. Female	91.2	90.8	0.4	0
IV. Persons born 1911-20				
IV m. Male	59.6	45.8	13.8	23
IV f. Female	82.6	85.2	+ 2.6	.
V. Persons born 1921-25				
V m. Male	62.1	38.5	23.6	38
V f. Female	77.5	76.0	1.5	2

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

ILLITERACY BY SIZE OF LOCALITY

The 1945 census also reported on literacy by size of locality, by maternal language, and by religion. Table 129 shows that the illiteracy rate is lowest in the largest cities, and highest in the rural areas, where the percentage of illiteracy for both sexes is just over twice that of the large cities. An interesting fact to be observed is that the difference between the two sexes within each size of locality is greater than the difference between persons of the same sex from localities of different sizes. That is to say, as far as illiteracy rates are concerned, the sex difference is more significant than the difference between large and small cities, or between small cities and the rural areas.

TABLE 129. *Percentage of illiteracy in the population of Turkey, 7 years old and over, by size of locality and by sex: 1945*

Size of locality	Total No. of persons (7 years old and over)	Percentage of illiteracy		
		Both sexes	Male	Female
<i>Entire country</i>	15 166 911	70.0	56.6	83.4
20 large cities of 30,000 or more inhabitants	1 894 533	38.3	27.5	51.1
Cities of 10,000 to 30,000 inhabitants <sup>1</sup>	1 138 169	51.3	37.0	67.8
Rest of country	12 134 209	76.7	63.6	89.3

<sup>1</sup> Including all provincial capitals of less than 30,000 inhabitants.

## ILLITERACY IN DIFFERENT LINGUISTIC GROUPS

Table 130 shows that, among the principal linguistic groups of the population, the highest illiteracy rate is reported for the Kurdish-speaking group, who constitute nearly eight per cent of the total population. The lowest illiteracy rate was found among the Yiddish-speaking group, who made up less than 0.3 per cent of the total population. All linguistic groups composed of less than 0.1 per cent of the total population, including some 131 persons of maternal language unknown, have been combined in the group 'Other'.

TABLE 130. *Percentage of illiteracy in the population of Turkey (all ages), by principal linguistic groups and by sex: 1945*

Maternal language	Total No. of persons (all ages)	Percentage of illiteracy		
		Both sexes	Male	Female
<i>All languages</i>	18 790 174	75.8	65.2	86.5
Turkish	16 598 037	74.3	63.1	85.7
Arabic	247 204	89.2	81.7	96.8
Circassian	66 691	74.4	62.9	85.8
Armenian	56 179	39.8	30.2	47.7
Georgian	40 076	76.8	62.1	91.0
Laz	46 987	80.2	64.3	93.2
Greek	88 680	50.6	29.8	66.7
Yiddish	51 019	38.0	29.8	45.3
Kurdish	1 476 562	94.7	90.3	99.2
Other <sup>1</sup>	118 739	63.4	55.4	71.4

<sup>1</sup> Including 131 persons of maternal language unknown.

## UNION OF SOUTH AFRICA: 1904-46

## HISTORICAL NOTE

The Union of South Africa was formed in 1910 out of four separate colonies, namely, Cape Colony, Natal, Orange River Colony and Transvaal. Each of these colonies took a census in 1904, using more or less comparable methods of enumeration and tabulation. In the report for Natal, however, the tabulation on literacy

PROGRESS OF LITERACY

did not include the native population. For Transvaal, most of the tables included the population of Swaziland, which did not later become part of the Union of South Africa.

In 1911 a new census was taken in the whole territory of the Union, and this provides data on literacy which are useful for comparison with later census results. These consist of literacy data from the census of 1918, limited only to the 'European or white' population; from the censuses of 1921 and later years, when the question on literacy was retained only for the Bantu or native population.

From all the data thus obtained, it is possible to gain some idea of the progress of literacy in the total population of the Union only for the period 1904-11. For the 'European or white' population, progress may be followed to the next census in 1918; for the native population, comparisons are possible down to the 1946 census. For other ethnic groups besides these two, data are so incomplete that no useful information can be gained from their comparison.

ILLITERACY IN THE TOTAL POPULATION, 1904-11

Considering the total population, of all ages, in the four colonies in 1904 (excluding the native population of Natal), there were over 3 million persons who could neither read nor write, that is, about 75 per cent of the total population excluding the natives in Natal.

The number and percentage of illiterates in the four colonies in 1904 are given in Table 131, with totals obtained by the addition of figures for the separate colonies.

TABLE 131. *Number and percentage of illiterates in the population of the colonies of South Africa, all ages, by European and other ethnic groups: 1904*

Colony and ethnic group	Population of all ages		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
Cape			
<i>All groups</i>	2 402 425	1 781 388	74.1
European or white	578 734	143 907	24.9
Other <sup>2</sup>	1 823 691	1 637 481	89.8

<sup>1</sup> Excluding persons of literacy unspecified, numbering 17,000 for all four colonies together.

<sup>2</sup> Including Africans (except for Natal), Indians and Asians, Mixed and Other.

## UNION OF SOUTH AFRICA: 1904-46

Colony and ethnic group	Population of all ages		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
Natal			
<i>All groups</i> <sup>3</sup>	202 549	105 717	52.2
European or white	96 370	15 748	16.3
Other <sup>3</sup>	106 179	89 969	84.7
Orange River			
<i>All groups</i>	386 554	260 414	67.4
European or white	142 203	36 639	25.8
Other <sup>2</sup>	244 351	223 775	91.6
Transvaal <sup>4</sup>			
<i>All groups</i>	1 254 140	1 005 841	80.2
European or white	283 017	56 564	20.0
Other <sup>2</sup>	971 123	949 277	97.8
Total			
<i>All groups</i> <sup>5</sup>	4 245 668	3 153 360	74.3
European or white	1 100 324	252 858	23.0
Other <sup>5</sup>	3 145 344	2 900 502	92.2

<sup>1</sup> Excluding persons of literacy unspecified, numbering 17,900 for all four colonies together.

<sup>2</sup> Including Africans (except for Natal), Indians and Asians, Mixed and Other.

<sup>3</sup> Excluding natives.

<sup>4</sup> Excluding the population of Swaziland who were enumerated together with Transvaal.

<sup>5</sup> Excluding natives in Natal.

As these figures refer to persons of all ages, including infants less than a year old, a more useful measure of illiteracy would be

TABLE 132. *Percentage of illiteracy in the population of the Union of South Africa, 15 years old and over, by European and other ethnic groups: 1904 and 1911*

Ethnic group	Percentage of illiteracy			
	1904 Both sexes	1911		
		Both sexes	Male	Female
<i>All groups</i>	<sup>1</sup> 65.4	68.9	67.2	70.8
European or white	3.6	2.5	2.6	2.3
Other	<sup>1</sup> 89.7	88.2	87.5	88.9

<sup>1</sup> Based on tabulated data for Cape and Orange River colonies, and adjusted data for Natal and Transvaal.

PROGRESS OF LITERACY

obtained by excluding children below a certain minimum age. It is possible, with a few slight adjustments of data for two colonies, to fix this minimum age at 15 years. Table 132 shows a comparison of the extent of illiteracy in South Africa as reported in the censuses of 1904 and 1911, among the population 15 years old and over.

This comparison shows a reduction of illiteracy among the European or white population of 1.1 per cent, and among the rest of the population of about 1.5 per cent between the two census years. Incidentally, it may be noted that the percentage of illiteracy among the male European population was slightly higher than among the female. This is true not only for 1911, but for other census years as well (see Table 133).

ILLITERACY AMONG THE EUROPEAN OR WHITE POPULATION

A comparison of the census results for 1904, 1911, and 1918, relating to the European or white population, shows considerable progress made in the reduction of illiteracy, both among the male and the female populations. At the age level 10 years and over, the rate of progress was almost 50 per cent per decade. At the age level 15 years and over, the relative rate of progress was about 34 per cent per decade. The rate of progress was approximately equal between the sexes, although, as already noted, the percentage of illiteracy was less among the female population throughout this period.

TABLE 133. *Reduction of illiteracy in the European or white population of South Africa, 10 and 15 years old and over, by sex: 1904-18*

Age level and sex	Percentage of illiteracy			Reduction in percentage of illiteracy 1904-18	Average decennial rate of progress
	1904	1911	1918		
%					
<i>10 years and over</i>					
Both sexes	5.4	3.0	2.1	3.3	49
Male	5.7	3.2	2.3	3.4	48
Female	4.9	2.8	1.9	3.0	49
<i>15 years and over</i>					
Both sexes	3.6	2.5	2.0	1.6	34
Male	3.9	2.6	2.2	1.7	34
Female	3.1	2.3	1.8	1.3	32



When these data are analysed by detailed age groups, as shown in Table 134, it is seen that the most rapid progress was registered among the age groups 10-14, and 15-19, both male and female. The advantage in literacy of the female over the male population holds for every age group below 55 in each of the census years except 1911, when the two sexes appear to have reached about the same level in the age groups 35-44 and 45-54.

TABLE 134. *Reduction of illiteracy in the European or white population of South Africa, by sex and age groups: 1904-18*

Sex and age group	Percentage of illiteracy			Reduction of illiteracy 1904-18	Average decennial rate of progress
	1904	1911	1918		
<b>Male</b>					
<i>10 years and over</i> <sup>1</sup>	5.7	3.2	2.3	3.4	48
10-14	18.5	7.6	2.7	15.8	75
15-19	5.7	2.6	1.1	4.6	69
20-24	2.9	2.0	1.4	1.5	41
25-34	3.0	2.1	1.7	1.3	33
35-44	4.0	2.4	2.2	1.8	35
45-54	4.6	3.0	2.9	1.7	28
55-64	5.1	3.9	3.8	1.3	19
65 and over	6.5	5.1	5.3	1.2	14
Unknown <sup>2</sup>	29.6	.	.	.	.
<b>Female</b>					
<i>10 years and over</i> <sup>1</sup>	4.9	2.8	1.9	3.0	49
10-14	13.3	5.7	2.0	11.3	74
15-19	2.8	1.8	0.7	2.1	63
20-24	2.4	1.5	0.8	1.5	50
25-34	2.5	1.8	1.2	1.3	41
35-44	3.1	2.4	1.9	1.2	30
45-54	3.9	3.0	2.8	1.1	21
55-64	5.2	4.1	3.8	1.4	20
65 and over	8.3	6.4	5.9	2.4	21
Unknown <sup>2</sup>	.	.	1.9	.	.

<sup>1</sup> Including age unknown.

<sup>2</sup> Percentages are not shown where base is less than 100.

Marked differences existed between the urban and rural areas in 1904, when the percentage of illiteracy among the rural population was nearly twice that of the urban population. By 1918, however, this difference had almost disappeared among male persons, while the female population in the rural areas seem to have outstripped its urban sisters in literacy.

PROGRESS OF LITERACY

TABLE 135. *Reduction of illiteracy in the European or white population of South Africa, 10 years old and over, by urban and rural areas and by sex: 1904-18*

Area and sex	Percentage of illiteracy			Reduction of illiteracy 1904-18	Average decennial rate of progress
	1904 <sup>1</sup>	1911 <sup>1</sup>	1918		
<i>Urban</i>					%
Both sexes	<sup>2</sup> 4.2	2.7	2.1	2.1	39
Male	<sup>2</sup> 4.4	2.6	2.2	2.2	39
Female	<sup>2</sup> 3.9	2.7	2.0	1.9	38
<i>Rural</i>					
Both sexes	<sup>2</sup> 7.6	3.5	2.0	5.6	61
Male	<sup>2</sup> 8.4	3.9	2.4	6.0	59
Female	<sup>2</sup> 6.5	3.0	1.6	4.9	63

<sup>1</sup> Excluding travellers by rail.  
<sup>2</sup> Excluding Natal (not available by urban and rural classification) but including Swaziland, whose population was enumerated with that of Transvaal at the 1904 census.

ILLITERACY AMONG THE NATIVE POPULATION

Since the 'European' population constitutes only about 20 per cent of the total population of South Africa, the main problem of illiteracy in that country concerns of course the 'non-European' population, the bulk of which is made up of almost 8 million native Africans, according to the census of 1946. This native population is still about 80 per cent illiterate, though this represents already a certain amount of progress from the situation at the turn of the century.

TABLE 136. *Number and percentage of illiterates in the native population of South Africa, all ages included: 1904-46*

Census year	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage of illiteracy		
			Both sexes	Male	Female
1904 <sup>2</sup>	2 586 222	2 453 484	94.9	94.5	95.2
1911	4 016 874	3 743 072	93.2	92.8	93.6
1921	4 685 689	4 230 291	90.3	89.7	90.8
1946	7 679 013	<sup>3</sup> 6 049 101	78.8	*78.1	*79.5

<sup>1</sup> Excluding persons of literacy unspecified, numbering 4,724 in 1904; 2,132 in 1911; 12,124 in 1921; 152,902 in 1946.  
<sup>2</sup> Excluding natives in Natal.  
<sup>3</sup> Not able to read and write in a native language.

Table 136 shows that, between 1904 and 1946, the percentage of illiteracy among the native population, all ages included, was reduced from 94.9 to 78.8, which means a relative rate of progress of about four per cent per decade. That this rate of progress is hardly adequate may be seen from the fact that the number of illiterate persons has been rapidly increasing.

If we consider only the native population 10 years old and over in 1946, there were still more than 4 million persons not able to read and write in any language, out of a total of 5.6 million persons at that age level. The percentage of illiteracy at this age level is about 72 for the entire native population, about 55 for the native population in urban areas, and about 78 for the native population in rural areas, as shown in Table 137

TABLE 137. *Number and percentage of illiterates in the native population of South Africa, 10 years old and over, by urban and rural areas and by sex: 1946*

Area and sex	Population 10 years old and over		
	Total No. of persons <sup>1</sup>	Persons not able to read and write	Percentage illiterate
<i>Urban and rural</i>			
Both sexes	5 596 739	4 052 635	72.4
Male	2 887 699	2 065 926	71.5
Female	2 709 040	1 986 709	73.3
<i>Urban</i>			
Both sexes	1 397 179	764 795	54.7
Male	951 031	555 548	58.4
Female	446 148	209 247	46.9
<i>Rural</i>			
Both sexes	4 199 560	3 287 840	78.3
Male	1 936 668	1 510 378	78.0
Female	2 262 892	1 777 462	78.5

<sup>1</sup> Excluding 118,996 persons of literacy unspecified and 26,476 persons of unknown age.

The illiteracy rate among the native population in urban areas is relatively higher for male persons than for female in every age group below 50. In the rural areas, however, the advantage of the female population over the male in regard to literacy holds only for the younger age groups under 30.

PROGRESS OF LITERACY

TABLE 138. *Percentage of illiteracy in the native population of South Africa, 10 years old and over, by urban and rural areas, and by age and sex: 1946*

Area and age group	Percentage of illiteracy		
	Both sexes	Male	Female
<i>Urban and rural</i>			
<i>10 years and over</i> <sup>1</sup>	73.1	72.2	74.0
10-19	70.6	73.9	67.1
20-29	68.3	68.4	68.2
30-39	71.7	68.9	75.0
40-49	76.3	72.6	80.5
50-59	80.5	75.9	85.1
60 and over	87.7	82.5	91.8
Unknown	91.4	89.3	93.6
<i>Urban</i>			
<i>10 years and over</i> <sup>1</sup>	56.3	59.6	49.2
10-19	49.0	55.8	39.7
20-29	55.3	60.4	42.6
30-39	57.4	59.7	51.2
40-49	59.9	60.3	58.9
50-59	62.1	59.2	67.1
60 and over	73.8	66.3	81.7
Unknown	78.7	79.2	77.5
<i>Rural</i>			
<i>10 years and over</i> <sup>1</sup>	78.7	78.5	79.0
10-19	74.9	78.1	71.8
20-29	75.7	76.2	75.3
30-39	78.7	76.3	80.6
40-49	81.9	78.9	84.6
50-59	84.6	81.0	87.8
60 and over	89.6	85.1	93.1
Unknown	95.3	94.2	96.3

<sup>1</sup> Percentages for 10 years old and over are here computed on the total population including persons of unknown age and those of literacy unspecified; hence they do not agree with those shown in Table 147.

The census of 1946 gives tabulations on literacy of the native population in (1) native languages; (2) English, or (3) Afrikaans, as shown in Table 139. In the above analysis, all persons not able to read and write in a native language have been considered as illiterate. It is quite possible, of course, that some natives may be literate in English or Afrikaans, though not able to read and write in any native language. Unfortunately, data are not available on the extent of literacy or of illiteracy in any language.

## UNION OF SOUTH AFRICA : 1904-46

 TABLE 139. *Percentage of literacy among the native population of South Africa, 10 years old and over, in native languages, English and Afrikaans, by urban and rural areas and by sex : 1946*

Area and sex	Percentage of literacy <sup>1</sup> in		
	Native languages	English	Afrikaans
<i>Urban and rural</i>			
Both sexes	27.6	10.7	4.6
Male	28.5	10.7	4.8
Female	26.7	10.7	4.5
<i>Urban</i>			
Both sexes	45.3	20.9	8.5
Male	41.6	17.4	6.9
Female	53.1	28.3	11.9
<i>Rural</i>			
Both sexes	21.7	7.3	3.4
Male	22.0	7.4	3.8
Female	21.5	7.3	3.0

<sup>1</sup> Ability to read and write.

## CONSISTENCY OF THE DATA

The census schedules used in the four colonies in 1904 and in the Union of South Africa in 1911 and 1918 all provided for three types of response: (1) able to read and write; (2) able to read only, and (3) able neither to read nor write.

The schedule used in the 1921 census of the native population contains the following instructions: 'If able to *read and write*, insert the figure 1; if able to *read only*, insert the figure 2; if *unable to read and write*, insert the figure 3.' Judging by the tabulated results, the third alternative was evidently intended to cover those unable to read *or* write. Otherwise, alternatives 1 and 3 would have been mutually exclusive, and there would have been no possibility of alternative 2.

In all the foregoing analysis, persons not able both to read and write have been considered illiterate. Wherever possible, persons of literacy unspecified have been excluded from the total population used in the computation of illiteracy rates.

PROGRESS OF LITERACY

UNITED STATES: 1900-47

ILLITERACY IN THE TOTAL POPULATION

There were more than 6 million illiterates 10 years old and over in the United States at the beginning of the century. In 1947 there were still about 2.8 million illiterates among persons 14 years old and over. According to the census reports for the years 1900-30, and an estimate for 1940 made by the Bureau of the Census, the percentage of illiteracy in the United States population 10 years old and over dropped from 10.7 in 1900 to 2.9 in 1940, as shown in Table 140.

TABLE 140. *Number and percentage of illiterates in the population of the United States, 10 years old and over: 1900-40*

Census year	Population 10 years old and over		
	Total No. of persons	Persons not able to read and write	Percentage illiterate
1900	57 949 824	6 180 069	10.7
1910	71 580 270	5 516 163	7.7
1920	82 739 315	4 931 905	6.0
1930	98 723 047	4 283 753	4.3
1940 <sup>1</sup>	110 443 129	*3 249 000	*2.9

<sup>1</sup> Estimates made by the Bureau of the Census.

The relative rates of progress for each decennial period since 1900 varied between 22 and 33 per cent. For the entire period 1900-40, the average decennial rate of progress was about 28 per cent.

TABLE 141. *Reduction of illiteracy in the population of the United States, 10 years old and over, by decennial periods: 1900-40*

Period	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	at beginning of period	at end of period		
1900-10	10.7	7.7	3.0	% 28
1910-20	7.7	6.0	1.7	22
1920-30	6.0	4.3	1.7	28
1930-40	4.3	*2.9	*1.4	33
1900-40	10.7	*2.9	*7.8	28

At the census of 1940, the question on literacy was replaced by a question on the last full grade that the person had completed in the regular school system.

In October 1947, the Census Bureau included supplementary questions on illiteracy and years of school completed in its monthly cross-section survey of population. Based on the results of this survey, the Bureau estimated the total number of illiterates at 2,838,000 among persons 14 years old and over, which represented 2.7 per cent of the total population at that age level. This compares with 4.7 per cent in 1930 (for persons 14 years old and over) and 6.5 per cent in 1920 (for persons 15 years old and over).

REDUCTION OF ILLITERACY, BY SEX

The percentage of illiteracy among the females was slightly higher than among the males in 1900 and 1910, but later censuses indicate a slightly lower percentage of illiteracy among the female population. The relative rate of progress was therefore greater among the female population than among the male during the three decades between 1900 and 1930. The estimates based on the 1947 survey also showed 2.3 per cent illiteracy among the female population as against 3 per cent among the male population.

TABLE 142. *Reduction of illiteracy in the population of the United States, 10 years old and over, by sex: 1900-30*

Sex	Percentage of illiteracy				Reduction of illiteracy 1900-30	Average decennial rate of progress
	1900	1910	1920	1930		
Both sexes	10.7	7.7	6.0	4.3	6.4	% 26
Male	10.1	7.6	6.0	4.4	5.7	24
Female	11.2	7.8	5.9	4.3	6.9	27

REDUCTION OF ILLITERACY, BY COLOUR AND NATIVITY

The census reports classified persons enumerated as: native white of native parentage, native white of foreign or mixed parentage, foreign-born white, Negro, and other races (including Mexican, Indian, Chinese, Japanese, Filipino, Hindu, Korean and 'all

PROGRESS OF LITERACY

other'). According to this classification, the percentage of illiteracy has been highest among the Negro and 'other races' as compared with either of the white groups, as shown in Table 143.

TABLE 143. *Percentage of illiteracy in the population of the United States, 10 years old and over, by colour, nativity, and sex: 1900-30*

Colour, nativity and sex	Percentage of illiteracy			
	1900	1910	1920	1930
<i>Native white</i>				
Both sexes	4.6	3.0	2.0	1.5
Male	4.6	3.1	2.2	1.7
Female	4.7	2.9	1.8	1.2
<i>Foreign-born white</i>				
Both sexes	12.9	12.7	13.1	9.9
Male	11.3	11.8	11.7	8.1
Female	14.7	13.9	14.8	11.9
<i>Negro</i>				
Both sexes	44.5	30.4	22.9	16.3
Male	43.1	30.1	23.5	17.6
Female	45.8	30.7	22.3	15.1
<i>Other races</i>				
Both sexes	44.5	31.6	25.6	25.0
Male	37.5	25.0	22.1	21.9
Female	59.8	46.2	31.8	29.1

Part of the decrease in illiteracy shown for the native white and foreign-born white groups is due to a change in the classification of Mexicans. They were classed with the white population in 1910 and 1920, but in 1930 they were shown separately among

TABLE 144. *Reduction of illiteracy in the population of the United States, 10 years old and over, by colour and nativity: 1900-30*

Population group and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Decennial rate of progress
	At beginning of period	At end of period		
<i>Native white</i>				
1900-10	4.6	3.0	1.6	%
1910-20	3.0	2.0	1.0	35
<i>Foreign-born white</i>				
1900-10	12.9	12.7	0.2	2
1910-20	12.7	13.1	+0.4	.

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.



## UNITED STATES: 1900-47

Population group and period	Percentage of illiteracy		Reduction in percentage of illiteracy	Decennial rate of progress
	At beginning of period	At end of period		
Negro				%
1900-10	44.5	30.4	14.1	32
1910-20	30.4	22.9	7.5	25
1920-30	22.9	16.3	6.6	29
Other				
1900-10	44.5	31.6	12.9	29
1910-20	31.6	25.6	6.0	19

the 'other races'. This change of classification invalidates any comparison between 1920 and 1930 except for the Negro population. The relative rates of progress are therefore shown in Table 144 for the Negro group for the period 1900-30, and for each of the other groups for the period 1900-20.

A further classification of the 'other races', for 1930 only, is shown in Table 145, which indicates illiteracy among these population groups in the following descending order: Mexican, Hindu, Indian, Chinese, Korean, Japanese, Filipino—and 'all other'.

TABLE 145. *Number and percentage of illiterates in the population of the United States, 10 years old and over, of other than white or Negro race: 1930*

Population group	Total No. of persons	Number of illiterates	Percentage of illiteracy		
			Both sexes	Male	Female
Mexican	1 002 241	275 470	27.5	24.5	31.1
Indian <sup>1</sup>	238 981	61 517	25.7	24.0	27.6
Japanese	97 273	8 932	9.2	7.0	12.8
Chinese	63 392	12 912	20.4	20.0	22.3
Filipino	42 964	2 834	6.6	6.3	13.3
Hindu	2 833	753	26.6	27.5	8.8
Korean	1 446	184	12.7	11.7	15.3
All other	694	41	5.9	6.9	1.6

<sup>1</sup> American Indians, not natives of India who are listed as Hindus.

It may be observed that the percentage of illiteracy for these population groups was higher among the female population in all cases except the Hindu and 'all other', where the actual numbers of female illiterates enumerated were exceedingly small (12 Hindu women and 2 'all other').

PROGRESS OF LITERACY

In 1940, according to the Census Bureau's estimates, the number and percentage of illiterates among the white (native and foreign-born) and non-white populations were respectively:

Population group	Number of illiterates 10 years old and over	Percentage of illiteracy
White	2 008 000	2.0
Native	983 000	1.1
Foreign-born	1 025 000	9.0
Non-white	1 241 000	11.5

These figures may be compared with the following estimates for 1947, though there is a difference in the age level considered: white population, 14 years old and over: 1.8 per cent illiterate. Non-white population, 14 years old and over: 11.0 per cent illiterate.

ILLITERACY AMONG THE URBAN AND RURAL POPULATION

There is generally a considerable difference in the extent of illiteracy among the urban and rural populations, on account of differences in environment and in the kind of educational facilities available. Figures from the 1910 and 1930 censuses show up

TABLE 146. *Reduction of illiteracy in the urban and rural population of the United States, 10 years old and over: by colour and nativity: 1910-30*

Area and population group	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	1910	1930		
<i>Urban: All groups</i>	5.1	3.2	1.9	% 21
Native white	0.8	0.5	0.3	21
Foreign-born white	12.6	10.0	2.6	11
Negro	17.6	9.2	8.4	28
Other	11.0	18.0	+ 7.0	.
<i>Rural: All groups</i>	10.1	6.0	4.1	23
Native white	4.8	2.6	2.2	26
Foreign-born white	13.2	9.4	3.8	16
Negro	36.1	22.4	13.7	21
Other	40.0	31.2	8.8	21

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

these differences, particularly in the cases of the native white population and of the Negroes and other races.

In the case of the native white population, the higher rate of progress in rural areas has eliminated much of this difference, while the foreign-born white population in rural areas has actually somewhat surpassed the population in urban areas for literacy.

In 1947, the Census Bureau estimated the number and percentage of illiterates among the population 14 years old and over, by urban, rural non-farm and rural farm areas as shown in Table 147.

TABLE 147. Estimated number and percentage of illiterates in the population of the United States, 14 years old and over, by urban and rural areas and by sex: October 1947

Area and sex	Population 14 years old and over		
	Total No. of persons	No. of illiterates	Percentage of illiteracy
<i>Total U.S.</i>	106 428 000	2 838 000	2.7
Urban	64 900 000	1 267 000	2.0
Male	30 851 000	590 000	1.9
Female	34 049 000	677 000	2.0
Rural non-farm	22 026 000	539 000	2.4
Male	10 776 000	309 000	2.9
Female	11 250 000	230 000	2.0
Rural farm	19 501 000	1 032 000	5.3
Male	10 107 000	659 000	6.5
Female	9 395 000	373 000	4.0

#### ILLITERACY IN DIFFERENT AGE GROUPS

Comparative figures on the illiterate population by age groups are available from the censuses of 1900-30. Table 148 shows the relative rates of progress in reduction of illiteracy in the various age groups of each sex for the period 1910-30.

It is obvious that the percentage of illiteracy is highest among the oldest segment of the population and becomes progressively lower with each younger age group. Together with the reduction of the percentage of illiteracy in each age group through successive censuses, this reflects the extension of schooling among the children. As these children replace their elders in the older age groups, the illiteracy rate in those age groups is eventually reduced.

Estimates made by the Census Bureau of the percentage of illiteracy in the 1940 population 10 years old and over, by age groups, are shown in Table 149.

PROGRESS OF LITERACY

TABLE 148. *Reduction of illiteracy in the population of the United States, 10 years old and over, by sex and age groups: 1910-30*

Sex and age group	Percentage of illiteracy			Reduction of illiteracy 1910-30	Average decennial rate of progress
	1910	1920	1930		
<b>Male</b>					%
<i>10 years and over</i> <sup>1</sup>	7.6	6	4.4	3.2	24
10-14	4.6	2.6	1.4	3.2	45
15-19	5.8	3.7	2.4	3.4	36
20-24	7.5	4.5	3.2	4.3	35
25-34	7.6	5.6	3.4	4.2	33
35-44	7.6	6.9	4.9	2.7	20
45-54	8.7	8	6.5	2.2	14
55-64	10.6	8.4	7.0	3.6	19
65 and over	12.5	11.0	8.9	3.6	16
Unknown	10	9.2	6.3	.	.
<b>Female</b>					
<i>10 years and over</i> <sup>1</sup>	7.8	5.9	4.3	3.5	26
10-14	3.5	2.0	1.0	2.5	47
15-19	4.1	2.4	1.4	2.7	42
20-24	6.2	4.0	2.2	4.0	40
25-34	7.0	5.6	3.1	3.9	33
35-44	8.6	7.1	5.4	3.2	21
45-54	11.3	8.3	6.8	4.5	22
55-64	13.6	9.8	7.5	6.1	26
65 and over	16.5	13.0	10.5	6.0	20
Unknown	19.2	12.4	7.8	.	.

<sup>1</sup> Including age unknown.

TABLE 149. *Estimated number and percentage of illiterates in the population of the United States, 10 years old and over, by age groups: 1940*

Age group	Total number of persons	Number of illiterates	Percentage of illiteracy
<i>10 years and over</i>	110 443 129	3 249 000	2.9
10-14	11 745 935	117 000	1.0
15-24	23 921 358	273 000	1.1
25-34	21 339 026	465 000	2.2
35-44	18 333 220	504 000	2.7
45-54	15 512 071	652 000	4.2
55-64	10 572 205	557 000	5.3
65 and over	9 019 314	680 000	7.5

As for 1947, the sample survey yielded estimates of the percentage of illiteracy in the population 14 years old and over, as shown in Table 150.

TABLE 150. Estimated percentage of illiteracy in the population of the United States, 14 years old and over, by sex and age groups : October 1940

Age group	Percentage of illiteracy		
	Both sexes	Male	Female
14 years and over	2.7	3	2.3
14-24	1.0	1.3	0.6
25-34	1.4	1.8	1.0
35-44	2.1	2.7	1.6
45-54	3.0	3.4	2.7
55-64	5.2	5.0	5.5
65 and over	6.7	7.0	6.6

#### REDUCTION OF ILLITERACY, BY COHORTS

When several groups of persons, each born within a specified period, are followed through successive censuses, it is seen that the percentage of illiteracy among these persons tends to decrease. This is at least partly due to the fact that some of them have learned to read and write in the meantime, whether through school attendance or otherwise. However, as shown in Table 151, there are exceptions to this tendency as, for instance, in the case of cohort Im. (male persons 35-44 years old in 1910), and cohorts IIf. and IIIf. (female persons who were 15-34 years old in 1910). In such cases, there may have been a real relapse into illiteracy on the part of certain individuals who did not have sufficient opportunity to exercise their knowledge of reading and writing previously acquired.

#### ILLITERACY AND YEARS OF SCHOOL COMPLETED

In its 1947 survey, the Census Bureau asked at the same time a question on literacy and one on the highest grade of school completed, of all persons 14 years old and over. It was assumed that all persons who had completed five years of school or more were literate; hence information on literacy was obtained only from persons completing less than five years of school.

PROGRESS OF LITERACY

TABLE 151. *Reduction of illiteracy among specified cohorts in the United States population: 1910-30*

Cohort	Percentage of illiteracy			Reduction of illiteracy <sup>1</sup>		Decennial rate of progress	
	1910	1920	1930	1910-20	1920-30	1910-20	1920-30
I. Persons born 1866-75						%	%
Im. Male	7.6	8.0	.	+ 0.4	.	.	.
If. Female	8.6	8.3	.	0.3	.	3	.
II. Persons born 1876-85							
IIIm. Male	7.6	6.9	6.5	0.7	0.4	9	6
IIIf. Female	7.0	7.1	6.8	+ 0.1	0.3	.	4
III. Persons born 1886-95							
IIIIm. Male	6.7	5.6	4.9	1.1	0.7	16	13
IIIIf. Female	5.1	5.6	5.4	+ 0.5	0.2	.	4
IV. Persons born 1896-1905							
IVIm. Male	.	4.1	3.4	.	0.7	.	17
IVIf. Female	.	3.2	3.1	.	0.1	.	3

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

The results indicated that the 'completion of no particular grade of school corresponds to the attainment of a state of literacy'. On the one hand, not all persons were illiterate who had had no formal schooling; on the other hand, even among those who had completed four years of school nearly five per cent were found to be illiterate. Table 152 gives the estimated percentage of illiteracy for various population groups by the number of years of school completed, in October 1947.

RELIABILITY OF STATISTICS ON ILLITERACY

The census report of 1910 contains the following note on the 'margin of error' in statistics on illiteracy:

'There is undoubtedly a certain margin of error in the statistics of illiteracy, resulting from a variety of causes. In some cases there may be unwillingness to admit illiteracy on the part of the persons enumerated. Furthermore, there can be no doubt that in many parts of the country it is so certain that persons of the

TABLE 152. Estimated percentage of illiteracy in the population of the United States, 14 years old and over, by number of years of school completed: October 1947

Population group	Percentage of illiteracy by number of years of school completed				
	None	1 year	2 years	3 years	4 years
<i>Total U.S.</i>					
Both sexes	80.1	66.6	46.2	19.2	4.7
Male	79.4	71.7	47.3	21.6	5.9
Female	80.8	59.0	44.6	16.2	3.4
<i>Urban</i>					
Both sexes	75.7	54.2	34.5	15.2	4.7
Male	73.5	62.0	28.7	14.9	4.8
Female	77.5	<sup>1</sup> 44.0	40.5	15.6	4.7
<i>Rural non-farm</i>					
Both sexes	79.2	61.5	42.0	16.7	3.0
Male	77.3	<sup>1</sup> 62.7	42.0	21.1	4.2
Female	81.8	<sup>1</sup> 60.0	<sup>1</sup> 40.5	10.2	2.0
<i>Rural farm</i>					
Both sexes	89.6	83.6	62.5	28.1	5.8
Male	90.6	85.0	67.3	31.4	8.5
Female	88.5	<sup>1</sup> 79.7	53.2	22.7	2.1
<i>White</i>					
Both sexes	76.0	56.8	39.5	10.0	4.4
Male	72.0	62.9	39.8	22.4	5.7
Female	79.5	49.3	39.0	15.1	2.9
<i>Non-white</i>					
Both sexes	89.9	80.2	55.6	19.4	5.5
Male	93.8	81.8	57.6	20.2	6.6
Female	84.9	<sup>1</sup> 76.9	52.5	18.4	4.6

<sup>1</sup> Percentages computed where base is less than 100,000; these percentages are subject to relatively large sampling errors

native white classes are literate that the enumerators acquire the habit of returning them as such without the formality of an inquiry and in that way some isolated cases of illiteracy may fail to be reported. On the other hand, in the case of the Negroes the opposite assumption may sometimes be made by white enumerators, while in the case of the foreign-born, inability to read or write English may sometimes be taken as constituting illiteracy, although the instructions make it clear that ability to write any language is literacy.

There is, however, no test whatever as to the degree of accuracy of the returns of illiteracy. Only careful re-enumeration of

selected areas would furnish any definite evidence as to the direction or the amount of error. That a considerable margin of error exists in some cases, however, is rendered highly probable by a comparison of the returns for neighbouring countries or other localities where conditions are similar, and particularly by a comparison of the returns made by individual enumerators working in adjoining communities or parts of the same community. For the United States as a whole and for areas such as states or cities of any considerable size, the figures are probably nearly enough accurate to furnish a sound basis for judgment as to the relative illiteracy of different classes of the population, of persons in different age groups, and of males as compared with females. Beyond question comparisons between different censuses show the general tendencies with substantial accuracy. Too much dependence should not, however, be placed upon comparisons between the returns for small areas.' (*Census of 1910, 'Population', Vol. I, p. 1185.*)

As for the sample survey of 1947, which was based on a sample consisting of about 25,000 households in 68 areas of 42 states and the district of Columbia, the Census Bureau noted that the resulting estimates for the country as a whole 'are subject to sampling variability which may be relatively large in cases where the estimates are small. For example, the total number of illiterates in October 1947 was estimated at 2,838,000. The chances are about 19 out of 20 that a complete census would have yielded a figure between 2,117,000 and 3,559,000'.

Furthermore, as noted in the Census Bureau report, 'the reliability of an estimated percentage depends upon both the size of the percentage and the size of the total on which it is based. Small estimated percentages and estimated percentages having a small base are subject to relatively large sampling variability. For example, an estimated 3 per cent of all males 14 years old and over were illiterate in October 1947. The chances are about 19 out of 20 that a complete census would have yielded a figure between 2.3 and 3.7 per cent'. (*Illiteracy in the United States, October 1947, p. 6.*)



## YUGOSLAVIA: 1900-48

The following analysis is based almost entirely on material extracted, with the permission of the author, from an article by Milan Babič on 'Literacy Statistics in Yugoslavia', published by the Federal Statistical Office in the *Statistička Revija* (Statistical Review), Vol I. No. 2, July 1951. The analysis on comparative rates of progress, shown in Table 157, differs from the conclusions of Mr. Babič in his article, owing to the use of different methods of computing a measure of progress.

## HISTORICAL NOTE

Before the first world war, the territory of present-day Yugoslavia belonged to different States: Serbia, Montenegro, Turkey, Austria-Hungary. It is not possible to reconstruct historic data on literacy for the territories of the present Yugoslav People's Republics. Nevertheless, some literacy figures can be obtained for certain territorial units of the old States, and presented for comparison with data from the censuses taken in Yugoslavia in 1921, 1931 and 1948.

Even in these three censuses, however, the territory covered has not been the same. Northern Dalmatia, with some 300,000 inhabitants, was not included in the 1921 census. Territories added to Yugoslavia after the second world war were, of course, not included in the two previous censuses.

Another difficulty arises from the fact that the available data on literacy from the three censuses of Yugoslavia are not the same in details such as age classification or distribution of the illiterate population by districts or by national groups. Despite these shortcomings, an attempt is made to present, for the country as a whole, such data on literacy from the respective censuses as will help to give an indication of the progress achieved in Yugoslavia since 1900 in the reduction of illiteracy among its population.

## ILLITERACY IN THE TOTAL POPULATION

The extent of illiteracy in 1900, among the population 7 years old and over, in the territories included in present-day Yugoslavia is estimated at 59.7 per cent for both sexes, 52.5 per cent for the male population, and 67 per cent for the female. This estimate

PROGRESS OF LITERACY

is based on an analysis of literacy figures for the various territories taken from the censuses of the old States as given in Table 153.

TABLE 153. Estimated percentage of illiteracy in the population of present-day Yugoslavia, 7 years old and over, by territories of former States: 1900

Territory	Percentage of illiteracy		
	Both sexes	Male	Female
Kingdom of Serbia	79.0	66.2	92.6
Batcha and Banat <sup>1</sup>	34.5	27.2	41.7
Croatia and Slavonia	54.4	46.8	61.9
Istria <sup>2</sup>	52.7	47.6	58.2
Dalmatia	72.2	64.2	80.4
Slovenia <sup>3</sup>	*18.2	*17.2	*19.2
Bosnia-Herzegovina <sup>4</sup>	87.8	82.9	93.4
Total	*59.7	*52.5	*67.0

<sup>1</sup> Based on data for the former districts of Batch-Bodrog and Torontál of Hungary, which correspond roughly in size and level of literacy to the territory actually ceded by Hungary.

<sup>2</sup> That part of Istria which was added to the People's Republic of Croatia after the second world war.

<sup>3</sup> Estimated figures, relating to population 11 years old and over.

<sup>4</sup> Data from the census of 1910, relating to population 8 years old and over.

From the census of 1921, literacy data are available only for the population 6 years old and over, or, by excluding the age group 6-11, for the population 12 years old and over. For 1931, the data relate to the population 11 years old and over; and for 1948, the population 10 years old and over. A comparison of the percentages of illiteracy for each sex at these respective age levels for 1921, 1931 and 1948, are given in Table 154.

TABLE 154. Percentage of illiteracy in the population of Yugoslavia 12, 11, and 10 years old and over, by sex: 1921-48

Census year	Age level	Percentage of illiteracy		
		Both sexes	Male	Female
1921	12 years and over	50.5	40.3	60.0
1931	11 years and over	44.6	32.3	56.4
1948	10 years and over	25.4	15.4	34.4

## ILLITERACY IN THE DIFFERENT PEOPLE'S REPUBLICS

Comparative data on the reduction of illiteracy in the different People's Republics are available only for 1931 and 1948. Table 155 gives the number and percentage of illiterates in the population 11 years old and over in 1931, and of the population 10 years old and over in 1948.

TABLE 155. *Number and percentage of illiterate persons in Yugoslavia and the different People's Republics: 1931 and 1948*

People's Republic	1931 (pop. 11 years and over)		1948 (pop. 10 years and over)	
	No. of illiterates	Percentage illiterate	No. of illiterates	Percentage illiterate
<i>Yugoslavia</i>	4 408 471	44.6	3 162 980	25.4
Serbia	1 941 221	46.9	1 404 597	26.8
Croatia	777 896	31.5	477 563	15.6
Slovenia	47 464	5.5	27 477	2.4
Bosnia- Herzegovina	1 061 439	70.0	834 799	44.9
Macedonia	439 479	67.5	344 295	40.4
Montenegro	140 972	56.1	74 249	26.4

Table 156 gives the percentage of illiteracy by sex for each People's Republic, of the population 11 years old and over in 1931, and of the population 10 years old and over in 1948. It will be noted that the percentage of illiteracy is highest in the People's Republic

TABLE 156. *Percentage of illiteracy in the population of Yugoslavia and the different People's Republics, by sex: 1931 and 1948*

People's Republic	Percentage of illiteracy					
	1931 (pop. 11 years and over)			1948 (pop. 10 years and over)		
	Both sexes	Male	Female	Both sexes	Male	Female
<i>Yugoslavia</i>	44.6	32.3	56.4	25.4	15.4	34.4
Serbia	46.9	30.6	62.4	26.8	15.0	37.6
Croatia	31.5	22.5	39.8	15.6	9.2	21.0
Slovenia	5.5	5.3	5.8	2.4	2.4	2.5
Bosnia- Herzegovina	70.0	56.6	84.0	44.9	28.7	59.3
Macedonia	67.5	53.3	81.7	40.4	27.0	53.9
Montenegro	56.1	34.2	77.3	26.4	13.8	37.1

PROGRESS OF LITERACY

of Bosnia-Herzegovina, followed by Macedonia, Serbia, Montenegro, Croatia and Slovenia in that order.

In terms of relative progress of literacy between 1931 and 1948, the highest rate was achieved by Slovenia, followed in order by Montenegro, Croatia, Bosnia-Herzegovina, Serbia and Macedonia.

It may be observed that, although the reduction in percentage of illiteracy was greater in most cases among the female population, the relative rate of progress was higher among the male population during this period both in Yugoslavia as a whole and in each of the People's Republics except Slovenia, where the female population had a slight advantage over the male.

TABLE 157. *Reduction of illiteracy in Yugoslavia and the different People's Republics: 1931-48*

People's Republic	Reduction in percentage of illiteracy 1931-48			Average decennial rate of progress		
	Both sexes	Male	Female	Both sexes	Male	Female
<i>Yugoslavia</i>	19.2	16.9	22.0	%	%	%
Serbia	20.1	15.6	24.8	28	34	26
Croatia	15.9	13.3	18.8	34	41	31
Slovenia	3.1	2.9	3.3	39	37	39
Bosnia-Herzegovina	25.1	27.9	24.7	23	33	19
Macedonia	27.1	26.3	27.8	26	33	22
Montenegro	29.7	20.4	40.2	36	41	35

ILLITERACY IN DIFFERENT AGE GROUPS

A comparison of percentages of illiteracy by broad age groups from the censuses of 1921, 1931, and 1948 shows that substantial progress has been achieved in reduction of illiteracy in all the given age groups, in both the male and the female populations. Data for the first age group are not strictly comparable, since the age limits are different for each census. It is significant that the age group 15-24 registered the most rapid progress between 1931 and 1948, indicating that a new generation of children were growing up with better educational advantages than the previous one.

The fact that, in 1948, there were still 15 per cent of children

10-14 years old reported as illiterate is an indication that the laws of compulsory schooling for children between the ages of 7 and 13 had not yet been enforced effectively. According to school statistics for the beginning of the school year 1948-49, only 75 per cent of children 7-13 years old were enrolled in school. The percentage of school attendance is 84.7 for children 7-10 years old and 62.7 for children 11-13 years old.

TABLE 158. *Reduction of illiteracy in the population of Yugoslavia, by sex and broad age groups: 1921-48*

Sex and age group	Percentage of illiteracy		
	1921	1931	1948
<b>Both sexes</b>			
<i>10 years and over</i>	<sup>1</sup> 50.5	<sup>2</sup> 44.6	25.4
10-14	<sup>3</sup> 47.4	<sup>4</sup> 33.4	15.4
15-24	41.8	37.7	12.6
25-59	51.4	45.2	28.9
60 and over	69.2	65.1	52.5
<b>Male</b>			
<i>10 years and over</i>	<sup>1</sup> 40.3	<sup>2</sup> 32.3	15.4
10-14	<sup>3</sup> 40.5	<sup>4</sup> 24.1	11.0
15-24	31.3	26.4	6.7
25-59	39.5	31.2	16.5
60 and over	63.0	56.8	38.9
<b>Female</b>			
<i>10 years and over</i>	<sup>1</sup> 60.0	<sup>2</sup> 56.4	34.4
10-14	<sup>3</sup> 54.7	<sup>4</sup> 43.2	20.1
15-24	51.9	49.3	18.1
25-59	61.8	58.0	39.7
60 and over	75.4	72.9	62.9

<sup>1</sup> 2 years and over.  
<sup>2</sup> 11 years and over.  
<sup>3</sup> 12-14.  
<sup>4</sup> 11-14.

#### ILLITERACY BY NATIONAL GROUPS

The census of 1948 gives population and literacy figures by nationality. Excluding certain small minorities which constitute altogether less than 0.5 per cent of the total population, Table 159 shows the percentage of illiteracy, by sex, for each of the nationalities according to the 1948 census.

PROGRESS OF LITERACY

TABLE 159. *Percentage of illiteracy in the population of Yugoslavia, 10 years old and over by national groups and by sex: 1948*

National group	Percentage of total population	Percentage of illiteracy		
		Both sexes	Male	Female
<i>All groups</i>	100.0	25.4	15.4	34.4
Serbs	41.5	27.7	14.1	40.2
Croats	24.0	18.1	11.2	24.0
Slovenes	9.0	2.3	2.3	2.3
Macedonians	5.1	30.2	18.7	42.0
Montenegrins	2.7	24.1	11.0	35.5
Autonomous Moslems	5.1	54.6	36.6	70.6
Bulgars	0.4	19.9	6.8	33.1
Czechs	0.2	3.0	2.4	3.5
Slovaks	0.5	4.8	4.2	5.3
Shiptars	4.8	73.7	55.9	92.5
Hungarians	3.1	8.0	6.0	9.6
Germans	0.4	6.2	5.9	6.4
Rumanians	0.4	17.6	11.2	23.2
Valaques	0.7	38.2	22.7	51.6
Italians	0.5	6.9	4.9	8.7
Turks	0.6	63.9	47.4	80.7
Gypsies	0.5	74.0	61.9	85.7

CRITERION OF LITERACY

In none of the censuses of Yugoslavia is there found any statement on the criterion of literacy, except that in the census of 1921, the enumerators were instructed to enter as illiterate all persons who could only sign their names but who could neither read nor write. It is understood that the percentage of illiteracy given in the present study refer, in fact, to persons who could not read, thus excluding those who could read but not write.

The extent of semi-literacy in Yugoslavia, however, is extremely small. According to the census reports, there were in 1921 about one per cent of the population 12 years old and over who could read but not write. In 1931 there were about 0.6 per cent in the population 11 years old and over. These percentages have not been included in the percentages of illiteracy given above, but in any case it would have made very little difference to the results of the analysis.

## SOURCES OF THE DATA

The article from which the above analysis been has extracted was published in the *Statistička Revija* (Statistical Review) for July 1951. The following sources of data, insofar as they related to censuses of 1900 and later, were indicated by the author.

- Statistička Kraljevine Srkije* (Statistics of the Kingdom of Serbia), Vol. XXIV (Belgrade, 1905).  
*A Magyar szent korona orszagainak 1900, évi Népszámlalasa.* (Budapest, 1907).  
*Volkszählung in den Ländern der ungarischen heil. Krone im Jahre 1900,* Zehnter Teil. (Budapest, 1909.)  
*A Magyar szent korona orszagainak 1910.* Otodile Rész. Részletes demografia. (Budapest, 1916.)  
*Recensement Général de la Population des Pays de la Sainte Couronne Hongroise en 1910,* sixième partie. (Budapest, 1924.)  
*Popis žiteljsjta od 31 prosinca 1910 u Kraljevinama Hrvatskoj i Slavoniji* (Census of the population at 31 December 1910, in the Kingdoms of Croatia and Slavonia). (Zagreb, 1914.)  
*Statistische Monatschrift,* Neue Folge XVIII Jahrgang (Brünn, 1913) 'Der Bildungsgrad der Bevölkerung in den österr. Alpen . . . und Karstländern nach den Ergebnissen der letzten vier Volkszählungen 1880-1910', p. 769, ff.  
*Oesterreichische Statistik,* LXIII Band, 3 Heft, I. (Wien, 1903.)  
*Neue Folge Oesterreichische Statistik,* I Band, 2 Heft. (Wien, 1914.)  
*Rezultati popisa žiteljsjta u Bosni i Hercegovini od 10 oktobra 1910* (Results of the census of population in Bosnia-Herzegovina at 10 October 1910). (Sarajevo, 1912.)  
*Statističko Godišnjak,* 1929 (Statistical Review, 1929). (Belgrade, 1932.)  
*Definitivni rezultati popisa stanovništva od 31-III-1931* (Final results of the census of population of 31 March 1931). Vol.III. (Belgrade, 1938.)  
*Statistički bilten* 1, 2 (Statistical Bulletin, 1 and 2). (Belgrade, 1950.)

## CHAPTER III

### SOME INTERNATIONAL COMPARISONS

#### BASIS OF COMPARISONS

It must be emphasized that percentages of illiteracy for different countries, even when computed on the same basis, are not directly comparable, for reasons discussed in the introductory chapter. But relative rates of progress in the reduction of illiteracy, expressed in terms of average decennial rates, should be more suitable for international comparison. The average decennial rate of progress is the percentage rate of reduction of the initial illiteracy rate in a period of 10 years. Thus where a country or a population group starts with an illiteracy rate of 50 per cent, and at the end of a decade has reduced it to 45 per cent, it is said to have shown a decennial rate of progress of 10 per cent. Or if the illiteracy rate is reduced from 50 to 30 per cent in 20 years, the average decennial rate of progress is about 23 per cent. The progress of literacy in the 26 countries will now be examined by this method of comparison to see what tentative conclusions may be drawn from the present study.

#### REDUCTION OF ILLITERACY IN THE TOTAL POPULATION

Table 160 shows the reduction of illiteracy in the total population 10 years old and over, in 18 countries, for various periods between 1899 and 1948. The following countries have shown average rates of progress of less than 10 per cent per decade for each of the intercensal periods between the dates given: Burma (1901-31), Chile (1930-40), Colombia (1928-38), Cuba (1907-19), Egypt (1907-37), India (1901-31), Mexico (1900-30), Portugal (1900-30).

Countries showing average decennial rates of progress between 10 and 24 per cent are: Bulgaria (1900-26), Chile (1907-20), Colombia (1918-28), Cuba (1919-43), France (1926-31; 1936-46), Greece (1907-28), Italy (1901-11; 1921-31), Mexico (1930-40),



SOME COMPARISONS

Philippines (1939-48), Portugal (1930-40), Spain (1900-20), Turkey (1935-45), United States (1910-20), Yugoslavia (1921-31).

Rates of progress of 25 per cent or more are shown for the following countries and periods: Bulgaria (1926-34), Canada (1921-31), Chile (1920-30), Cuba (1899-1907), France (1901-26; 1931-36), Italy (1911-21), Spain (1920-40), United States (1900-10; 1920-40), Yugoslavia (1931-48).

TABLE 160. *Reduction of illiteracy in the population 10 years old and over, in 18 selected countries, by various intercensal periods since about 1900*

Country and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	At beginning of period	At end of period		
<b>Bulgaria</b>				%
1900-34	70.4	31.4	39.0	21
1900-05	70.4	65.5	4.9	13
1905-10	65.5	57.8	7.7	22
1910-20	57.8	46.7	11.1	19
1920-26	46.7	39.7	7.0	24
1926-34	39.7	31.4	8.3	25
<b>Burma</b>				
1901-31	71.6	59.8	11.8	6
1901-11	71.6	70.6	1.0	1
1911-21	70.6	64.3	6.3	9
1921-31	64.3	59.8	4.5	7
<b>Canada</b>				
1921-31	5.7	4.3	1.4	25
<b>Chile<sup>2</sup></b>				
1907-40	49.9	26.4	23.5	18
1907-20	49.9	36.9	13.0	21
1920-30	36.9	24.4	12.5	34
1930-40 <sup>3</sup>	24.4	26.4	+ 2.0	.
<b>Colombia<sup>2</sup></b>				
1918-38	*57.6	44.2	13.4	12
1918-28	*57.6	48.4	9.2	16
1928-38	48.4	44.2	4.2	9
<b>Cuba<sup>4</sup></b>				
1899-1943	56.9	23.6	33.3	18
1899-1907	56.9	43.6	13.3	28
1907-19	43.6	38.7	4.9	9
1919-31	38.7	28.2	10.5	23
1931-43	28.2	23.6	4.6	14

PROGRESS OF LITERACY

Country and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	At beginning of period	At end of period		
<b>Egypt</b>				%
1907-37	92.7	85.2	7.5	3
1907-17	92.7	91.2	1.5	2
1917-27	91.2	85.9	5.3	6
1927-37	85.9	85.2	0.7	1
<b>France</b>				
1901-46	16.5	3.4	13.1	30
1901-11	16.5	11.9	4.6	28
1911-21	11.9	8.2	3.7	31
1921-26	8.2	6.1	2.1	45
1926-31	6.1	5.3	0.8	24
1931-36	5.3	4.0	1.3	43
1936-46	4.0	3.4	0.6	15
<b>Greece</b>				
1907-28	60.5	41.9	.	.
1907-20 <sup>5</sup>	60.5	46.1	14.4	19
1920-28 <sup>6</sup>	52.0	41.9	10.1	24
<b>India<sup>7</sup></b>				
1901-31	93.8	90.9	2.9	1
1901-11	93.8	93.0	0.8	1
1911-21	93.0	91.7	1.3	1
1921-31	91.7	90.9	0.8	1
<b>Italy<sup>2</sup></b>				
1901-31	48.2	21.6	.	.
1901-11	48.2	37.2	11.0	23
1911-21 <sup>8</sup>	37.2	27.5	9.7	26
1921-31 <sup>9</sup>	26.8	21.6	5.2	19
<b>Mexico</b>				
1900-40	77.7	54.0	23.7	9
1900-10	77.7	72.3	5.4	7
1910-21	72.3	66.2	6.1	8
1921-30	66.2	61.5	4.7	8
1930-40	61.5	54.0	7.5	12
<b>Philippines</b>				
1939-48	51.2	38.7	12.5	24
<b>Portugal<sup>2</sup></b>				
1900-40	73.4	50.4	23.0	9
1900-11	73.4	68.9	4.5	6
1911-20	68.9	65.2	3.7	6
1920-30	65.2	60.2	5.0	8
1930-40	60.2	50.4	9.8	16

SOME COMPARISONS

Country and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	At beginning of period	At end of period		
<b>Spain</b>				%
1900-40	58.7	23.2	35.5	21
1900-10	58.7	52.2	6.5	11
1910-20	52.2	44.0	8.2	16
1920-40	44.0	23.2	20.8	27
<b>Turkey</b>				
1935-45	79.6	69.5	10.1	13
<b>United States</b>				
1900-40	10.7	*2.9	*7.8	28
1900-10	10.7	7.7	3.0	28
1910-20	7.7	6.0	1.7	22
1920-30	6.0	4.3	1.7	28
1930-40	4.3	*2.9	*1.4	33
<b>Yugoslavia<sup>2</sup></b>				
1921-48	<sup>10</sup> 50.5	25.4	25.1	22
1921-31	<sup>10</sup> 50.5	<sup>11</sup> 44.6	5.9	12
1931-48	<sup>11</sup> 44.6	25.4	19.2	28

<sup>1</sup> A plus sign in this column indicates an increase of illiteracy.

<sup>2</sup> Criterion of literacy is 'ability to read'.

<sup>3</sup> Apparent increase of illiteracy rate may be due to errors of enumeration or change of criterion.

<sup>4</sup> Criterion of literacy is not uniform for different censuses.

<sup>5</sup> Old boundaries, i.e., excluding territories added to Greece after the Balkan wars and the first world war.

<sup>6</sup> New boundaries, i.e. according to the Treaty of Lausanne (1923).

<sup>7</sup> Pre-partition India, i.e., including present-day Pakistan but not including Burma.

<sup>8</sup> Old boundaries, i.e., excluding Venezia Tridentina and Venezia Giulia.

<sup>9</sup> New boundaries, i.e., including Venezia Tridentina and Venezia Giulia.

<sup>10</sup> Population 12 years old and over.

<sup>11</sup> Population 11 years old and over.

Table 161 presents the data relating to the population 15 years old and over in 22 countries. This shows the countries grouped by their average decennial rates of progress as follows:

*Less than 10 per cent:* Brazil (1900-40), Burma (1901-31), Chile (1930-40), Egypt (1907-27), Honduras (1930-45), India (1901-31), Portugal (1911-30).

*Between 10-24 per cent:* Argentina (1895-1914), Belgium (1920-30), Bulgaria (1900-34), Chile (1907-20), Cuba (1899-1919), Greece (1907-28), Italy (1901-11; 1921-31), Mexico (1930-40), Portugal (1930-40), Spain (1900-20), Turkey (1935-45), United States (1910-20).

*25 per cent and over:* Argentina (1914-47), Belgium (1900-20), Canada (1921-31), Chile (1920-30), Finland (1900-30), Hungary (1920-41), Italy (1911-21), Philippines (1939-48), Spain (1920-40), United States (1920-30), Yugoslavia (1931-48).

PROGRESS OF LITERACY

TABLE 161. *Reduction of illiteracy in the population 15 years old and over, in 22 selected countries, by various intercensal periods since about 1900*

Country and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	At beginning of period	At end of period		
Argentina <sup>2</sup>				%
1895-1947	53.3	13.6	39.7	23
1895-1914	53.3	35.1	18.2	20
1914-47	35.1	13.6	21.5	25
Belgium				
1900-30	19.6	5.9	13.7	33
1900-10	19.6	13.4	6.2	32
1910-20	13.4	7.8	5.6	42
1920-30	7.8	5.9	1.9	24
Brazil				
1900-40	65.3	56.1	9.2	4
1900-20	65.3	64.9	0.4	0
1920-40	64.9	56.1	8.8	7
Bulgaria				
1900-34	73.6	35.1	38.5	20
1900-05	73.6	68.6	5.0	13
1905-10	68.6	62.2	6.4	18
1910-20	62.2	50.3	11.9	19
1920-26	50.3	42.9	7.4	23
1926-34	42.9	35.1	7.8	22
Burma				
1901-31	70.1	57.6	12.5	6
1901-11	70.1	68.6	1.5	2
1911-21	68.6	62.3	6.3	9
1921-31	62.3	57.6	4.7	8
Canada				
1921-31	6.3	4.7	1.6	25
Chile <sup>3</sup>				
1907-40	49.6	27.1	22.5	17
1907-20	49.6	36.6	13.0	21
1920-30	36.6	25.3	11.3	31
1930-40 <sup>4</sup>	25.3	27.1	+ 1.8	.
Cuba <sup>5</sup>				
1899-1919	55.2	36.6	18.6	19
1899-1907	55.2	45.4	9.8	22
1907-19	45.4	36.6	8.8	16
Egypt				
1907-27	92.8	86.6	6.2	3

SOME COMPARISONS

Country and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	At beginning of period	At end of period		
<b>Finland</b>				%
1900-30	61.2	15.9	45.3	36
1900-10	61.2	44.7	16.5	27
1910-20	44.7	30.1	14.6	33
1920-30	30.1	15.9	14.2	47
<b>Greece</b>				
1907-28	63.0	45.1	.	.
1907-20 <sup>6</sup>	63.0	48.6	14.4	18
1920-28 <sup>7</sup>	54.7	45.1	9.6	21
<b>Honduras</b>				
1930-45	66.6	63.7	2.9	3
1930-35 <sup>4</sup>	66.6	67.4	+ 0.8	.
1935-40	67.4	65.3	2.1	6
1940-45	65.3	63.7	1.6	5
<b>Hungary<sup>8</sup></b>				
1920-41	13.4	6.4	7.0	31
1920-30	13.4	10.0	3.4	25
1930-41	10.0	6.4	3.6	36
<b>India<sup>9</sup></b>				
1901-31	93.5	90.4	3.1	1
1901-11	93.5	92.7	0.8	1
1911-21	92.7	91.4	1.3	1
1921-31	91.4	90.4	1.0	1
<b>Italy<sup>3</sup></b>				
1901-31	49.9	23.1	.	.
1901-11	49.9	39.3	10.6	21
1911-21 <sup>10</sup>	39.3	28.8	10.5	27
1921-31 <sup>11</sup>	28.0	23.1	4.9	18
<b>Mexico</b>				
1930-40	63.6	53.9	9.7	15
<b>Philippines</b>				
1939-48	52.3	40.0	12.3	26
<b>Portugal<sup>3</sup></b>				
1911-40	69.1	52.3	16.8	9
1911-20	69.1	65.3	3.8	6
1920-30	65.3	60.5	4.8	7
1930-40	60.5	52.3	8.2	14
<b>Spain<sup>12</sup></b>				
1900-40	58.9	23.6	35.3	20
1900-10	58.9	52.2	6.7	11
1910-20	52.2	43.7	8.5	16
1920-40	43.7	23.6	20.1	27
<b>Turkey</b>				
1935-45	81.3	71.5	9.8	12

PROGRESS OF LITERACY

Country and period	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
	At beginning of period	At end of period		
United-States				%
1910-30	8.2	4.8	3.4	23
1910-20	8.2	6.5	1.7	21
1920-30	6.5	4.8	1.7	26
Yugoslavia				
1931-48	46.2	27.1	19.1	27

<sup>1</sup> A plus sign in this column indicates an increase of illiteracy.

<sup>2</sup> Population 14 years old and over.

<sup>3</sup> Criterion of literacy is 'ability to read'.

<sup>4</sup> Apparent increase in illiteracy rate may be due to errors of enumeration or change of criterion.

<sup>5</sup> Criterion of literacy is 'able to read, or attending school'.

<sup>6</sup> Old boundaries, i.e., excluding territories added to Greece after the Balkan wars and the first world war.

<sup>7</sup> New boundaries, i.e., according to the Treaty of Lausanne (1923).

<sup>8</sup> Territory by the Trianon Treaty (1920).

<sup>9</sup> Pre-partition India, i.e., including present-day Pakistan but not including Burma.

<sup>10</sup> Old boundaries, i.e., excluding Venezia Tridentina and Venezia Giulia.

<sup>11</sup> New boundaries, i.e., including Venezia Tridentina and Venezia Giulia.

<sup>12</sup> Population 16 years old and over.

Taking the two lists together, it is seen that five of the countries—Brazil, Burma, Egypt, Honduras and India—have shown progress consistently below 10 per cent per decade. Another five countries—Chile, Colombia, Cuba, Mexico and Portugal—have shown similar rates of progress for certain periods covered by the present study. Ceylon too registered less than 10 per cent progress, during the period 1901-11, for the total population 5 years old and over, as did the Union of South Africa throughout the period 1904-46 for the Native population of all ages.

If the data for these 12 countries, presented in the preceding chapter, are further examined, it appears that in practically all cases where the rate of progress was less than 10 per cent per decade, the number of illiterate persons increased between censuses. This increase may occur at an average rate of up to 30 per cent per decade, as in the case of Chile between 1930 and 1940. The only cases in this group of countries where the number of illiterates decreased were Colombia (one per cent per decade) and Mexico (two per cent per decade).

SOME COMPARISONS

TABLE 162. *Increase or decrease in number of illiterates in countries and periods where average decennial rate of progress was under 10 per cent*

Country, age level (years) and period	Number of illiterates (thousands)		Per cent increase or decrease in No. of illiterates	
	At beginning of period	At end of period	During period	Average per decade
Brazil (15 +)				
1900-40	6 372	13 269	+ 108	+ 20
Burma (10 +)				
1901-31	5 451	6 480	+ 19	+ 6
Ceylon (5 +)				
1901-11	2 154	2 416	+ 12	+ 12
Chile (10 +)				
1930-40	746	971	+ 30	+ 30
Colombia (10 +)				
1928-38	2 718	2 699	— 1	— 1
Cuba (10 +)				
1907-19	644	785	+ 22	+ 18
Egypt (10 +)				
1907-37	7 277	9 885	+ 36	+ 11
Honduras (15 +)				
1930-45	327	446	+ 36	+ 23
India (10 +)				
1901-31	194 161	218 754	+ 13	+ 4
Mexico (10 +)				
1900-30	7 636	7 224	— 5	— 2
Portugal (10 +)				
1900-30	3 066	3 189	+ 4	+ 1
Union of S. Africa (Native, all ages)				
1911-46	3 743	6 049	+ 62	+ 15

*Note: 5 +, 10 +, 15 + is equivalent to 5 years old and over, etc.*

It would thus seem possible to conclude, from the data analysed in this study, that *an average rate of progress of less than 10 per cent per decade is not sufficient to keep the number of illiterates in a country from increasing with the growth of the total population.* In fact, even with a rate of progress of more than 10 per cent, there is no guarantee that the number of illiterates would not actually increase at the same time as the percentage of illiteracy was being reduced.

Consider, for example, that in Argentina (1895-1914) the

PROGRESS OF LITERACY

percentage of illiteracy was reduced from 53.3 to 35.1 making an average decennial rate of progress of about 20 per cent. Yet the number of illiterates, 14 years and over, had increased during that period by 460,000 (or about 17 per cent per decade since 1895).

TABLE 163. *Increase or decrease in number of illiterates in countries and periods where average decennial rate of progress was between 10 and 24 per cent*

Country, age level (years) and period	Number of illiterates (thousands)		Per cent increase or decrease in No. of illiterates	
	At beginning of period	At end of period	During period	Average per decade
Argentina (14 +)				
1895-1914	1 306	1 766	+ 35	+ 17
Belgium (15 +)				
1920-30	435	369	- 15	- 15
Bulgaria (15 +)				
1900-34	1 649	1 377	- 16	- 5
Ceylon (5 +)				
1911-46	2 416	2 443	+ 1	+ 0.3
Chile (10 +)				
1907-20	1 202	1 024	- 15	- 12
Colombia (10 +)				
1918-28	2 216	2 718	+ 23	+ 23
Cuba (10 +)				
1919-43	785	789	+ 1	+ 0.3
Greece (10 +)				
1907-20	1 159	1 008	- 13	- 10
1920-28	1 961	1 962	+ 0	+ 0.1
Italy (10 +)				
1901-11	11 910	9 843	- 17	- 17
1921-31	8 228	6 948	- 16	- 16
Mexico (10 +)				
1930-40	7 224	7 544	+ 4	+ 4
Philippines (10 +)				
1939-48	5 574	5 024	- 10	- 11
Portugal (10 +)				
1930-40	3 189	2 948	- 8	- 8
Spain (10 +)				
1900-20	8 409	7 342	- 13	- 7
Turkey (10 +)				
1935-45	8 824	9 542	+ 8	+ 8
United States (10 +)				
1910-20	5 516	4 932	- 11	- 11

Note: 10 +, 14 +, 15 + is equivalent to 10 years old and over, etc.



SOME COMPARISONS

Similarly, Table 163 shows that the number of illiterates had also increased in each of the following countries and periods, where the average rate of progress was between 10 and 24 per cent per decade: Ceylon (1911-46), Colombia (1918-28), Cuba (1919-43), Greece (1920-28), Mexico (1930-40), Turkey (1935-45).

On the other hand, in the rest of the countries and periods shown in Table 163, the number of illiterates had decreased, the percentage rate of decrease per decade ranging from five in Bulgaria (1900-34) to 17 in Italy (1901-11).

As for those countries and periods where the average decennial rate of progress was 25 per cent or more, there is no question about the

TABLE 164. *Decrease in number of illiterates in countries and periods where average decennial rate of progress was 25 per cent or more*

Country, age level (years) and period	Number of illiterates (thousands)		Per cent decrease in No. of illiterates	
	At beginning of period	At end of period	During period	Average per decade
Argentina (14 +) 1914-47	1 766	1 542	13	4
Belgium (15 +) 1900-20	895	435	51	30
Bulgaria (10 +) 1926-34	1 637	1 457	11	14
Canada (10 +) 1921-31	383	348	9	9
Chile (10 +) 1920-30	1 024	746	27	27
Cuba (10 +) 1899-1907	691	644	7	8
Finland (15 +) 1900-30	1 087	377	65	30
France (10 +) 1901-46	5 128	1 115	78	35
Hungary (15 +) 1920-41	744	437	41	23
Italy (10 +) 1911-21	9 843	8 112	18	18
Spain (10 +) 1920-40	7 342	4 835	34	19
United States (10 +) 1900-10	6 180	5 516	11	11
1920-40	4 932	3 249	34	19

Note: 10+, 14+, 15+ is equivalent to 10 years old and over, etc.

## P R O G R E S S   O F   L I T E R A C Y

reduction in number as well as in percentage of illiterates, as may be seen from Table 164.

From the foregoing it may be concluded that *an average decennial rate of progress of 25 per cent or more seems to ensure an actual reduction in the number of illiterates in the total population.*

### D I F F E R E N T I A L   R A T E S   O F   P R O G R E S S ,   B Y   S E X

It appears from the data presented in this study that the illiteracy rate for the female population is generally higher than for the male. However, there are a few exceptions. In Canada, throughout the period 1921-31, the male illiteracy rate was slightly higher than the female. The same was true of the European or white population in the Union of South Africa, between 1904 and 1918.

In Cuba and the United States, the female population started with an illiteracy rate higher than the male, but eventually surpassed the male population in literacy.

The relative rate of progress of the female population is more often lower than that of the male population, and the difference is less often in the other direction. In a few cases, progress seems to have been at an approximately equal rate between the two sexes. Such is the record of the following countries during the periods specified in each case : Brazil (1920-40), Chile (1907-40), Colombia (1918-38), Finland (1900-30), Hungary (1920-41), India (1901-31), Mexico (1900-40), Union of South Africa (European, 1904-18; Native, 1904-46).

TABLE 165. *Reduction of illiteracy among the male and female population in 25 selected countries, for various periods since about 1900*

Country, age level (years) and period	Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
		At beginning of period	At end of period		
Belgium (15 +) 1900-30	Male	17.1	5.5	11.6	% 31
	Female	22.0	6.4	15.6	34
Brazil (15 +) 1920-40	Male	57.1	49.7	7.4	7
	Female	72.8	62.4	10.4	7
Bulgaria (10 +) 1900-34	Male	54.6	19.5	35.1	26
	Female	87.0	43.3	43.7	19

SOME COMPARISONS

Country, age level (years) and period	Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
		At beginning of period	At end of period		
Burma (10 +)					%
1901-31	Male	50.2	38.6	11.6	8
	Female	94.3	82.5	11.8	4
Canada (10 +)					
1921-31	Male	6.4	4.8	1.6	25
	Female	5.0	3.6	1.4	28
Ceylon (5 +)					
1901-46	Male	58.0	29.9	28.1	14
	Female	91.5	56.2	35.3	10
Chile <sup>1</sup> (10 +)					
1907-40	Male	46.9	24.6	22.3	18
	Female	52.9	28.2	24.7	17
Colombia <sup>1</sup> (10 +)					
1918-38	Male	* 54.5	41.7	12.8	13
	Female	* 60.0	46.5	13.9	12
Cuba <sup>2</sup> (10 +)					
1899-1943	Male	55.4	24.9	30.5	17
	Female	58.3	22.2	36.1	20
Egypt (10 +)					
1907-37	Male	87.0	76.6	10.4	4
	Female	98.6	93.9	4.7	2
Finland (15 +)					
1900-30	Male	58.4	15.1	43.3	36
	Female	64.0	16.6	47.4	36
France (10 +)					
1901-46	Male	13.5	3.2	10.3	27
	Female	19.4	3.6	15.8	31
Greece (10 +)					
1920-28	Male	33.9	23.8	10.1	36
	Female	69.7	59.4	10.3	18
Honduras (15 +)					
1930-45	Male	62.2	61.3	0.9	1
	Female	70.7	66.1	4.6	4
Hungary (15 +)					
1920-41	Male	10.5	5.0	5.5	31
	Female	16.1	7.6	8.5	31
India (10 +)					
1901-31	Male	88.5	84.7	3.8	1.4
	Female	99.3	97.6	1.7	0.6
Italy <sup>1</sup> (10 +)					
1921-31	Male	23.3	17.8	5.5	24
	Female	30.0	25.2	4.8	16
Mexico (10 +)					
1900-40	Male	73.5	50.0	23.5	9
	Female	81.8	57.9	23.9	8

PROGRESS OF LITERACY

Country, age level (years) and period	Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
		At beginning of period	At end of period		
Philippines (10 +)					%
1939-48	Male	45.6	35.6	10.0	22
	Female	56.8	41.7	15.1	27
Portugal <sup>1</sup> (10 +)					
1900-40	Male	63.9	41.5	22.4	10
	Female	81.8	58.5	23.3	8
Spain (10 +)					
1900-40	Male	47.2	17.3	29.9	22
	Female	69.4	28.5	40.9	20
Turkey (10 +)					
1935-45	Male	68.0	55.0	13.0	19
	Female	90.1	83.8	6.3	7
Union of South Africa (European, 10 +)					
1904-18	Male	5.7	2.3	3.4	48
	Female	4.9	1.9	3.0	49
(Native, all ages)					
1904-46	Male	94.5	78.1	16.4	4
	Female	95.2	79.5	15.7	4
United States (10 +)					
1900-30	Male	10.1	4.4	5.7	24
	Female	11.2	4.3	6.9	27
Yugoslavia (10 +)					
1921-48	Male	<sup>3</sup> 40.3	15.4	24.9	30
	Female	<sup>3</sup> 60.0	34.4	25.6	19

<sup>1</sup> Criterion of literacy is 'ability to read'.

<sup>2</sup> Criterion of literacy is not uniform for different censuses.

<sup>3</sup> Population 12 years old and over.

Note: 5+, 10+, 15+ is equivalent to 5 years old and over, etc.

Table 166 gives the countries grouped according to both the general rate of progress for both sexes and according to the difference between the male and female rates. There seems to be little or no correlation between these two measures. That is to say, *whether the general rate of progress is low, medium or high, the male rate of progress is just as apt to be higher than, equal to, or lower than the female rate.*

SOME COMPARISONS

TABLE 166. *Countries included in the present study grouped according to average decennial rates of progress and difference between male and female rates*

Average decennial rate of progress (both sexes)	Countries and periods <sup>1</sup> where the male rate of progress was		
	Higher than the female rate	About equal to the female rate	Lower than the female rate
Under 10%	Burma (1901-31) Egypt (1907-37) Portugal (1900-40)	Brazil (1920-40) India (1901-31) Mexico (1900-40) Union of S. Africa (Native, 1904-46)	Honduras (1930-45)
10-24%	Bulgaria (1900-34) Ceylon (1901-46) Greece (1920-28) Italy (1921-31) Spain (1900-40) Turkey (1935-45) Yugoslavia (1921-48)	Chile (1907-40) Colombia (1918-38)	Cuba (1899-1943) Philippines (1939-48)
25% and over		Finland (1900-30) Hungary (1920-41) Union of S. Africa (European, 1904-18)	Belgium (1900-30) Canada (1921-31) France (1901-46) United States (1900-30)

<sup>1</sup> In addition, Argentina had an average decennial rate of progress, for both sexes, of 20 per cent during 1895-1914, and 25 per cent during 1914-47. Data are not available for a separate assessment of male and female rates.

PROGRESS AMONG CHILDREN OF SCHOOL-GOING AGES

Literacy data by age are not available in age groups sufficiently uniform for detailed comparisons. However, a comparison will be made of the rates of progress shown for different age groups among children between the ages of 5 and 14. These are the ages during which the future literacy status of the person is usually decided, although opportunity still exists in most countries for a person to acquire the rudimentary knowledge of reading and writing after reaching the age of 15.

Unfortunately for purposes of comparison, the age groups below 15 which are available from census reports vary considerably from one country to another. Among the countries included in the present study we have extracted literacy data for the following

PROGRESS OF LITERACY

different age groups under 15 years: 10-14 years (10 countries, including age-group 10-15 years for Spain; and for Yugoslavia, 11-14 years at one census); 8-14 years (one country—Greece); 7-14 years (five countries); 6-14 years (three countries, including age-group, 7-15 years for Chile at one census); 5-14 years (one country—Egypt); 5-9 years (one country—France).

Table 167 shows reduction of illiteracy among boys and girls in these different age groups for various census periods, and their average rates of progress. It must be borne in mind that the term 'illiterate', as applied to children in these age groups, includes both those who, for lack of elementary instruction, are almost certain to become permanently illiterate as they grow into adulthood, and those who, because of age and other circumstances, have merely delayed making a start on reading and writing and are thus to be considered only temporarily illiterate

TABLE 167. *Reduction of illiteracy among children of school-going ages in 21 selected countries, for various periods since about 1900*

Country, age group (years) and period	Sex	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
		At beginning of period	At end of period		
Belgium (7-14)					%
1900-30	Male	22.5	3.7	18.8	45
	Female	20.8	3.4	17.4	45
Brazil (7-14)					
1920-40	Male	79.8	67.9	11.9	8
	Female	80.7	67.0	13.7	9
Bulgaria (10-14)					
1900-34	Male	38.2	10.4	27.8	32
	Female	72.8	11.8	61.0	41
Burma (10-14)					
1901-31	Male	68.5	61.5	7.0	4
	Female	93.9	83.9	10.0	4
Canada (10-14)					
1921-31	Male	2.3	1.3	1.0	43
	Female	1.9	1.1	0.8	42
Chile <sup>1</sup> (6-14)					
1907-40	Male	63.0	<sup>3</sup> 34.9	28.1	16
	Female	62.5	<sup>3</sup> 33.8	28.7	17
Cuba (10-14)					
1899-1919	Male	66.9	49.8	17.1	14
	Female	60.9	43.2	17.7	16
Egypt (5-14)					
1907-27	Male	92.2	78.3	13.9	8
	Female	98.8	92.9	5.9	3

SOME COMPARISONS

Country, age level (years) and period	Sex	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
		At beginning of period	At end of period		
France (5-9) 1901-46	Male	31.5	17.4	14.1	% 12
	Female	30.3	15.3	15.0	14
Greece (8-14) 1920-28	Male	28.6	12.1	16.5	66
	Female	51.4	28.0	23.4	53
Honduras (7-14) 1930-45	Male	78.5	73.4	5.1	4
	Female	79.3	74.7	4.6	4
Hungary (6-14) 1920-41	Male	21.2	12.6	8.6	22
	Female	20.8	12.5	8.3	22
India (10-14) 1901-31	Male	92.3	90.2	2.1	0.8
	Female	99.2	97.2	2.0	0.7
Italy <sup>2</sup> (6-14) 1921-31	Male	25.1	11.2	13.9	55
	Female	25.9	12.1	13.8	53
Mexico <sup>4</sup> (10-14) 1930-40	Male	47.9	54.6	+ 6.7	.
	Female	49.6	54.4	+ 4.8	.
Philippines (10-14) 1939-48	Male	45.7	34.4	11.3	25
	Female	45.4	32.1	13.3	29
Portugal <sup>2</sup> (7-14) 1911-40	Male	70.9	43.1	27.8	16
	Female	78.3	50.0	28.3	14
Spain (10-15) 1900-40	Male	52.4	19.5	32.9	22
	Female	63.2	20.9	42.3	24
Turkey (7-14) 1935-45	Male	70.0	58.8	11.2	16
	Female	81.9	73.1	8.8	11
United States (10-14) 1910-30	Male	4.6	1.4	3.2	45
	Female	3.5	1.0	2.5	47
Yugoslavia (10-14) 1931-48	Male	<sup>5</sup> 24.1	11.0	13.1	37
	Female	<sup>5</sup> 43.2	20.1	23.1	36

<sup>1</sup> A plus sign in this column indicates an increase of illiteracy.

<sup>2</sup> Criterion of literacy is 'ability to read'.

<sup>3</sup> Age group 7-15 years.

<sup>4</sup> Apparent increase in illiteracy rate.

<sup>5</sup> Age group 11-14 years.

PROGRESS OF LITERACY

Bearing in mind the differences in age grouping, as well as differences in compulsory education requirements and provisions in various countries, we note that eight of the countries included in Table 167 have shown average decennial rates of progress of 25 per cent or more for these children. Four of these countries—Belgium, Canada, Philippines and Yugoslavia—have also shown 25 per cent or more in their average rate of progress among the population 15 years old and over. The other four countries—Bulgaria, Greece, Italy and the United States—have average rates between 10 and 24 per cent for the population 15 years old and over.

Six countries—Brazil, Burma, Egypt, Honduras, India and Mexico—during the various periods indicated, showed progress at a rate under 10 per cent per decade. With the exception of Mexico, their general rates of progress for the adult population were also under 10 per cent per decade.

Some degree of correlation is suggested here between the rate of progress of the school-age children and that of the adult

TABLE 168. *Countries included in the present study grouped according to average decennial rates of progress for population 15 years old and over and for children of school-going ages*

Average decennial rate of progress (15 years and over)	Countries and periods <sup>1</sup> where the rate of progress for children of school-going ages was		
	Under 10 %	10-24 %	25 % and over
Under 10 %	Brazil (1920-40) Burma (1901-31) Egypt (1907-27) Honduras (1930-45) India (1901-31)	Portugal (1911-40)	
10-24 %	Mexico (1930-40)	Chile (1907-40) Cuba (1899-1919) Spain (1900-40) Turkey (1935-45)	Bulgaria (1900-34) Greece (1920-28) Italy (1921-31) United States (1910-30)
25 % and over		Hungary (1920-41)	Belgium (1900-30) Canada (1921-31) Philippines (1939-48) Yugoslavia (1931-48)

<sup>1</sup> In addition, France (1901-46) had an average decennial rate of progress of 30 per cent for the population 10 years old and over, and 12-14 per cent for children aged 5-9 years.



population, referring to identical periods of time between census years in each country. It is obvious that a high rate of progress in the reduction (or prevention) of illiteracy among school-age children must contribute greatly to the rate of progress for the adult population a few years later.

Once a generation of school-age children has been taught to read and write in larger proportionate numbers than their elders, they will of course, in passing beyond the school-going ages, bring down the illiteracy rate among the older age groups. This will in turn bring down the general illiteracy rate, which will finally approximate to the illiteracy rate of the particular group of children followed from the beginning, provided that succeeding groups of children are brought up with educational advantages equal to those enjoyed by the first group. Any further improvement in educational opportunities for young children will contribute additionally to the lowering of the illiteracy rate in succeeding periods. Thus the cumulative influence of the education of young children works to reduce the illiteracy rate among the total population. Hence it may be concluded that *the children of school-going ages constitute a crucial group whose literacy rate largely determines the rate of progress in the reduction of illiteracy in any given country.*

#### RATES OF PROGRESS BY COHORTS

In order to separate the influence of education among school-age children from the amount of progress noted for each age group between census years, an attempt has been made in the preceding chapter to assess the progress of literacy by specified cohorts, so far as the available data permitted such analyses. It has not been possible to eliminate the influence of migration on the illiteracy rate of a country which may have given or received a considerable number of emigrants or immigrants. In so far as the emigrants or immigrants have an illiteracy rate markedly different from the stationary population, the result of any large-scale emigration or immigration cannot but introduce a change, favourable or unfavourable, in the general illiteracy rate of the country concerned.

There is probably no reason to suppose that the survival rate among the illiterate population is either higher or lower than that of the literate part of the population. Therefore any reduction in the percentage of illiteracy among a given cohort must be due in large part to the improvement of literacy status by individuals in the group.

PROGRESS OF LITERACY

Table 169 consists of data on selected cohorts in seven countries, for various census periods between 1900 and 1940. It is shown, for example, that in Belgium during the census period 1900-10, among the cohort born between 1856 and 1865 (they were 35-44 years old in 1900, and 45-54 years old in 1910), the male illiteracy rate was reduced by 1.3 per cent, and the female rate by 1.2 per cent, giving decennial rates of progress of nine and six per cent respectively. During the next census period, another cohort of persons born between 1866 and 1875 (who passed through the same age periods as the first cohort, only 10 years after them), show rates of 22 per cent for the male persons, and 17 per cent for the female.

In some cases, such as Chile (1930-40) and Egypt (1927-37), each cohort registered an increase, rather than decrease, of illiteracy. This may be due to errors in enumeration or change in criteria of literacy, though among the older age groups there may have been some amount of relapse into illiteracy.

In the case of the United States, some increase in the illiteracy of cohorts is noted between the 1910 and 1920 census years, among males 35-44 years old and females 15-34 years old in 1910. This may be accounted for by the influx of relatively more illiterate immigrants during that period, the men among them being somewhat older than the women.

On the whole it appears that a certain amount of progress in reduction of illiteracy among these selected cohorts did occur between census years, more so among men than among women, and among the younger and more recent cohorts than among the older. Therefore, it may be said that *there is evidence of progress made in the reduction of illiteracy even after the population has passed beyond the usual school-going ages.*

TABLE 169. *Reduction of illiteracy among specified cohorts in seven selected countries*

Country and period	Period of birth of cohort	Reduction in percentage of illiteracy <sup>1</sup>		Decennial rate of progress	
		Male	Female	Male	Female
Belgium				%	%
1900-10	1856-65	1.3	1.2	9	6
1910-20	1866-75	2.1	2.0	22	17
1900-10	1866-75	1.7	1.5	15	11
1910-20	1876-85	2.0	1.5	27	19
1900-10	1876-85	2.8	1.2	27	13
1910-20	1886-95	2.6	1.3	40	24

SOME COMPARISONS

Country and period	Period of birth of cohort	Reduction in percentage of illiteracy <sup>1</sup>		Decennial rate of progress	
		Male	Female	Male	Female
<b>Bulgaria</b>					
1900-10	1856-65	4.1	0.7	7	1
1910-20	1866-75	0.8	0.7	2	1
1900-10	1866-75	4.6	1.9	10	2
1910-20	1876-85	2.4	2.3	8	3
1900-10	1876-85	9.4	1.5	24	2
1910-20	1886-95	6.9	3.6	25	6
<b>Chile</b>					
1920-30	1881-90	6.9	4.5	22	12
1930-40	1891-1900	+ 5.3	+ 6.8	.	.
1920-30	1891-1900	8.7	5.0	30	16
1930-40	1901-10	+ 3.5	+ 6.1	.	.
1920-30	1901-10	18.0	12.6	49	37
1930-40	1911-20	+ 1.3	+ 4.1	.	.
<b>Egypt</b>					
1917-27	1878-87	8.2	0.8	10	1
1927-37	1888-97	+ 1.9	+ 0.2	.	.
1917-27	1888-97	7.2	0.7	9	1
1927-37	1898-1907	+ 3.0	+ 1.0	.	.
1917-27	1898-1907	10.4	0.9	12	1
1927-37	1908-17	—	+ 2.2	0	.
<b>Italy</b>					
1911-21	1872-81	1.9	4.7	7	12
1921-31	1882-91	1.2	+ 2.0	6	.
1911-21	1882-91	3.8	4.6	16	14
1921-31	1892-1901	1.9	0.1	12	0
1911-21	1892-1901	7.7	4.5	32	17
1921-31	1902-11	6.1	3.4	34	18
<b>Spain</b>					
1900-10	1860-69	3.0	3.4	7	5
1910-20	1870-79	4.1	5.0	11	8
1900-10	1870-79	5.0	3.5	11	5
1910-20	1880-89	6.0	4.7	16	9
1900-10	1880-89	10.3	6.3	21	10
1910-20	1890-99	14.0	8.7	32	16
<b>United States</b>					
1910-20	1866-75	+ 0.4	0.3	.	3
1920-30	1876-85	0.4	0.3	6	4
1910-20	1876-85	0.7	+ 0.1	9	.
1920-30	1886-95	0.7	0.2	13	4
1910-20	1886-95	1.1	+ 0.5	16	.
1920-30	1896-1905	0.7	0.1	17	3

<sup>1</sup> A plus sign in this column indicates increase of illiteracy.

## PROGRESS OF LITERACY

### PROGRESS IN URBAN AND RURAL AREAS

Illiteracy generally tends to be higher in rural than in urban areas. This is not surprising, in view of the relatively unfavourable conditions for education in rural areas. Considerable progress has been shown, however, in rural as well as urban areas in several countries for which illiteracy figures are available by urban-rural classification. Rates of progress were higher for urban areas (variously defined) in Bulgaria, 1900-34; Canada, 1921-31; Cuba, 1899-1934; and Finland, 1900-30. On the other hand, the European or white population in the Union of South Africa showed a higher rate of progress during 1904-18 in the rural areas. Similarly, for the total population of the United States, during 1910-30, progress was more marked in the rural than in the urban areas. In Belgium, 1900-30, communes of less than 5,000 inhabitants registered more rapid progress than the larger communes, but this distinction by size of communes is probably not equivalent to an urban-rural classification. Finally, in Greece, between 1920 and 1928, relatively more progress was shown by the rural male than the urban male population, but among the female population the advantage was still with the urban areas.

In these eight countries taken together—similar comparative data are unavailable for the other countries—the following groups showed average decennial rates of progress of 25 per cent or more: Belgium (1900-30) all areas, both sexes; Bulgaria (1900-34) urban and rural, male; Canada (1921-31) urban, both sexes; rural, female; Finland (1900-30) all areas, both sexes; Greece (1920-28) urban and rural, male; Union of South Africa (European or white, 1904-18) all areas, both sexes.

Both in Cuba, 1899-1943, and in the United States, 1910-30, as well as the remaining sex or residence groups in Bulgaria, Canada and Greece, the rate of progress was within the range of 10-24 per cent per decade.

SOME COMPARISONS

TABLE 170. *Reduction of illiteracy in the urban and rural populations of eight selected countries, for various periods since about 1900*

Country age level (years) and period	Area and Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
		At beginning of period	At end of period		
Belgium (15 +) 1900-30	<i>Urban</i> <sup>1</sup>				%
	Both sexes	20.5	6.5	14.0	32
	Male	17.9	5.8	12.1	31
	Female	22.8	7.0	15.8	33
	<i>Rural</i>				
	Both sexes	18.6	5.1	13.5	35
Bulgaria (10 +) 1900-34	<i>Urban</i> <sup>2</sup>				
	Both sexes	46.6	18.8	27.8	23
	Male	32.4	11.3	21.1	27
	Female	62.2	26.5	35.7	22
	<i>Rural</i>				
	Both sexes	76.8	35.2	41.6	21
Canada (10 +) 1921-31	<i>Urban</i> <sup>3</sup>				
	Male	3.6	2.7	0.9	25
	Female	2.7	2.0	0.7	26
	<i>Rural</i>				
	Male	7.7	6.1	1.6	21
	Female	6.5	4.9	1.6	25
Cuba (10 +) 1899-1943	<i>Urban</i> <sup>4</sup>	26.8	9.1	17.7	22
	<i>Rural</i>	66.7	33.8	32.9	14
Finland (15 +) 1900-30	<i>Urban</i> <sup>2</sup>				
	Both sexes	24.0	4.3	19.7	44
	Male	21.1	3.3	17.8	46
	Female	26.9	5.0	21.9	43
	<i>Rural</i>				
	Both sexes	67.0	19.0	48.0	34
Greece (8 +) 1920-28	<i>Urban</i> <sup>5</sup>				
	Both sexes	35.1	29.0	6.1	21
	Male	23.9	17.2	6.7	34
	Female	48.5	41.0	7.5	19
	<i>Rural</i>				
	Both sexes	58.2	46.9	11.3	24
	Male	38.7	26.7	12.0	37
	Female	76.0	66.4	9.6	16

PROGRESS OF LITERACY

Country age level (years) and period	Area and Sex	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
		At beginning of period	At end of period		
Union of South Africa (Euro- pean or White population, 10 +) 1904-18	<i>Urban</i> <sup>3</sup> Both sexes Male Female	4.2 4.4 3.9	2.1 2.2 2.0	2.1 2.2 1.9	% 39 39 38
	<i>Rural</i> Both sexes Male Female	7.6 8.4 6.5	2.0 2.4 1.6	5.6 6.0 4.9	61 59 63
United States (10 +) 1910-30	<i>Urban</i> <sup>6</sup> <i>Rural</i>	5.1 10.1	3.2 6.0	1.9 4.1	21 23

<sup>1</sup> Communes of 5,000 or more inhabitants.

<sup>2</sup> Cities and towns.

<sup>3</sup> Incorporated cities, towns and villages of all sizes.

<sup>4</sup> Cities of 25,000 or more inhabitants.

<sup>5</sup> Municipalities and communes of 10,000 or more inhabitants.

<sup>6</sup> Incorporated places of 2,500 or more inhabitants.

Note: 8 +, 10 +, 15 +, is equivalent to 8 years of age and over, etc.

PROGRESS OF LITERACY, BY VARIOUS DEMOGRAPHIC GROUPS

Obviously the rate of progress for the country as a whole is largely determined by the rate of progress of the predominant group in the population. Where there are several large groups, their contribution to the progress of the total population will be in relation both to their numerical importance and to their respective rates of progress. Figures showing progress of literacy by linguistic groups are presented for seven countries in Table 171.

For another seven countries, Table 172 shows different rates of progress by nationality, colour, or by other ethnic classifications used in each country. Again, the proportions of the total population belonging to each category must be borne in mind in assessing the various rates of progress. In Cuba, for instance, the foreign white population showed the lowest rate of progress, about six per cent per decade between 1899 and 1943. But in 1943 this group only constituted four per cent of the total population; hence the influence of their own rate of progress on that of the population in general was very small.

On the other hand, the rate of progress in the Union of South Africa as a whole would certainly be greatly affected by the rate of progress among the native (Bantu) population, who constitute about 80 per cent of the total population of that country.

SOME COMPARISONS

TABLE 171. *Progress of literacy in Bulgaria, Finland and Hungary, by linguistic groups*

Country, age level (years) and period	Linguistic group	Percentage of illiteracy		Reduction in percentage of illiteracy	Average decennial rate of progress
		At beginning of period	At end of period		
Bulgaria (10 +) 1910-34	<i>All groups</i>	57.8	31.4	26.4	% 22
	Bulgarian	52.0	25.3	26.7	26
	Other Slavonic	33.4	6.2	27.2	50
	Turkish, Tartar and Romany	92.5	81.7	10.8	5
	Greek	57.8	51.6	6.2	5
	Rumanian	76.0	72.1	3.9	2
	Jewish	26.8	18.0	8.8	15
	Armenian	30.8	23.8	7.0	10
	Other non- Slavonic	22.5	11.4	11.1	25
					% 9
Finland (15 +) 1900-30	<i>All groups</i>	61.2	15.9	45.3	36
	Finnish	63.9	16.8	47.1	36
	Swedish	45.9	8.6	37.3	43
	Russian	16.4	6.1	10.3	28
	German	0.9	0.2	0.7	39
	Lapp	69.2	34.4	34.8	21
	Other	27.6	10.7	16.9	27
Hungary (6 +) 1920-30	<i>All groups</i>	15.2	9.6	5.6	37
	Hungarian	15.2	9.6	5.6	37
	German	10.3	6.7	3.6	35
	Slovak	17.4	10.8	6.6	38
	Other	30.5	24.3	6.2	20

Note: 6 +, 10 +, 15 +, is equivalent to 6 years old and over, etc.

PROGRESS OF LITERACY

TABLE 172. *Reduction of illiteracy in seven selected countries, by nationality, colour or other ethnic groups*

Country, age level (years) and period	Nationality, colour, or ethnic group	Percentage of illiteracy		Reduction in percentage of illiteracy <sup>1</sup>	Average decennial rate of progress
		At beginning of period	At end of period		
Burma (all ages)					%
1901-31	<i>All groups</i>	78.5	68.3	10.2	5
	Burmese	73.2	60.5	12.7	6
	Shan	92.1	88.5	3.6	1
	Karen	90.9	75.8	15.1	6
Canada (10 +)					
1921-31	<i>All groups</i>	4.5	3.4	1.1	24
	British	1.1	0.9	0.2	18
	European	8.9	6.2	2.7	30
	Asiatic	26.6	15.3	11.3	42
	Negro	8.4	8.1	0.3	4
Cuba (10 +)					
1899-1943	<i>All groups</i>	56.9	23.6	33.3	18
	Native White	53.4	22.4	31.0	18
	Foreign White	29.3	22.4	6.9	6
	Coloured	72.0	27.4	44.6	20
Egypt (5 +)					
1917-37	<i>All groups</i>	92.0	81.4	10.6	6
	Egyptian	93.0	82.2	10.8	6
	Foreign	41.9	19.1	22.8	32
France (10 +)					
1921-36	<i>All groups</i>	8.2	4.0	4.2	38
	French: native	7.8	3.3	4.5	44
	Naturalized	10.7	8.1	2.6	17
	Foreign	17.8	14.3	3.5	14
Union of South Africa (10 +)					
1904-18	European or White	5.4	2.1	3.3	49
(all ages)					
1904-46	Native	94.9	78.8	16.1	4
United States (10 +)					
1900-20	<i>All groups</i>	10.7	6.0	4.7	25
	Native White	4.6	2.0	2.6	34
	Foreign-born				
	White	12.9	13.1	+ 0.2	.
	Negro	44.5	22.9	21.6	28
	Other	44.5	25.6	18.9	24

<sup>1</sup> A plus sign in this column indicates an increase of illiteracy.



## LIST OF SOURCES

The following sources have been consulted for census data on literacy and illiteracy used in the present study:

### ARGENTINA

- Dirección Nacional de Investigaciones, Estadística y Censos. *Tercer censo nacional levantado el 1º de junio de 1914*. Tomo III. Buenos Aires, 1916.
- . *IV censo general de la nación. Cuestionarios censales, planillas y formularios impresos*. Buenos Aires, 1947.
- Dirección General del Servicio Estadístico Nacional. *IV censo general de la nación, 1947. Comparación de los resultados del censo de población*. Buenos Aires, 1951.

### BELGIUM

- Ministère de l'Intérieur. *Population: Recensement général du 31 décembre 1900*. Tome I. Bruxelles, 1903.
- . *Population: Recensement général du 31 décembre 1910*. Tome I. Bruxelles, 1916.
- . *Population: Recensement général du 31 décembre 1920*. Tome I. Bruxelles, 1926.
- . *Population: Recensement général du 31 décembre 1930*. Tome III. Bruxelles, 1937.

### BRAZIL

- Directoria Geral de Estatística. *Synopse do recenseamento realizado em 1 de 1920*. Rio de Janeiro, 1925.
- Instituto Brasileiro de Geografia e Estatística. *Estudos sobre a alfabetização e a instrução da população do Brasil, conforme as aspirações do censo demográfico de 1940*. Rio de Janeiro, 1950.

### BULGARIA

- Direction générale de la statistique. *Résultats généraux du Recensement de la population au 31 décembre 1900*. 1<sup>er</sup> livraison. Sofia, 1906.

## PROGRESS OF LITERACY

- *Résultats généraux du recensement de la population au 31 décembre 1905.* Livre I. Sofia, 1911.
- *Résultats généraux du recensement de la population au 31 décembre 1910.* Tome I. Sofia, 1923.
- *Résultats généraux du recensement de la population au 31 décembre 1920.* Tome I. Sofia, 1927.
- *Résultats généraux du recensement de la population au 31 décembre 1926.* Tome I. Sofia, 1931.
- *Recensement de la population au 31 décembre 1934. Résultats généraux.* Tome I. Sofia, 1938.

## BURMA

- Census Commission. *Census of India, 1901.* Vol. 12, Part. I; Vol. 12 A, Part. II. Rangoon, 1902.
- *Census of India, 1911.* Vol. IX, Parts I, II. Rangoon, 1912.
- *Census of India, 1921.* Vol. X, Part. I. Delhi, 1933; Vol. XI, Part I. Rangoon, 1933.

## CANADA

- Census Office. *Fourth Census of Canada, 1901.* Vol. I. Ottawa, 1902.
- Census and Statistics Bureau. *Census of Canada, 1911.* Vol. II. Ottawa, 1913.
- Dominion Bureau of Statistics. *Sixth Census of Canada.* Bulletin XVII. Ottawa, n.d.
- *School Attendance and Literacy by Sex for Canada and Provinces, 1931.* Census Bulletin XVIII. Ottawa, 1932.
- *Literacy, Language Spoken, and Conjugal Condition of the Population Ten Years of Age and Over.* Census Bulletin XXXII. Ottawa, 1933.
- *Illiteracy and School Attendance.* Census Monograph No. 5. Ottawa, 1937.
- *Eighth Census of Canada, 1941.* Vols. III, VII. Ottawa, 1946.
- Colonial Secretary's Office. *Census of Newfoundland and Labrador 1901.* St John's, n.d.
- *Census of Newfoundland and Labrador 1911.* St. John's, 1914.
- Newfoundland. Department of Public Health and Welfare. *Tenth Census of Newfoundland and Labrador, 1935.* Vol. I. St. John's, 1937.
- *Eleventh Census of Newfoundland and Labrador, 1945.* Vol. I. Ottawa, 1949.
- Canada. Dominion Bureau of Statistics. *Province of Newfoundland. Statistical Background.* Ottawa, 1949.

## CEYLON

- Department of Census and Statistics. *Census of Ceylon, 1901.* Vol. II. Colombo, 1902.
- *Census of Ceylon, 1911.* Colombo, 1912.
- *Census of Ceylon, 1921.* Vol. I, Part II. Colombo, 1924.
- *Census of Ceylon, 1946.* Vol. I, Part I. Colombo, 1950.

LIST OF SOURCES

CHILE

- Comisión Central del Censo. *Censo de la República de Chile 1907*. Santiago, 1908.  
 Dirección General de Estadística. *Censo de población de la República de Chile, 1920*. Santiago, 1925.  
 —. *Estadística chilena*. Año XVIII, N.º 12. Santiago, 1945.  
 —. *Resultados del X censo de la población, 1930*. Vols. I, II. Santiago, 1931.

COLOMBIA

- Dirección General de Estadística. *Censo de población, 1918*. Bogotá, 1924.  
 Contraloría General de la República. *Censo de Colombia, 1938*. Tomo XVI. Bogotá 1942.

CUBA

- United States. War Department. *Report on the Census of Cuba, 1899*. Washington, 1900.  
 United States. Bureau of the Census. *Cuba: Population, History and Resources, 1907*. Washington, 1909.  
 Cuba. Dirección General del Censo. *Censo de la República de Cuba, 1909*. La Habana, 1922.  
 —. *Censo de 1943*. La Habana, 1945.

EGYPT

- Ministry of Finance. Statistical and Census Department. *Census of Egypt, 1907*. Cairo, 1909.  
 —. *Census of Egypt, 1917*. Vol. II. Cairo, 1921.  
 —. *Census of Egypt, 1927*. Part I. Cairo, 1931.  
 —. *Census of Egypt, 1937*. Cairo, 1942.  
 Ministère de l'économie nationale. Département de la statistique et du recensement. *Annuaire statistique 1945-46 et 1946-47*. Le Caire, 1951.

FINLAND

- Statistiques officielles de la Finlande. *Population de la Finlande au 31 décembre 1920*. Tome I. Helsinki, 1922.  
 —. *Population de la Finlande au 31 décembre 1930*. Tome I. Helsinki, 1933.

FRANCE

- Service du recensement. *Résultats statistiques du recensement général de la population effectué le 24 mars 1901*. Tomes I, IV. Paris, 1904.

## PROGRESS OF LITERACY

- Statistique générale de la France. *Résultats statistiques de recensement général de la population effectué le 5 mars 1911*. Tome I. Paris, 1913.
- . *Résultats statistiques du recensement général de la population effectué le 6 mars 1921*. Tome I. Paris, 1923.
- . *Résultats statistiques du recensement général de la population effectué le 7 mars 1926*. Tome I. Paris, 1928.
- . *Résultats statistiques du recensement général de la population effectué le 8 mars 1931*. Tome I. Paris, 1933.
- Direction de la statistique générale et de la documentation. *Résultats statistiques du recensement général de la population effectué le 8 mars 1936*. Tome I. Paris, 1938.
- Direction de la statistique générale. *Résultats statistiques du recensement général de la population effectué le 10 mars 1946*. Vol. I. Paris, 1948.

## GREECE

- Service du recensement. *Résultats statistiques du recensement général de la population effectué le 27 octobre 1907*. Tomes I, II. Athènes, 1909.
- Statistique générale de la Grèce. *Recensement de la population de la Grèce au 19 décembre 1920-1<sup>er</sup> janvier 1921*. Athènes, 1928.
- . *Résultats statistiques du recensement de la population de la Grèce du 15-16 mai 1928*, Athènes, 1933.

## HONDURAS

- Dirección General de Estadística. *Censo general de población, 1926*. Tegucigalpa, 1927.
- . *Censo general de población: Resumen, 1930*. Tegucigalpa, 1932.
- . *Resumen del censo general de población, 1935*. Tegucigalpa, 1936.
- . *Resumen del censo general de población, 1940*. Tegucigalpa, 1942.
- . *Resumen del censo general de población, 1945*. Tegucigalpa, 1947.

## HUNGARY

- Publications statistiques hongroises. *Dénombrement de la population des pays de la Sainte Couronne hongroise, 1900*. 7<sup>ème</sup> partie. Budapest, 1906.
- . *Recensement général de la population des pays de la Sainte Couronne hongroise, 1910*. 5<sup>ème</sup> partie. Budapest, 1916.
- . *Recensement général de la population de 1920*. 1<sup>ère</sup> partie. Budapest, 1923.
- . *Recensement général de la population de 1930*. 1<sup>ère</sup> partie. Budapest, 1933.
- Office central de statistique. *Revue statistique hongroise*. XXV année, No. 11-12. Budapest, 1947.
- Office central royal hongrois de statistique. *Annuaire statistique hongrois, 1939*. Budapest, 1940.

## INDIA

- Government of India. *Census of India, 1901*. Vol. I, Part I. Calcutta, 1903.
- *Census of India, 1911*. Vol. I, Part I. Calcutta, 1913.
- *Census of India, 1921*. Vol. I, Part I. Calcutta, 1924.
- *Census of India, 1931*. Vol. I, Part I. Delhi, 1933.
- *Census of India, 1941*. Vol. IX (*Assam*). Simla, 1942; Vol. XVII (*Baroda*). Baroda, 1941; Vol. IV (*Bengal*). Simla, 1942; Vol. VII (*Bihar*). Simla, 1942; Vol. III (*Bombay*). Simla, 1942; Vol. XVIII (*Central India*). Simla, 1943; Vol. VIII (*Central Provinces and Berar*). Simla, 1942; Vol. XIX (*Cochin*). Ernakulam, 1944; Vol. XVI (*Delhi*). Simla, 1942; Vol. (?) (*Jaipur State*), Parts I, II. Ajmer, 1941; Vol. XXII (*Jammu and Kashmir*), Parts I, II. Ranbir, 1942; Vol. XXIII (*Mysore*), Part II. Bangalore, 1942; Vol. XI (*Orissa*). Simla, 1942; Vol. VI (*Punjab*). Simla, 1941; Vol. XXIV (*Rajputana and Ajmer-Merwara*). Jaipur, 1941; Vol. XII (*Sind*). Simla, 1942.

## ITALY

- Direzione generale della statistica. *Censimento della popolazione del Regno d'Italia al 10 febbraio 1901*. Vol. II. Roma, 1903; Vol. V. Roma, 1904.
- Direzione generale della statistica e del Lavoro. *Censimento della popolazione del Regno d'Italia al 10 giugno 1911*. Vols. II. III. Roma, 1914; Vol. VII. Roma, 1916.
- Istituto centrale de Statistica. *Censimento della popolazione del Regno d'Italia al 1° dicembre 1921*. Vol. XIX. Roma, 1928.
- *Censimento generale della popolazione del Regno d'Italia. VII censimento generale della popolazione 21 aprile 1931*. Vol. IV: parte seconda. Roma, 1934; parte prima. Roma, 1935.

## MEXICO

- Dirección General de Estadística. *Tercer censo de población de los Estados Unidos Mexicanos, 1910*. Mexico, 1918.
- *Censo general de habitantes, Resumen, 1921*. México, 1928.
- *Quinto censo de población, 15 de mayo de 1930: Resumen general*. México, 1934.
- *Sexto censo de población, 1940: Resumen general*. México, 1943.

## PHILIPPINES

- United States Census Bureau. *Census of the Philippines, 1903*. Vol. 3. Washington, 1905.
- Census Office of the Philippine Islands. *Census of the Philippine Islands, 1918*. Vol. II, Vol. IV, Part 2. Manila, 1921.
- Commission of the Census, Manila. *Census of the Philippines: 1939*. Vol. II. Manila, 1941.

## PROGRESS OF LITERACY

### PORTUGAL

- Direcção Geral da Estatística e dos Proprios Nacionaes. *Censo da população do Reino de Portugal no 1º dezembro de 1900*. Vol. I. Lisboa, 1905.
- Direcção Geral da Estatística. *Censo da população de Portugal no 1º de dezembro de 1911*. Partes II, III. Lisboa, 1913.
- *Censo da população de Portugal, dezembro de 1920*. Vol. II. Lisboa, 1925.
- *Censo da população de Portugal no 1º dezembro de 1930*. Vol. II. Lisboa, 1934.
- Instituto Nacional de Estatística. *VIII Recenseamento geral da população, 12 de dezembro de 1940*. Vol. I. Lisboa, 1945; Vol. XXV. Lisboa, 1947.
- *Anuario estatístico 1950*. Lisboa, 1951.

### SPAIN

- Dirección General del Instituto Geográfico y Estadístico. *Censo de la población de España, el 31 de diciembre de 1900*. Tomo I. Madrid, 1902; Tomo II. Madrid, 1903; Tomo III. Madrid, 1907.
- *Censo de la población de España, el 31 de diciembre de 1910*. Tomo II. Madrid, 1916; Tomo III. Madrid, 1917.
- Dirección General de Estadística. *Censo de la población de España, el 31 de diciembre de 1920*. Tomo I. Madrid, 1922; Tomo II. Madrid, 1924; Tomo III. Madrid, 1926.
- *Censo de la población de España, el 31 de diciembre de 1940*. Tomo I. Madrid, 1943; Tomos XVII, XVIII. Madrid, n.d.

### TURKEY

- Office central de statistique. *Recensement général de la population au 28 octobre 1927*. Fascicules I, III. Ankara, 1929.
- *Recensement général de la population au 20 octobre 1935*. Tome I. Istanbul, 1936; Tome 60. Ankara, 1937.
- *Recensement général de la population du 21 octobre 1945*. Vol. 65. Ankara, 1950.

### UNION OF SOUTH AFRICA

- Colony of the Cape of Good Hope. Census Office. *Census, 1904*. Cape Town, 1905.
- Colony of Natal. Census Office. *Census, 1904*. Pietermaritzburg, 1905.
- Orange River Colony. Census office. *Census, 1904*. Bloemfontein. n.d.
- Transvaal Colony and Swaziland. Census Commission. *Census, 1904*. London, 1906.
- Union of South Africa. *Census, 1911*. Part. I. Pretoria, 1913.
- *Census of the European or White Races, 1918*. Part III. Cape Town, 1920.
- Office of Census and Statistics. *Census, 1921*. Parts I-IX. Pretoria, 1924.

LIST OF SOURCES

Bureau of Census and Statistics. *Preliminary Census Report: (c) Literacy of Natives, 1946* (Special Report No. 189). Pretoria, 1947.

UNITED STATES

Bureau of the Census. *Twelfth Census of the United States, 1900*. Vol. II. Washington, 1902.

- . *Thirteenth Census of the United States, 1910*. Vol. I. Washington, 1913.
- . *Fourteenth Census of the United States, 1920*. Vol. II. Washington, 1922.
- . *Fifteenth Census of the United States, 1930*. Vol. II. Washington, 1933.
- . *Illiteracy in the United States: October 1947* (Current Population Reports: Population Characteristics, Series P-20, No. 20). Washington, 22 September 1948.

YUGOSLAVIA

Federal Statistical Office. *Statistical Bulletin*. Nos. 1, 2. Belgrade, 1950; No. 5. Belgrade, 1951.

- . *Statistical Review of Yugoslavia*. Belgrade, July 1951. (Ref. Babič, Milan. *Illiteracy Statistics in Yugoslavia*. For a list of sources indicated by the author of this article, see page 167.)

## A P P E N D I X

Table A. POPULATION OF 26 COUNTRIES CLASSIFIED BY LITERACY  
Each census since about 1900

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of persons			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read nor write		
<b>Argentina</b>								
1914	7 +	MF	6 301 961	3 915 949	172 096	2 213 916	—	37.9
		M	3 424 228	2 232 046	74 301	1 117 881	—	34.8
		F	2 877 733	1 683 903	97 795	1 096 035	—	41.5
1914	14 +	MF	5 026 914	3 261 014	1 765 900	—	35.1	
1947	14 +	MF	11 318 896	9 777 218	1 541 678	—	13.6	
		M	5 828 722	5 123 524	705 198	—	12.1	
		F	5 490 174	4 653 694	836 480	—	15.2	
<b>Belgium</b>								
1900	15 +	MF	4 571 045	3 676 319	894 723	3	19.6	
		M	2 259 333	1 872 904	386 426	3	17.1	
		F	2 311 712	1 803 415	508 297	—	22.0	
1910	15 +	MF	5 156 755	4 463 688	693 067	—	13.4	
		M	2 542 755	2 244 593	298 162	—	11.7	
		F	2 614 000	2 219 095	394 905	—	15.1	
1920	15 +	MF	5 549 737	5 114 419	435 318	—	7.8	
		M	2 711 476	2 528 945	182 531	—	6.7	
		F	2 838 261	2 585 474	252 787	—	8.9	



Belgium (*cont.*)

1930	15 +	MF	6 232 821	5 863 417	369 404	—	5.9
		M	3 070 447	2 902 926	167 521	—	5.5
		F	3 162 374	2 960 491	201 883	—	6.4

## Brazil

1900	15 +	MF	9 752 111	3 380 451	6 371 660	—	65.3
1920	15 +	MF	17 557 282	6 155 567	11 401 715	—	64.9
		M	8 810 201	3 776 067	5 034 134	—	57.1
		F	8 747 081	2 379 500	6 367 581	—	72.8
1940	15 +	MF	23 709 769	10 379 990	13 269 381	60 398	56.1
		M	11 752 357	5 897 795	5 825 214	29 348	49.7
		F	11 957 412	4 482 195	7 444 167	31 050	62.4

## Bulgaria

1900	10 +	MF	2 707 108	800 234	1 906 874	—	70.4
		M	1 386 817	629 085	757 732	—	54.6
		F	1 320 291	171 149	1 149 142	—	87.0
1905	10 +	MF	2 917 439	1 007 068	1 910 371	—	65.5
		M	1 492 975	764 444	728 531	—	48.8
		F	1 424 464	242 624	1 181 840	—	83.0
1910	10 +	MF	3 135 251	1 314 848	1 803 283	17 120	57.8
		M	1 598 602	941 844	648 517	8 241	40.8
		F	1 536 649	373 004	1 154 766	8 879	75.6
1920	10 +	MF	3 732 483	1 987 779	10 101 1 728 642	5 961	46.7
		M	1 851 941	1 260 753	6 311 581 685	3 192	31.8
		F	1 880 542	727 026	3 790 1 146 957	2 769	61.3
1926	10 +	MF	4 128 788	2 491 465	13 151 1 624 141	31	39.7
		M	2 056 012	1 535 867	7 687 512 440	18	25.3
		F	2 072 776	955 598	5 464 1 111 701	13	53.9
1934	10 +	MF	4 643 694	3 184 776	1 457 365	1 553	31.4
		M	2 322 342	1 869 956	451 838	548	19.5
		F	2 321 352	1 314 820	1 005 527	1 005	43.3

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of Person			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read nor write		
<b>Burma<sup>3</sup></b>								
1901	10 +	MF	7 613 489	2 162 721	5 450 768	—	71.6	
		M	3 918 434	1 952 322	1 966 112	—	50.2	
		F	3 695 055	210 399	3 484 656	—	94.3	
1911	10 +	MF	8 869 556	2 609 118	6 260 438	—	70.6	
		M	4 579 246	2 269 341	2 309 905	—	50.4	
		F	4 290 310	339 777	3 950 533	—	92.1	
1921	10 +	MF	9 899 712	3 536 913	6 362 799	—	64.3	
		M	5 119 917	2 948 198	2 171 719	—	42.4	
		F	4 779 795	588 715	4 191 080	—	87.7	
1931	10 +	MF	10 828 282	4 347 904	6 480 378	—	59.8	
		M	5 582 146	3 429 627	2 152 519	—	38.6	
		F	5 246 136	918 277	4 327 859	—	82.5	
<b>Canada</b>								
1901	5 +	MF	4 728 631	3 918 915	129 584	680 132	—	17.1
1911	5 +	MF	6 319 160	5 622 844	32 863	663 453	—	11.0
		M	3 373 776	2 983 876	16 320	373 580	—	11.6
		F	2 945 384	2 638 968	16 543	289 873	—	10.4
1921	5 +	MF	7 730 833	6 957 412	58 254	715 167	—	10.0
		M	3 996 496	3 574 837	31 534	390 125	—	10.6
		F	3 734 337	3 382 575	26 720	325 042	—	9.4
1921	10 +	MF	6 682 072	6 298 704	42 349	341 019	—	5.7
		M	3 467 796	3 245 756	23 298	198 742	—	6.4
		F	3 214 276	3 052 948	19 051	142 277	—	5.0
1931	10 +	MF	8 169 622	7 821 819	38 407	309 396	—	4.3
		M	4 258 862	4 053 007	22 028	183 827	—	4.8
		F	3 910 760	3 768 812	16 379	125 569	—	3.6

## Newfoundland

1921	11 +	MF	190 714	144 792	2 530	43 392	—	24.1
1935	10 +	MF	221 384	174 337	6 589	40 458	—	21.3
		M	114 335	86 685	3 241	24 409	—	24.2
		F	107 049	87 652	3 348	16 049	—	18.1
1945	10 +	MF	242 946	210 064	2 889	29 072	921	13.2
		M	124 756	105 101	1 334	17 826	495	15.4
		F	118 190	104 963	1 555	11 246	426	10.9

## Ceylon

1901	5 +	MF	2 927 178	773 196	2 153 982	—	73.6
		M	1 567 518	657 615	909 903	—	58.0
		F	1 359 660	115 581	1 244 079	—	91.5
1911	5 +	MF	3 498 375	1 082 828	2 415 547	—	69.0
		M	1 863 160	878 766	984 394	—	52.8
		F	1 635 215	204 062	1 431 153	—	87.5
1921	5 +	MF	3 854 394	1 536 948	2 317 446	—	60.1
		M	2 052 669	1 155 518	897 151	—	43.7
		F	1 801 725	381 430	1 420 295	—	78.8
1946	5 +	MF	5 795 900	3 352 789	2 443 111	—	42.2
		M	3 094 786	2 170 747	924 039	—	29.9
		F	2 701 114	1 182 042	1 519 072	—	56.2

Chile <sup>4</sup>

1907	10 +	MF	2 408 497	1 206 347	1 202 150	—	49.9
		M	1 197 337	635 851	561 486	—	46.9
		F	1 211 160	570 496	640 664	—	52.9
1920	10 +	MF	2 773 110	1 749 114	1 023 996	—	36.0
		M	1 370 267	884 707	485 560	—	35.4
		F	1 402 843	864 407	538 436	—	38.4
1930	10 +	MF	3 162 161	2 309 504	746 154	106 503	24.4
		M	1 556 632	1 169 589	333 678	53 365	22.2
		F	1 605 529	1 139 915	412 476	53 138	26.6

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of persons			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read or write		
Chile (cont.)								
1940	10 +	MF	3 766 679	2 703 670		971 449	91 560	26.4
		M	1 854 307	1 363 841		444 802	45 664	24.6
		F	1 912 372	1 339 829		526 647	45 896	28.2
Colombia <sup>4</sup>								
1918	10 +	MF	3 846 283	...	...	*2 215 654	—	57.6
		M	1 832 036	...	...	*998 499	—	54.5
		F	2 014 247	...	...	*1 217 155	—	60.4
1928	10 +	MF	5 610 715	...	...	2 717 585	—	48.4
		M	2 810 400	...	...	1 297 333	—	46.2
		F	2 800 315	...	...	1 420 252	—	50.7
1938	10 +	MF	6 112 712	3 413 338		2 699 374	—	44.2
		M	3 008 587	1 752 579		1 256 008	—	41.7
		F	3 104 125	1 660 759		1 443 366	—	46.5
Cuba <sup>4,5</sup>								
1899	10 +	MF	1 215 810	491 046	32 772	690 565	1 427	56.9
		M	634 515	<sup>6</sup> 270 919	11 905	351 691	...	<sup>7</sup> 55.4
		F	581 295	<sup>6</sup> 221 554	20 867	338 874	...	<sup>7</sup> 58.3
1907	10 +	MF	1 481 573	833 152		643 615	4 806	43.6
		M	787 412	<sup>6</sup> 459 023		328 389	...	<sup>7</sup> 41.7
		F	694 161	<sup>6</sup> 378 935		315 226	...	<sup>7</sup> 45.4
1919	10 +	MF	2 041 971	1 245 165		784 659	12 147	38.7
		M	1 100 308	<sup>6</sup> 683 144		417 164	...	<sup>7</sup> 37.9
		F	941 663	<sup>6</sup> 574 168		367 495	...	<sup>7</sup> 39.0
1931	10 +	MF	2 924 537	2 095 836		824 556	4 145	28.2
		M	1 575 388	<sup>6</sup> 1 103 567		471 821	...	<sup>7</sup> 29.9
		F	1 349 149	<sup>6</sup> 996 414		352 735	...	<sup>7</sup> 26.1

## Cuba (cont.)

1943	10 +	MF	3 575 434	2 550 847	789 301	235 286	23.6	
		M	1 881 265	1 317 464	436 762	127 039	24.9	
		F	1 694 169	1 233 383	352 539	108 247	22.2	
1907	10 +	MF	7 848 024	570 721	7 277 303	—	92.7	
		M	3 953 059	515 162	3 437 897	—	87.0	
		F	3 894 965	55 559	3 839 406	—	98.6	
1917	10 +	MF	9 161 944	*804 483	*8 357 461	—	*91.2	
		M	4 606 077	*701 633	*3 904 444	—	*84.8	
		F	4 555 867	*102 850	*4 453 017	—	*97.7	
1927	10 +	MF	10 287 778	1 451 803	8 816 601	19 374	85.9	
		M	5 126 179	1 222 815	3 894 114	9 250	76.1	
		F	5 161 599	228 988	4 922 487	10 124	95.6	
1937	10 +	MF	11 604 283	1 718 188	9 885 300	795	85.2	
		M	5 836 896	1 368 006	4 468 442	448	76.6	
		F	5 767 387	350 182	5 416 858	347	93.9	
Finland								
1900	15 +	MF	1 775 626	*688 410	*1 060 955	26 261	—	61.2
		M	869 945	...	...	13 466	—	58.4
		F	905 681	...	...	12 795	—	64.0
1910	15 +	MF	1 874 036	1 036 259	816 217	21 560	—	44.7
		M	904 388	519 938	373 367	11 083	—	42.5
		F	969 648	516 321	442 850	10 477	—	46.8
1920	15 +	MF	2 057 227	1 437 860	598 821	20 546	—	30.1
		M	978 644	695 446	272 174	11 024	—	28.9
		F	1 078 583	742 414	326 647	9 522	—	31.2
1930	15 +	MF	2 375 102	1 998 017	355 228	21 857	—	15.9
		M	1 139 375	967 548	160 147	11 680	—	15.1
		F	1 235 727	1 030 469	195 081	10 177	—	16.6

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of persons			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read nor write		
<b>France</b>								
1901	10 +	MF	31 662 848	25 954 633	5 128 299		579 916	16.5
		M	15 525 565	13 206 564	2 062 802		256 199	13.5
		F	16 137 283	12 748 069	3 065 497		323 717	19.4
1906	10 +	MF	31 965 209	26 921 047	4 419 492		624 670	14.1
		M	15 648 227	13 617 277	1 762 319		268 631	11.5
		F	16 316 982	13 303 770	2 657 173		356 039	16.6
1911	10 +	MF	32 408 090	28 017 558	3 792 566		597 966	11.9
		M	15 842 778	14 069 529	1 506 921		266 328	9.7
		F	16 565 312	13 948 029	2 285 645		331 638	14.1
1921	10 +	MF	33 397 913	29 779 811	2 657 271		960 831	8.2
		M	15 729 146	14 241 851	1 056 544		430 751	6.9
		F	17 668 767	15 537 960	1 600 727		530 080	9.3
1926	10 +	MF	34 294 850	31 094 749	2 026 222		1 173 879	6.1
		M	16 314 353	14 948 103	830 190		536 060	5.3
		F	17 980 497	16 146 646	1 196 032		637 819	6.9
1931	10 +	MF	34 108 683	31 188 679	1 730 809		1 189 195	5.3
		M	16 309 790	15 012 616	749 393		547 781	4.8
		F	17 798 893	16 176 063	981 416		641 414	5.7
1936	10 +	MF	34 514 056	32 160 198	1 326 469		1 027 389	4.0
		M	16 443 315	15 421 693	566 985		454 637	3.5
		F	18 070 741	16 738 505	759 484		572 752	4.3
1946	10 +	MF	34 232 423	31 738 532	1 115 268		1 378 623	3.4
		M	16 036 393	14 965 356	492 500		578 537	3.2
		F	18 196 030	16 773 176	622 768		800 086	3.6

Greece 1907	10 +	MF	1 914 111	755 596	1 158 515	—	60.5	
		M	953 775	568 023	385 752	—	40.4	
		F	960 336	187 573	772 763	—	80.5	
1920 <sup>9</sup>	10 +	MF	<sup>10</sup> <sub>2</sub> 187 238	1 178 917	1 008 321	...	46.1	
		M	<sup>10</sup> <sub>1</sub> 081 087	798 564	282 523	...	26.1	
		F	<sup>10</sup> <sub>1</sub> 106 151	380 353	725 798	...	65.6	
1920 <sup>11</sup>	10 +	MF	3 918 010	1 808 966	1 961 027	148 017	52.0	
		M	1 922 656	1 230 457	631 035	61 164	33.9	
		F	1 995 354	578 509	1 329 992	86 853	69.7	
1928	10 +	MF	4 814 720	2 726 573	1 962 330	125 817	41.9	
		M	2 365 578	1 762 053	551 613	51 912	23.8	
		F	2 449 142	964 520	1 410 717	73 905	59.4	
Honduras 1926	All ages	MF	700 811	182 571	518 240	—	<sup>4</sup> 73.9	
		M	348 475	101 180	247 295	—	<sup>4</sup> 71.0	
		F	352 336	81 391	270 945	—	<sup>4</sup> 76.9	
1930	15 +	MF	492 046	164 198	—	326 999	849 66.6	
		M	239 997	90 557	—	149 011	429 62.2	
		F	252 049	73 641	—	177 988	420 70.7	
1935	15 +	MF	585 419	190 607	20 263	374 549	—	67.4
		M	287 674	103 912	9 709	174 053	—	63.9
		F	297 745	86 695	10 554	200 496	—	70.9
1940	15 +	MF	636 143	220 834	—	415 309	—	65.3
		M	315 855	116 114	—	199 741	—	63.2
		F	320 288	104 720	—	215 568	—	67.3
1945	15 +	MF	699 421	253 835	—	445 586	—	63.7
		M	347 579	134 565	—	213 014	—	61.3
		F	351 842	119 270	—	232 572	—	66.1
Hungary 1900 <sup>12</sup>	15 +	MF	10 856 166	6 518 292	451 987	3 883 432	2 455	39.9
		M	5 382 138	3 634 238	90 339	1 656 304	1 257	32.5
		F	5 474 028	2 884 054	361 648	2 227 128	1 198	47.3

T A B L E A

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of persons			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read nor write		
<b>Hungary (cont.)</b>								
1910 <sup>12</sup>	15 +	MF	11 813 555	7 998 876	3 814 679	—	32.3	
		M	5 821 810	4 284 519	1 537 291	—	26.4	
		F	5 991 745	3 714 357	2 277 388	—	38.0	
1920 <sup>13</sup>	15 +	MF	5 536 588	4 792 495	744 093	—	13.4	
		M	2 642 705	2 364 645	278 060	—	10.5	
		F	2 893 883	2 427 850	466 033	—	16.1	
1930 <sup>13</sup>	15 +	MF	6 295 049	5 664 588	630 461	—	10.0	
		M	3 040 682	2 800 138	240 544	—	7.9	
		F	3 254 367	2 864 450	389 917	—	12.0	
1941 <sup>13</sup>	15 +	MF	6 898 492	6 449 187	26 522	410 919	11 864	6.4
		M	3 339 741	3 165 314	5 365	162 300	6 762	5.0
		F	3 558 751	3 283 873	21 157	248 619	5 102	7.6
<b>India <sup>14</sup></b>								
1901	10 +	MF	207 070 426	12 909 812	194 160 614	—	93.8	
		M	105 956 997	12 207 365	93 749 632	—	88.5	
		F	101 113 429	702 447	100 410 982	—	99.3	
1911	10 +	MF	218 189 879	15 304 162	202 885 717	—	93.0	
		M	112 471 222	14 159 352	98 311 870	—	87.4	
		F	105 718 657	1 144 810	104 573 847	—	98.9	
1921	10 +	MF	219 751 721	18 147 889	201 603 832	—	91.7	
		M	114 014 278	16 193 421	97 820 857	—	85.8	
		F	105 737 443	1 954 468	103 782 975	—	98.2	
1931	10 +	MF	240 716 606	21 962 564	218 754 042	—	90.9	
		M	124 800 920	19 141 172	105 659 748	—	84.7	
		F	115 915 686	2 821 392	113 094 294	—	97.6	



Italy <sup>4</sup>	1901	10 +	MF	24 705 851	12 795 383	11 910 468	—	48.2	
			M	12 196 405	7 113 141	5 083 264	—	41.7	
			F	12 509 446	5 682 242	6 827 204	—	54.6	
1911	10 +	MF	26 607 926	16 613 518	9 842 872	151 536	37.2		
		M	12 913 792	8 780 311	4 064 309	69 172	31.6		
		F	13 694 134	7 833 207	5 778 563	82 364	42.5		
1921 <sup>15</sup>	10 +	MF	29 478 154	21 366 560	8 111 594	—	27.5		
		M	14 411 532	10 949 020	3 462 512	—	24.0		
		F	15 066 622	10 417 540	4 649 082	—	30.9		
1921 <sup>16</sup>	10 +	MF	30 758 420	22 530 156	8 288 264	—	26.8		
		M	15 053 191	11 538 355	3 514 836	—	23.3		
		F	15 705 229	10 991 801	4 713 428	—	30.0		
1931	10 +	MF	32 120 508	25 172 157	6 948 351	—	21.6		
		M	15 528 070	12 763 368	2 764 702	—	17.8		
		F	16 592 438	12 408 789	4 183 649	—	25.2		
Mexico	1900	10 +	MF	9 822 220	2 185 761	350 378	7 286 081	—	77.7
			M	4 819 686	1 277 203	164 840	3 377 643	—	73.5
			F	5 002 534	908 558	185 538	3 908 438	—	81.8
1910	10 +	MF	10 809 090	2 992 026	279 650	7 537 414	—	72.3	
		M	5 286 213	1 680 918	125 266	3 480 029	—	68.2	
		F	5 522 877	1 311 108	154 384	4 057 385	—	76.3	
1921 <sup>17</sup>	10 +	MF	10 538 622	3 564 767	—	6 973 855	—	66.2	
		M	5 074 276	1 878 434	—	3 195 842	—	63.0	
		F	5 464 346	1 686 333	—	3 778 013	—	69.1	
1930	10 +	MF	11 748 936	4 525 035	261 384	6 962 517	—	61.5	
		M	5 681 300	2 460 614	119 740	3 100 946	—	56.7	
		F	6 067 636	2 064 421	141 644	3 861 571	—	66.0	
1940	10 +	MF	13 960 139	6 416 188	345 196	7 198 755	—	54.0	
		M	6 806 218	3 401 089	168 699	3 236 430	—	50.0	
		F	7 153 921	3 015 099	176 497	3 962 325	—	57.9	

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of persons			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read nor write		
<b>Philippines</b>								
1918 <sup>18</sup>	10 +	MF	6 381 261	3 138 634		3 242 627	—	<sup>4</sup> 50.8
		M	3 171 113	1 681 566		1 489 547	—	<sup>4</sup> 47.0
		F	3 210 148	1 457 068		1 753 080	—	<sup>4</sup> 54.6
1939	10 +	MF	10 903 879	5 316 146		5 574 254	13 479	51.2
		M	5 457 365	2 964 453		2 486 021	6 891	45.6
		F	5 446 514	2 351 693		3 088 233	6 588	56.8
1948	10 +	MF	13 300 961	7 960 050		5 024 482	316 429	38.7
		M	6 597 269	4 144 922		2 294 134	158 213	35.6
		F	6 703 692	3 815 128		2 730 348	158 216	41.7
<b>Portugal <sup>4</sup></b>								
1900	10 +	MF	4 175 972	1 110 208		3 065 764	—	73.4
		M	1 957 971	706 219		1 251 752	—	63.9
		F	2 218 001	403 989		1 814 012	—	81.8
1911	10 +	MF	4 550 597	1 413 014		3 137 583	—	68.9
		M	2 113 218	853 283		1 259 935	—	59.6
		F	2 437 379	559 731		1 877 648	—	77.0
1920	10 +	MF	4 747 658	1 652 216		3 095 442	—	65.2
		M	2 203 410	959 793		1 243 617	—	56.4
		F	2 544 248	692 423		1 851 825	—	72.8
1930	10 +	MF	5 294 048	2 104 814		3 189 234	—	60.2
		M	2 479 214	1 230 648		1 248 566	—	50.4
		F	2 814 834	874 166		1 940 668	—	68.9
1940	10 +	MF	6 057 290	2 897 452		2 948 157	211 681	50.4
		M	2 859 930	1 624 099		1 153 716	82 115	41.5
		F	3 197 360	1 273 353		1 794 441	129 566	58.5

Spain									
1900	10 +	MF	14 343 977	5 915 870	365 210	8 043 369	19 528	58.7	
		M	6 931 077	3 651 981	110 810	3 158 856	9 430	47.2	
		F	7 412 900	2 263 889	254 400	4 884 513	10 098	69.4	
1910	10 +	MF	15 300 818	7 295 584	256 467	7 698 357	50 410	52.2	
		M	7 355 576	4 232 890	75 217	3 025 289	22 180	42.3	
		F	7 945 242	3 062 694	181 250	4 673 068	28 230	61.3	
1920	10 +	MF	16 805 848	9 358 550	135 842	7 206 358	105 098	44.0	
		M	8 065 902	5 152 522	42 480	2 822 247	48 653	35.7	
		F	8 739 946	4 206 028	93 362	4 384 111	56 445	51.6	
1940	10 +	MF	20 870 455	16 035 714	4 834 741	—	—	23.2	
		M	9 886 629	8 178 353	1 708 276	—	—	17.3	
		F	10 983 826	7 857 361	3 126 465	—	—	28.5	
Turkey									
1927	All ages	MF	13 629 488	1 111 496	12 517 992	—	—	491.8	
		M	6 554 624	851 527	5 703 097	—	—	487.0	
		F	7 074 864	259 969	6 814 895	—	—	496.3	
1935	10 +	MF	11 089 747	2 265 470	40 632	8 783 645	—	79.6	
		M	5 294 040	1 691 534	22 908	3 579 598	—	68.0	
		F	5 795 707	573 936	17 724	5 204 047	—	90.1	
1945	10 +	MF	13 727 943	4 185 773	35 178	9 506 992	—	69.5	
		M	6 811 429	3 066 740	17 593	3 727 096	—	55.0	
		F	6 916 514	1 119 033	17 385	5 779 896	—	83.8	
Union of South Africa Euro- pean or white population									
1904	10 +	MF	849 671	800 381	10 661	34 889	3 740	5.4	
		M	495 662	465 118	6 219	22 077	2 248	5.7	
		F	354 009	335 263	4 442	12 812	1 492	4.9	

TABLE A

Country and census year	Age level (years)	Sex	Total population at specified age level <sup>1</sup>	Number of persons			Literacy unstated	Percentage of illiteracy <sup>2</sup>
				Can read and write	Can read only	Can neither read nor write		
Union of South Africa (European) (cont.)								
1911	10 +	MF	935 240	906 117	6 382	21 856	885	3.0
		M	512 361	495 492	3 593	12 765	511	3.2
		F	422 879	410 625	2 789	9 091	374	2.8
1918	10 +	MF	1 043 864	1 015 065	8 757	12 907	7 135	2.1
		M	536 329	519 293	4 744	7 499	4 793	2.3
		F	507 535	495 772	4 013	5 408	2 342	1.9
Native population								
1904 <sup>19</sup>	All ages	MF	2 590 946	132 738	29 355	2 424 129	4 724	94.9
		M	1 312 409	71 710	15 822	1 223 266	1 611	94.5
		F	1 278 537	61 028	13 533	1 200 863	3 113	95.2
1911	All ages	MF	4 019 006	273 802	46 593	3 696 479	2 132	93.2
		M	2 022 949	145 218	24 056	1 852 282	1 393	92.8
		F	1 996 057	128 584	22 537	1 844 197	739	93.6
1921	All ages	MF	4 697 813	455 398	68 930	4 161 361	12 124	90.3
		M	2 382 397	243 633	37 475	2 094 456	6 833	89.7
		F	2 315 416	211 765	31 455	2 066 905	5 291	90.8
1946	All ages	MF	7 831 915	1 629 912	136 623	5 912 478	152 902	78.8
1946	10 +	MF	<sup>20</sup> 5 715 735	1 544 104	109 746	3 942 889	118 996	72.4
		M	2 948 996	821 773	61 403	2 004 523	61 297	71.5
		F	2 766 739	722 331	48 343	1 938 366	57 699	73.3
United States								
1900	10 +	MF	57 949 834	51 769 755	6 180 069	—	—	10.7
		M	29 703 440	26 692 216	3 011 224	—	—	10.1
		F	28 246 384	25 077 539	3 168 845	—	—	11.2

## United States (cont.)

1910	10 +	MF	71 580 270	66 064 107	5 516 168	—	7.7	
		M	37 027 558	34 212 608	2 814 950	—	7.6	
		F	34 552 712	31 851 499	2 701 213	—	7.8	
1920	10 +	MF	82 739 315	77 807 410	448 340 4 483 565	—	6.0	
		M	42 289 969	39 749 760	216 060 2 324 149	—	6.0	
		F	40 449 346	38 057 650	232 280 2 159 416	—	5.9	
1930	10 +	MF	98 723 047	94 439 294	4 283 753	—	4.3	
		M	49 949 798	47 751 505	2 198 293	—	4.4	
		F	48 773 249	46 687 789	2 085 460	—	4.3	
1940	10 +	MF	110 443 129	*107 194 000	*3 249 000	—	*2.9	
Yugoslavia <sup>4</sup>								
1931	11 +	MF	9 882 547	5 418 339	55 737	4 408 471	<sup>6</sup> 44.6	
		M	4 828 744	3 250 368	20 445	1 557 931	<sup>6</sup> 32.3	
		F	5 053 803	2 167 971	35 292	2 850 540	<sup>6</sup> 56.4	
1948	10 +	MF	12 438 502	...	...	3 162 980	...	25.4
		M	5 884 381	...	...	906 703	...	15.4
		F	6 554 121	...	...	2 256 277	...	34.4

<sup>1</sup> Unless otherwise noted, the total population at specified age level includes persons of age unknown.

<sup>2</sup> Unless otherwise noted, the percentage of illiteracy is computed on the number of persons who cannot both read and write as related to the total population less the number of persons of literacy unstated.

<sup>3</sup> Excluding all who were not enumerated for literacy. They numbered, for all ages, approximately 127,000 in 1901, 76,000 in 1911, 43,000 in 1921 and 20,000 in 1931.

<sup>4</sup> Percentage of illiteracy computed on number of persons who can neither read nor write.

<sup>5</sup> Persons 10 years old and over and attending school were counted as able to read in the censuses 1899, 1907 and 1919.

<sup>6</sup> Including literacy unstated.

<sup>7</sup> Computed on the total population including literacy unstated.

<sup>8</sup> Excluding the nomadic population, estimated at 40,000 in 1927 and 12,000 in 1937.

<sup>9</sup> Old boundaries, i.e., excluding territories added to Greece after the Balkan wars and the first world war.

<sup>10</sup> Not including persons of literacy unstated.

<sup>11</sup> New boundaries, i.e., according to the treaty of Lausanne.

<sup>12</sup> Territory of the former Kingdom of Hungary, less Croatia and Slavonia.

<sup>13</sup> Territory of the Trianon Treaty.

<sup>14</sup> Pre-partition India; figures excluding those not enumerated for literacy, whose numbers were, for all ages, approximately 800,000 in 1901; 1,700,000 in 1911; 2,800,000 in 1921; and 3,000,000 in 1931.

<sup>15</sup> Old boundaries, i.e., excluding Venezia Tridentina and Venezia Giulia.

<sup>16</sup> New boundaries, i.e. including Venezia Tridentina and Venezia Giulia.

<sup>17</sup> Not including the population of certain *municipios* in six states, and the territory of Quintana Roo, which were not enumerated.

<sup>18</sup> Native population only.

<sup>19</sup> Excluding natives in Natal.

<sup>20</sup> Excluding 26,476 persons of age unspecified.

Table B. ILLITERATE POPULATION IN 26 COUNTRIES,  
DISTRIBUTED BY AGE AND SEX

Latest census available

Country, census year and age <sup>1</sup>	Male			Female		
	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate
<i>Argentina (1947)</i>						
14 and over	5 828 722	705 198	12.1	5 490 174	836 480	15.2
14-29	2 335 732	194 483	8.3	2 319 708	192 248	8.3
30-49	2 236 531	241 415	10.8	2 046 819	289 757	14.2
50 and over	1 229 509	253 824	20.6	1 085 651	327 907	30.2
Unknown	26 950	15 476	57.4	37 996	26 568	69.9
<i>Belgium (1930)</i>						
7 and over	3 533 315	184 632	5.2	3 617 179	217 523	6.0
7-14	462 868	17 111	3.7	454 805	15 640	3.4
15-20	396 180	5 528	1.4	391 768	3 693	0.9
21-59	2 232 546	103 102	4.6	2 257 484	102 043	4.5
60 and over	441 721	58 891	13.3	513 122	96 147	18.7
<i>Brazil (1940)</i>						
10 and over	14 391 759	7 440 905	51.7	14 559 204	9 011 927	61.9
10-14	2 668 750	1 615 691	60.5	2 632 842	1 567 760	59.5
15-19	2 152 384	1 156 237	53.7	2 281 021	1 263 370	55.4
20-29	3 476 492	1 678 374	48.3	3 676 325	2 164 177	58.9
30-39	2 460 458	1 129 317	45.9	2 429 087	1 535 289	63.2

*Brazil (cont.)*

40-49	1 785 337	876 731	49.1	1 647 704	1 123 029	68.2
50-59	1 051 124	533 925	50.8	988 596	690 992	69.9
60 and over	783 368	445 025	56.8	887 027	658 482	74.2
Unknown	13 846	5 605	40.5	16 602	8 828	53.2

*Bulgaria<sup>3</sup> (1934)*

10 and over	2 322 342	451 838	19.5	2 321 352	1 005 527	43.3
10-14	369 677	38 317	10.4	355 020	41 802	11.8
15-19	224 540	28 667	12.8	217 998	36 306	16.7
20-24	289 875	39 274	13.5	282 687	72 349	25.6
25-34	507 237	77 104	15.2	497 420	170 273	34.2
35-44	333 559	53 491	16.0	346 343	182 166	52.6
45-54	265 663	56 259	21.2	288 771	207 196	71.8
55-64	170 138	62 054	36.5	176 596	149 869	84.9
65 and over	160 959	96 418	59.9	156 009	145 313	93.1
Unknown	694	254	36.6	508	253	49.8

*Burma (1931)*

10 and over	5 582 146	2 152 519	38.6	5 246 136	4 327 859	82.5
10-14	845 623	520 457	61.5	815 384	683 728	83.9
15-19	693 377	264 871	38.2	719 238	568 077	79.0
20 and over	4 043 146	1 367 191	33.8	3 711 514	3 076 054	82.9

*Canada<sup>4</sup> (1931)*

10 and over	4 258 862	205 855	4.8	3 910 760	141 948	3.6
10-14	542 930	7 200	1.3	531 121	5 687	1.1
15-19	525 250	11 158	2.1	514 341	6 965	1.4
20-24	463 722	13 537	2.9	447 463	9 464	2.1
25-34	778 111	31 492	4.0	717 006	21 242	3.0
35-44	706 844	34 475	4.9	627 718	23 449	3.7
45-54	588 845	36 167	6.1	485 047	22 988	4.7

Country, census year and age <sup>1</sup>	Male			Female		
	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate
<i>Canada (cont.)</i>						
55-64	356 072	30 880	8.7	305 550	20 259	6.6
65 and over	294 377	40 602	13.8	281 454	31 692	11.3
Unknown	2 711	344	12.7	1 060	202	19.1
<i>Ceylon (1946)</i>						
5 and over	3 094 786	924 039	29.9	2 701 114	1 519 072	56.2
<i>Chile<sup>5</sup> (1940)</i>						
10 and over	1 808 643	444 802	24.6	1 866 476	526 647	28.2
10-14	296 740	69 413	23.4	293 296	65 935	22.5
15-19	250 150	57 509	23.0	250 986	52 566	20.9
20-24	213 697	42 776	20.0	232 790	49 367	21.2
25-29	198 951	40 447	20.3	217 391	49 696	22.9
30-39	325 220	71 602	22.0	333 365	92 278	27.7
40-49	241 447	62 014	25.7	233 655	79 535	34.0
50-59	151 425	46 156	30.5	150 945	60 537	40.1
60 and over	131 013	54 885	41.9	154 048	76 733	49.8
<i>Colombia<sup>5</sup> (1938)</i>						
10 and over	3 008 587	1 256 008	41.7	3 104 125	1 443 366	46.5
10-14	547 036	248 774	45.5	521 576	227 178	43.6
15-29	1 161 956	414 933	35.7	1 244 498	484 425	38.9
30 and over	1 299 595	592 301	45.6	1 338 051	731 763	54.7
<i>Cuba<sup>5</sup> (1943)</i>						
10 and over	1 754 226	436 762	24.9	1 585 922	352 539	22.2
10-14	246 602	86 695	35.2	235 568	67 900	28.8
15-19	211 411	52 610	24.9	214 719	37 280	17.4
20 and over	1 296 213	297 457	22.9	1 135 635	247 359	21.8



*Egypt (1937)*

<i>10 and over</i>	5 836 448	4 468 442	76.6	5 767 040	5 416 858	93.9
10-14	1 030 889	742 681	72.0	878 114	750 524	85.5
15-19	713 145	551 321	77.3	633 040	570 489	90.1
20-29	1 156 232	874 807	75.7	1 258 059	1 184 732	94.2
30-39	1 158 227	889 117	76.8	1 175 123	1 132 323	96.4
40-49	819 823	634 128	77.3	785 379	762 210	97.0
50-59	474 986	374 060	78.8	469 717	458 003	97.5
60 and over	465 003	388 228	83.5	548 410	540 529	98.6
Unknown	18 143	14 100	77.7	19 198	18 048	94.0

*Finland<sup>4</sup> (1930)*

<i>15 and over</i>	1 139 375	171 827	15.1	1 235 727	205 258	16.6
--------------------	-----------	---------	------	-----------	---------	------

*France (1946)*

<i>10 and over</i>	15 457 856	492 500	3.2	17 395 944	622 768	3.6
10-13	1 138 628	15 979	1.4	1 124 324	11 895	1.1
14-59	11 814 386	315 789	2.7	12 728 238	290 515	2.3
60 and over	2 501 267	160 147	6.4	3 538 468	319 834	9.0
Unknown	3 575	585	16.4	4 914	524	10.7

*Greece (1928)*

<i>10 and over</i>	2 313 666	551 613	23.8	2 375 237	1 410 717	59.4
10-14	306 926	32 083	10.5	277 875	78 586	28.3
15-19	335 014	61 707	18.4	341 367	143 889	42.2
20-24	254 457	41 546	16.3	280 218	132 221	47.2
25-34	428 582	72 353	16.9	448 686	260 246	58.0
35-44	319 896	81 547	25.5	363 776	254 716	70.0
45-54	293 319	96 170	32.8	280 350	217 387	77.5
55-64	195 568	78 493	40.1	193 938	160 205	82.6
65 and over	171 180	85 134	49.7	180 876	157 592	87.1
Unknown	8 724	2 580	29.6	8 151	5 875	72.1

Country, census year and age <sup>1</sup>	Male			Female		
	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate
<i>Honduras (1945)</i>						
7 and over	470 388	303 182	64.5	467 360	318 867	68.2
7-14	122 809	90 168	73.4	115 518	86 295	74.7
15-19	67 019	43 154	64.4	66 853	41 372	61.9
20-24	59 206	36 499	61.6	60 818	37 185	61.1
25 and over	221 354	133 361	60.2	224 171	154 015	68.7
<i>Hungary (1941)</i>						
6 and over	4 081 716	262 092	6.4	4 290 080	361 513	8.4
6-11	492 183	89 552	18.2	482 246	86 965	18.0
12-14	256 554	4 875	1.9	254 185	4 772	1.9
15-19	447 513	7 685	1.7	442 175	7 625	1.7
20-29	668 242	16 352	2.4	692 260	19 257	2.8
30-39	769 250	34 289	4.5	763 927	40 670	5.3
40-49	574 244	23 470	4.1	639 501	38 586	6.0
50-59	409 806	24 206	5.9	484 455	49 384	10.2
60 and over	463 472	61 501	13.3	530 652	113 942	21.5
Unknown	452	162	35.8	679	312	45.9
<i>India (1931)</i>						
10 and over	124 800 920	105 659 748	84.7	115 915 686	113 094 294	97.6
10-14	20 727 071	18 690 604	90.2	18 246 138	17 733 864	97.2
15-19	15 346 901	12 643 802	82.4	15 178 276	14 625 141	96.4
20 and over	88 318 731	73 924 597	83.7	82 141 721	80 385 807	97.9
Unknown	408 217	400 745	98.2	349 551	349 482	100.0

Italy<sup>4, 5</sup> (1931)

<i>10 and over</i>	15 528 070	2 764 702	17.8	16 592 438	4 183 649	25.2
10-14	1 619 347	133 867	8.3	1 566 698	144 225	9.2
15-19	2 032 278	230 264	11.3	2 013 767	246 307	12.2
20-29	3 474 993	407 088	11.7	3 563 884	536 407	15.1
30-39	2 489 306	343 755	13.8	2 890 159	614 646	21.3
40-49	2 062 667	385 800	18.7	2 403 870	706 151	29.4
50-64	2 406 849	671 213	27.9	2 578 774	1 037 860	40.2
65 and over	1 436 552	590 221	41.1	1 568 892	894 664	57.0
Unknown	6 078	2 494	41.0	6 394	3 389	53.0

Mexico (1940)

<i>10 and over</i>	6 806 218	3 405 129	50.0	7 153 921	4 138 822	57.9
10-14	1 246 795	680 714	54.6	1 155 924	629 086	54.4
15-39	3 765 997	1 759 719	46.7	4 059 409	2 224 467	54.8
40 and over	1 790 759	962 999	53.8	1 936 522	1 283 880	66.3
Unknown	2 667	1 697	63.6	2 066	1 389	67.2

Philippines (1948)

<i>10 and over</i>	6 439 056	2 294 134	35.6	6 545 476	2 730 348	41.7
10-14	1 245 776	428 113	34.4	1 190 263	382 166	32.1
15-19	984 009	238 915	24.3	1 045 877	263 645	25.2
20-24	841 231	210 084	25.0	899 556	277 905	30.9
25-34	1 232 865	388 403	31.5	1 325 114	515 330	38.9
35-44	927 700	342 418	36.9	922 510	447 371	48.5
45-54	563 570	268 176	47.6	547 131	353 400	64.6
55-64	342 373	201 160	58.8	323 519	246 608	76.2
65 and over	301 196	216 835	72.0	291 369	243 906	83.7
Unknown	316	30	9.5	137	17	12.4

T  
A  
B  
L  
E  
B

Country, census year and age <sup>1</sup>	Male			Female		
	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate
<i>Portugal</i> <sup>5, 6</sup> (1940)						
<i>10 and over</i>	2 859 930	1 235 831	43.2	3 197 360	1 924 007	60.2
10-14	408 344	147 061	36.0	395 012	175 616	44.5
15-19	373 088	140 841	37.8	375 394	181 916	48.5
20-24	314 829	111 601	35.4	315 853	168 142	53.2
25-34	564 474	238 289	42.2	601 048	353 775	58.9
35-44	424 659	187 449	44.1	493 629	304 168	61.6
45-54	324 853	154 912	47.7	396 494	270 504	68.2
55-64	239 601	130 277	54.4	308 149	228 103	74.0
65 and over	199 427	118 336	59.3	298 865	232 633	77.8
Unknown	10 655	7 065	66.3	12 916	9 150	70.8
<i>Spain</i> (1940)						
<i>10 and over</i>	9 886 629	1 708 276	17.3	10 983 826	3 126 465	28.5
10-14	1 376 332	268 543	19.5	1 365 103	285 639	20.9
15-19	1 248 068	178 533	14.3	1 297 114	207 420	16.0
20-24	1 014 912	95 215	9.4	1 167 204	199 520	17.1
25-34	1 880 836	203 612	10.8	2 100 914	464 475	22.1
35-44	1 559 197	231 924	14.9	1 715 932	491 249	28.6
45-54	1 199 574	240 874	20.1	1 323 703	477 115	36.0
55-64	888 061	239 907	27.0	1 043 117	468 173	44.9
65 and over	719 649	249 668	34.7	970 739	532 874	54.9
<i>Turkey</i> (1945)						
<i>10 and over</i>	6 811 429	3 744 689	55.0	6 916 514	5 797 481	83.8
10-14	1 284 952	663 927	51.7	1 074 080	744 165	69.3
15-19	1 048 701	499 181	47.6	931 461	677 748	72.8

*Turkey (cont.)*

20-24	789 205	303 513	38.5	691 680	525 937	76.0
25-34	1 215 611	557 288	45.8	1 318 726	1 123 863	85.2
35-44	1 149 678	691 274	60.1	1 136 390	1 031 920	90.8
45-54	684 235	495 440	72.4	812 606	766 977	94.4
55-64	371 070	298 953	80.6	568 605	551 691	97.0
65 and over	256 683	225 790	88.0	369 860	362 921	98.1
Unknown	11 294	9 323	82.5	13 106	12 259	93.5

*Union of South  
Africa* <sup>7</sup> (1946)

<i>10 and over</i>	2 962 511	2 139 297	72.2	2 779 700	2 056 538	74.0
10-19	899 762	664 716	73.9	852 533	572 252	67.1
20-29	708 030	484 031	68.4	641 187	437 086	68.2
30-39	560 594	386 026	68.9	485 255	363 857	75.0
40-49	390 527	283 319	72.5	344 098	276 928	80.5
50-59	190 110	144 252	75.9	194 791	165 733	85.1
60 and over	199 973	164 879	82.5	248 875	228 552	91.8
Unknown	13 515	12 074	89.3	12 961	12 130	93.6

*United States* <sup>4</sup>  
(1930)

<i>10 and over</i>	49 949 798	2 198 293	4.4	48 773 249	2 085 460	4.3
10-14	6 068 777	82 030	1.4	5 936 100	58 410	1.0
15-19	5 757 825	140 632	2.4	5 794 290	81 310	1.4
20-24	5 336 815	173 019	3.2	5 533 563	121 341	2.2
25-34	9 421 966	323 919	3.4	9 532 063	294 347	3.1
35-44	8 816 319	433 510	4.9	8 382 521	454 445	5.4
45-54	6 803 569	441 883	6.5	6 214 514	422 550	6.8
55-64	4 367 500	303 907	7.0	4 029 398	302 904	7.5
65 and over	3 325 211	296 105	8.9	3 308 594	346 861	10.5
Unknown	51 816	3 288	6.3	42 206	3 292	7.8

T  
A  
B  
L  
E  
B

Country, census year and age <sup>1</sup>	Male			Female		
	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate	Total number of persons <sup>2</sup>	Persons not able to read and write	Per cent illiterate
<i>Yugoslavia</i> <sup>5</sup> (1948)						
<i>10 and over</i>	5 884 381	906 703	15.4	6 554 121	2 256 277	34.4
10-14	914 830	100 707	11.0	883 211	177 802	20.1
15-24	1 533 898	104 140	6.8	1 639 156	297 283	18.1
25-44	1 880 181	247 725	13.2	2 105 196	708 615	33.7
45 and over <sup>3</sup>	1 555 472	454 131	29.2	1 926 558	1 072 577	55.7

<sup>1</sup> Persons of age unknown are included in the total number referring to persons above a specified minimum age.

<sup>2</sup> Unless otherwise noted, excluding literacy unstated.

<sup>3</sup> Including persons (10 years old and over) of literacy unstated: 548 males; 1,005 females.

<sup>4</sup> Question on literacy omitted from subsequent censuses.

<sup>5</sup> Figures appearing under the heading 'Persons not able to read and write' refer to persons not able to read.

<sup>6</sup> Including persons (10 years and over) of literacy unstated: 82,115 male; 129,566 female.

<sup>7</sup> Native population only, including persons (10 years old and over) of literacy unstated: 61,207 male; 57,699 female.

<sup>8</sup> Including persons (age unknown): 469 male, 362 female.

## LIST OF GRAPHS

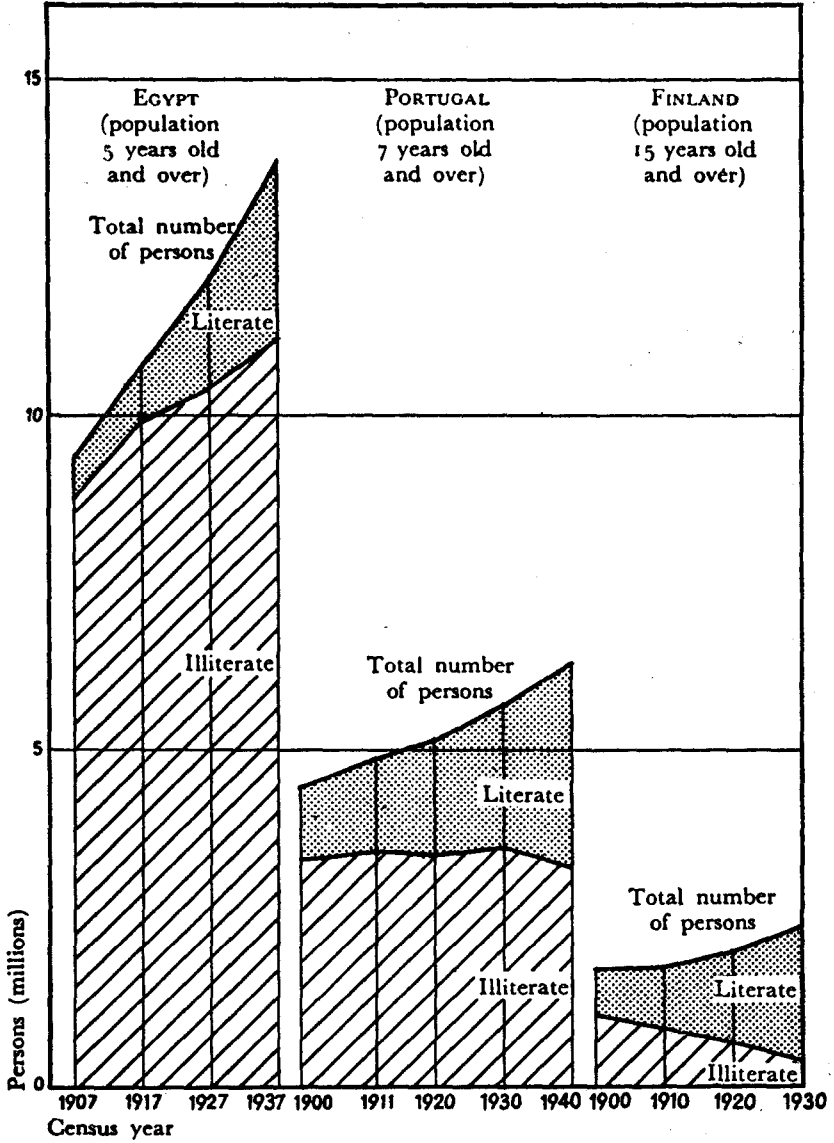
1. Increase or decrease in number of literates and illiterates in three selected countries.
2. Rate of progress in reduction of illiteracy in three selected countries.
3. Number of literates and illiterates and percentage of illiteracy in ARGENTINA (population 14 years old and over: 1895-1947).
4. Number of literates and illiterates and percentage of illiteracy in BELGIUM (population 7 years old and over: 1900-30).
5. Number of literates and illiterates and percentage of illiteracy in BRAZIL (population 15 years old and over: 1900-40).
6. Number of literates and illiterates and percentage of illiteracy in BULGARIA (population 10 years old and over: 1900-34).
7. Number of literates and illiterates and percentage of illiteracy in BURMA (population 10 years old and over: 1901-31).
8. Number of literates and illiterates and percentage of illiteracy in CANADA (population 5 years old and over: 1901-31).
9. Number of literates and illiterates and percentage of illiteracy in CEYLON (population 5 years old and over: 1901-46).
10. Number of literates and illiterates and percentage of illiteracy in CHILE (population 10 years old and over: 1907-40).
11. Number of literates and illiterates and percentage of illiteracy in COLOMBIA (population 10 years old and over: 1918-38).
12. Number of literates and illiterates and percentage of illiteracy in CUBA (population 10 years old and over: 1899-1943).
13. Number of literates and illiterates and percentage of illiteracy in EGYPT (population 10 years old and over: 1907-37).
14. Number of literates and illiterates and percentage of illiteracy in FINLAND (population 15 years old and over: 1900-30).
15. Number of literates and illiterates and percentage of illiteracy in FRANCE (population 10 years old and over: 1901-46).
16. Number of literates and illiterates and percentage of illiteracy in GREECE (population 8 years old and over: 1907-28).
17. Number of literates and illiterates and percentage of illiteracy in HONDURAS (population 7 years old and over: 1930-45).
18. Number of literates and illiterates and percentage of illiteracy in HUNGARY (population 6 years old and over: 1900-41).
19. Number of literates and illiterates and percentage of illiteracy in INDIA (population 10 years old and over: 1901-31).

PROGRESS OF LITERACY

20. Number of literates and illiterates and percentage of illiteracy in ITALY (population 10 years old and over: 1901-31).
21. Number of literates and illiterates and percentage of illiteracy in MEXICO (population 10 years old and over: 1900-40).
22. Number of literates and illiterates and percentage of illiteracy in the PHILIPPINES (population 10 years old and over: 1939-48).
23. Number of literates and illiterates and percentage of illiteracy in PORTUGAL (population 10 years old and over: 1900-40).
24. Number of literates and illiterates and percentage of illiteracy in SPAIN (population 10 years old and over: 1900-40).
25. Number of literates and illiterates and percentage of illiteracy in TURKEY (population 10 years old and over: 1935-45).
26. Number of literates and illiterates and percentage of illiteracy in the UNION OF SOUTH AFRICA (native population, all ages: 1911-46).
27. Number of literates and illiterates and percentage of illiteracy in the UNITED STATES (population 10 years old and over: 1900-40).
28. Number of literates and illiterates and percentage of illiteracy in YUGOSLAVIA (population 10 years old and over: 1931-48).
29. Rate of progress in reduction of illiteracy in 10 countries (population 10 years of age and over).

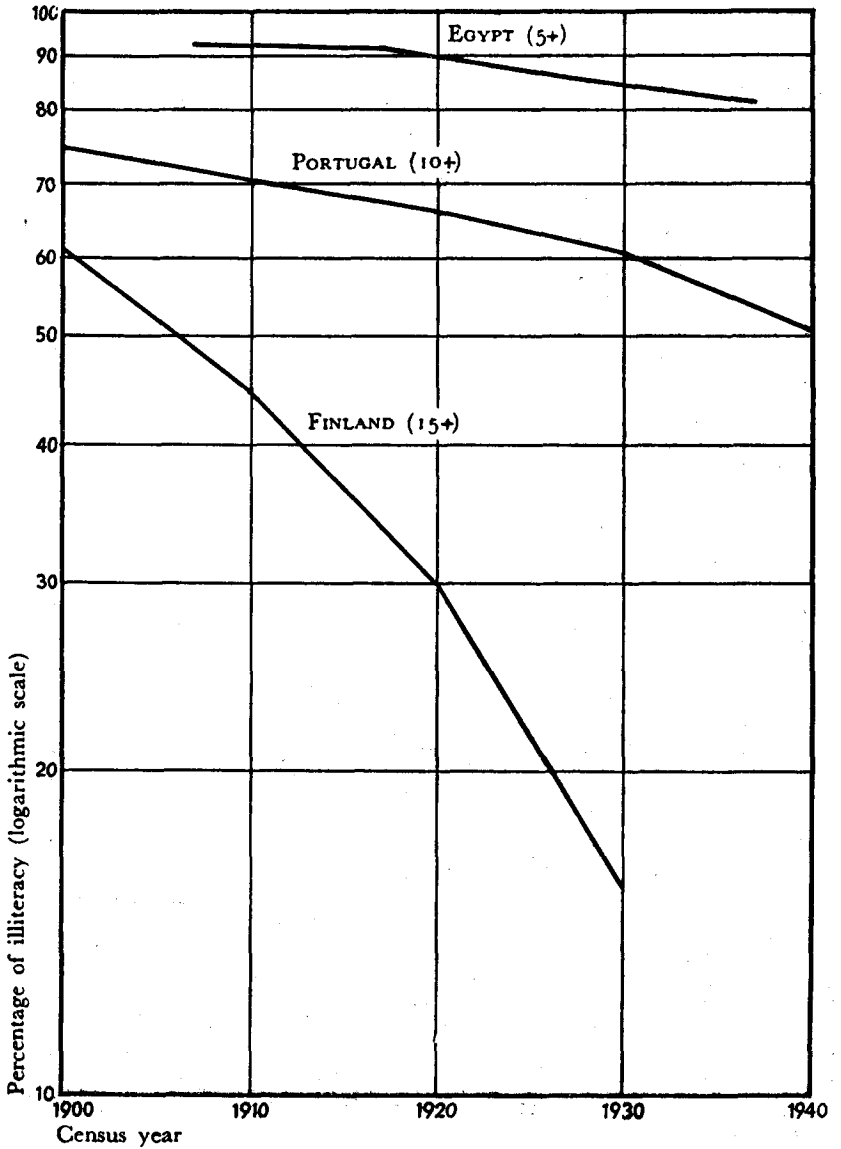


GRAPH 1. Increase or decrease in number of literates and illiterates in three selected countries.



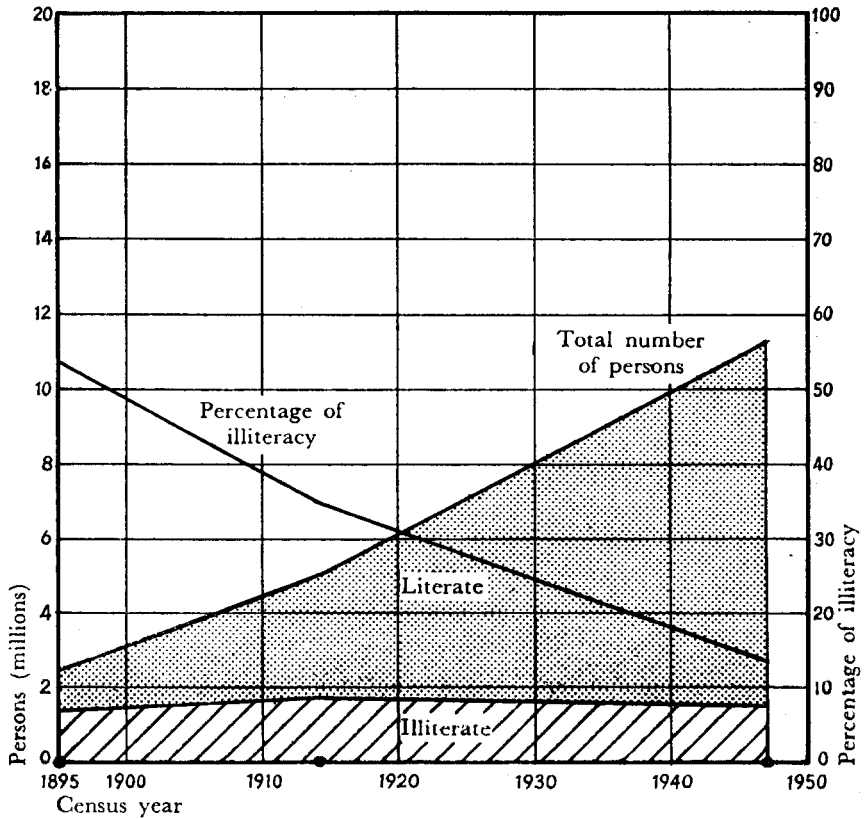
PROGRESS OF LITERACY

GRAPH 2. Rate of progress in reduction of illiteracy in three selected countries.



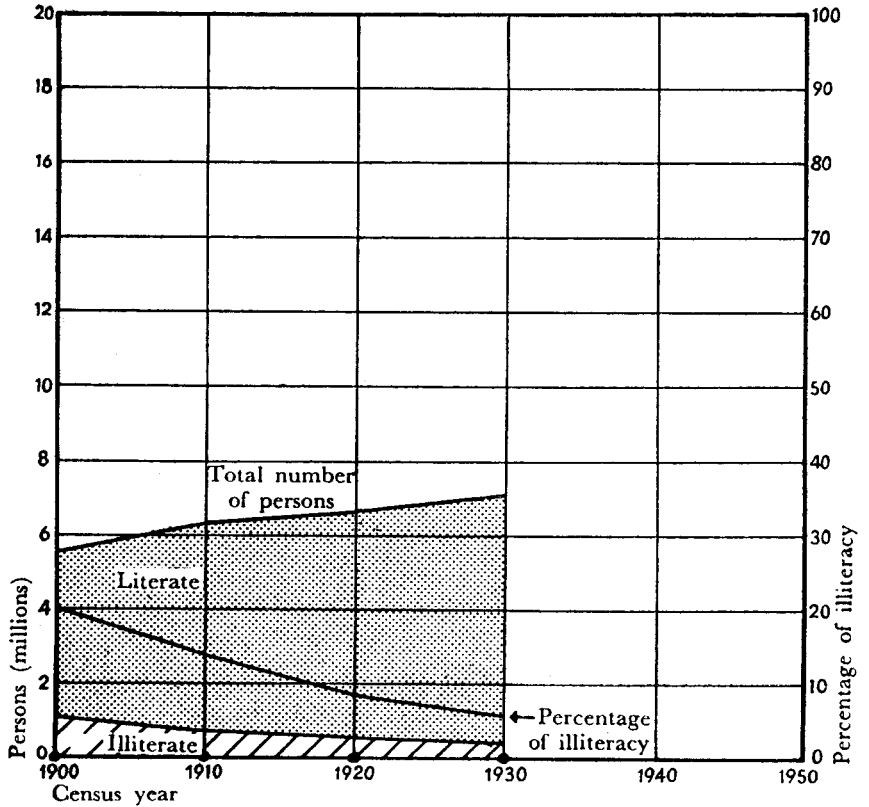
GRAPHS

GRAPH 3. Number of literates and illiterates and percentage of illiteracy in ARGENTINA (population 14 years old and over: 1895-1947).

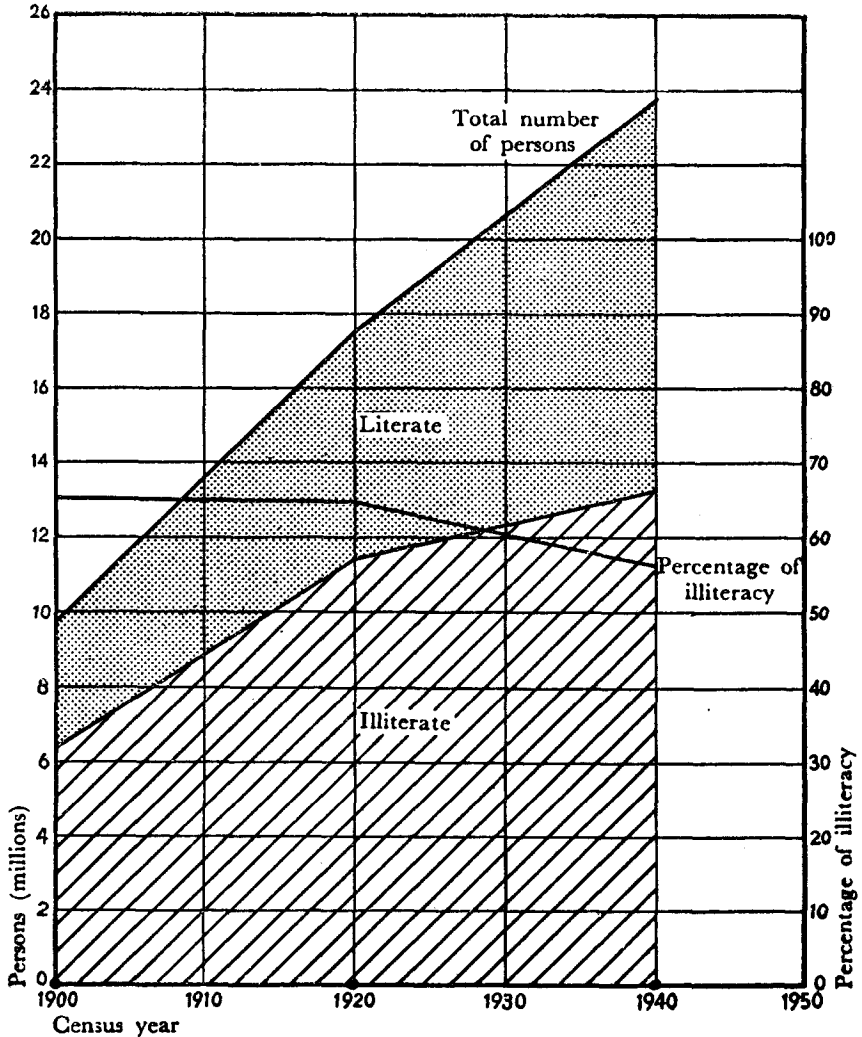


# PROGRESS OF LITERACY

GRAPH 4. Number of literates and illiterates and percentage of illiteracy in BELGIUM (population 7 years old and over: 1900-30).

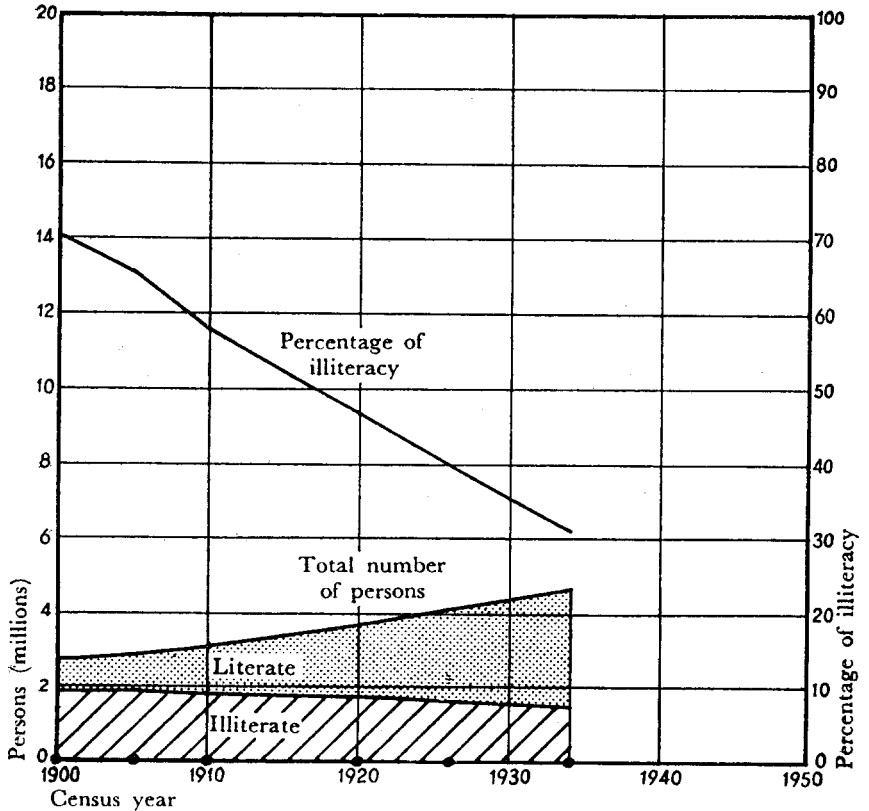


GRAPH 5. Number of literates and illiterates and percentage of illiteracy in BRAZIL (population 15 years old and over: 1900-40).

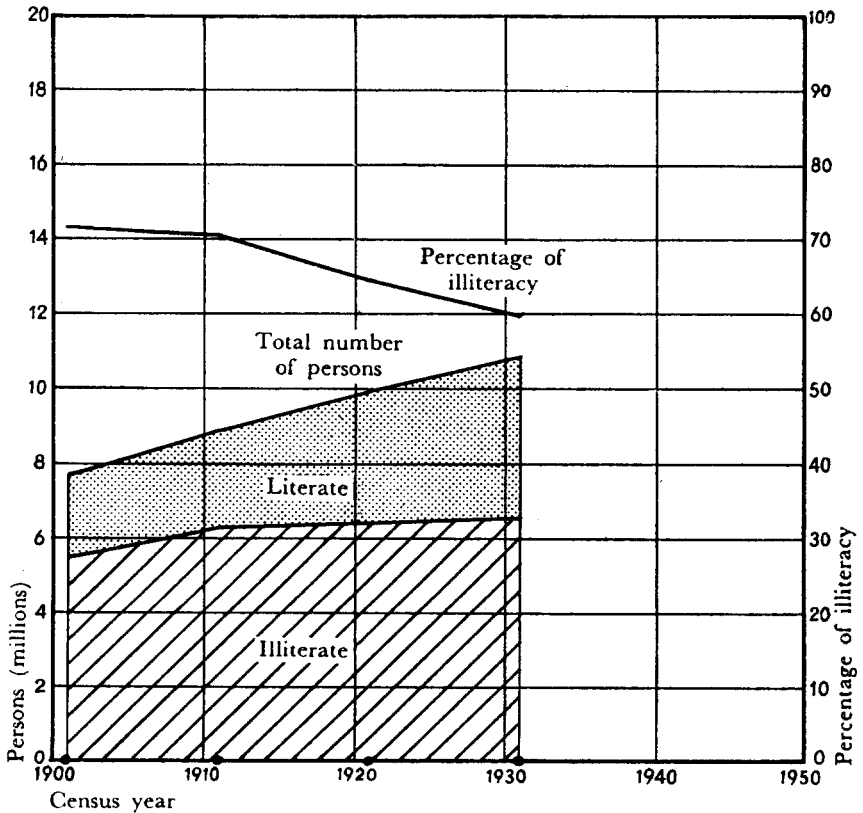


PROGRESS OF LITERACY

GRAPH 6. Number of literates and illiterates and percentage of illiteracy in BULGARIA (population 10 years old and over: 1900-34).

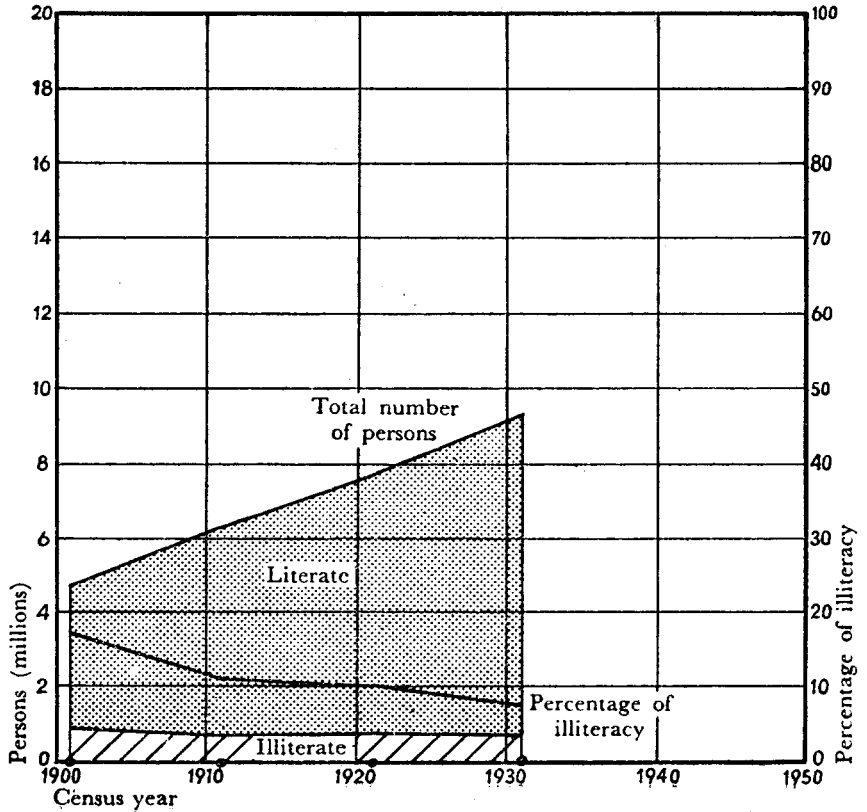


GRAPH 7. Number of literates and illiterates and percentage of illiteracy in BURMA (population 10 years old and over: 1900-31).



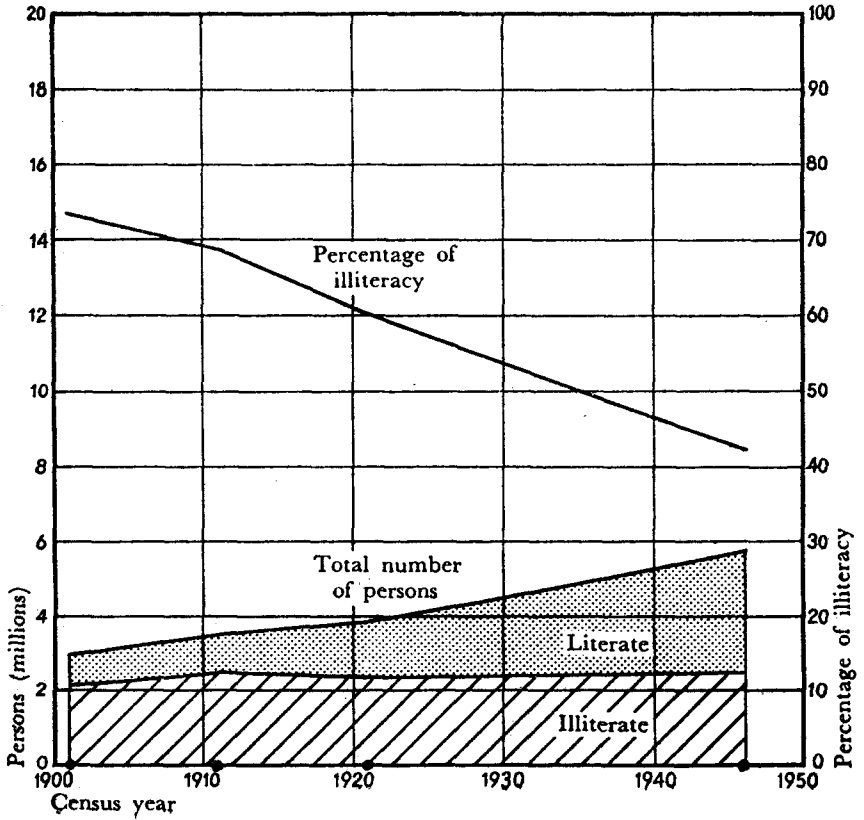
PROGRESS OF LITERACY

GRAPH 8. Number of literates and illiterates and percentage of illiteracy in CANADA (population 5 years old and over: 1901-31).



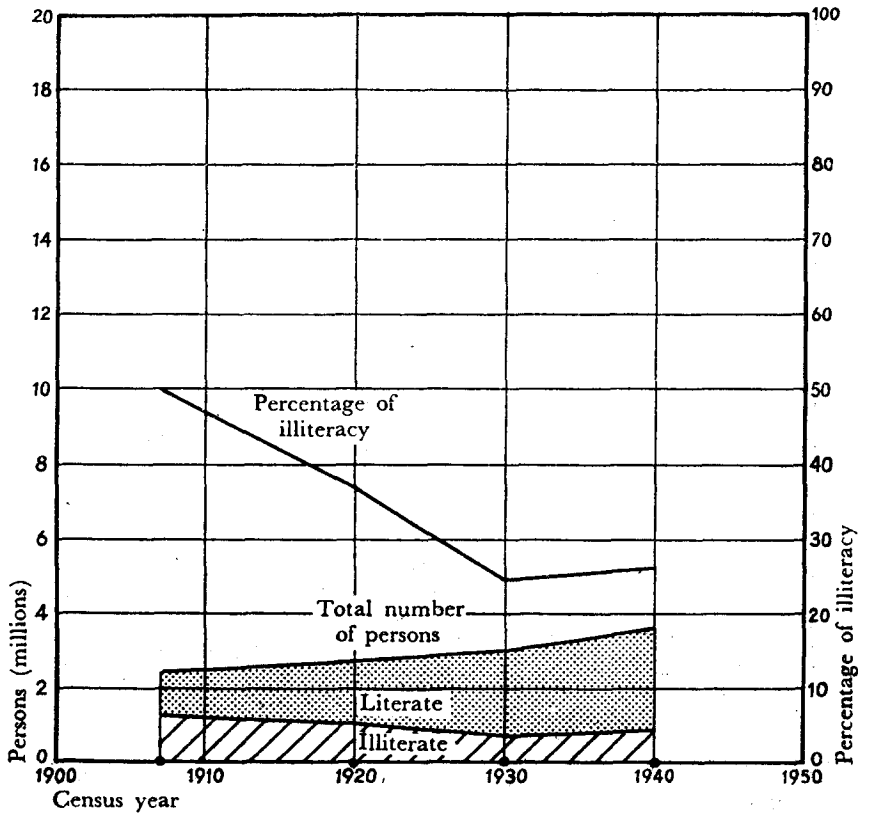


GRAPH 9. Number of literates and illiterates and percentage of illiteracy in CEYLON (population 5 years old and over: 1901-46).



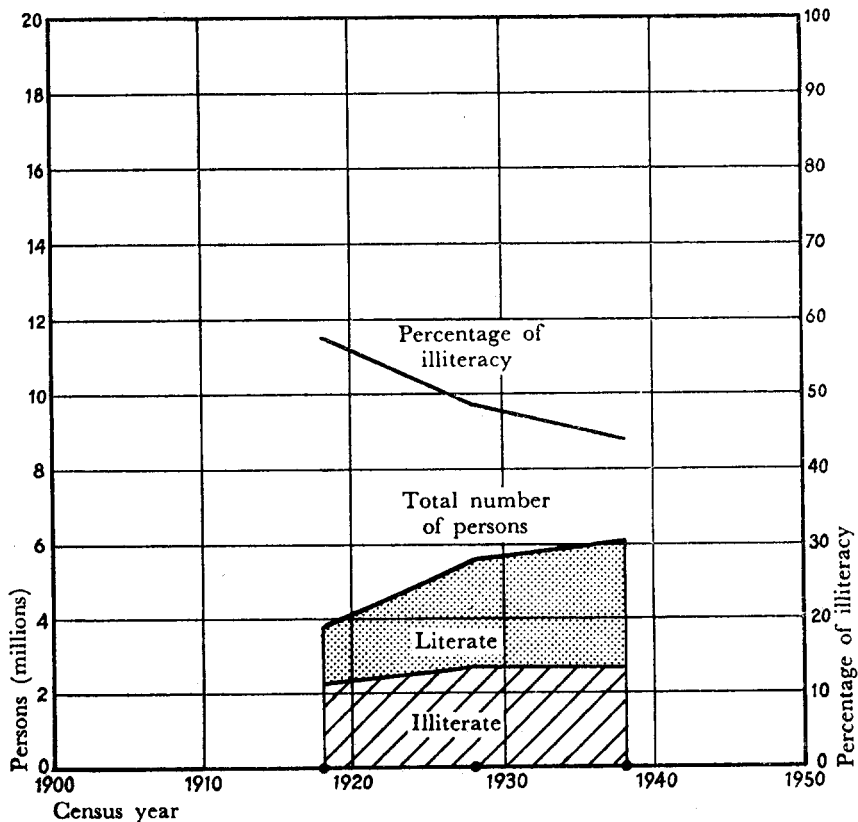
PROGRESS OF LITERACY

GRAPH 10. Number of literates and illiterates and percentage of illiteracy in CHILE (population 10 years old and over: 1907-40).



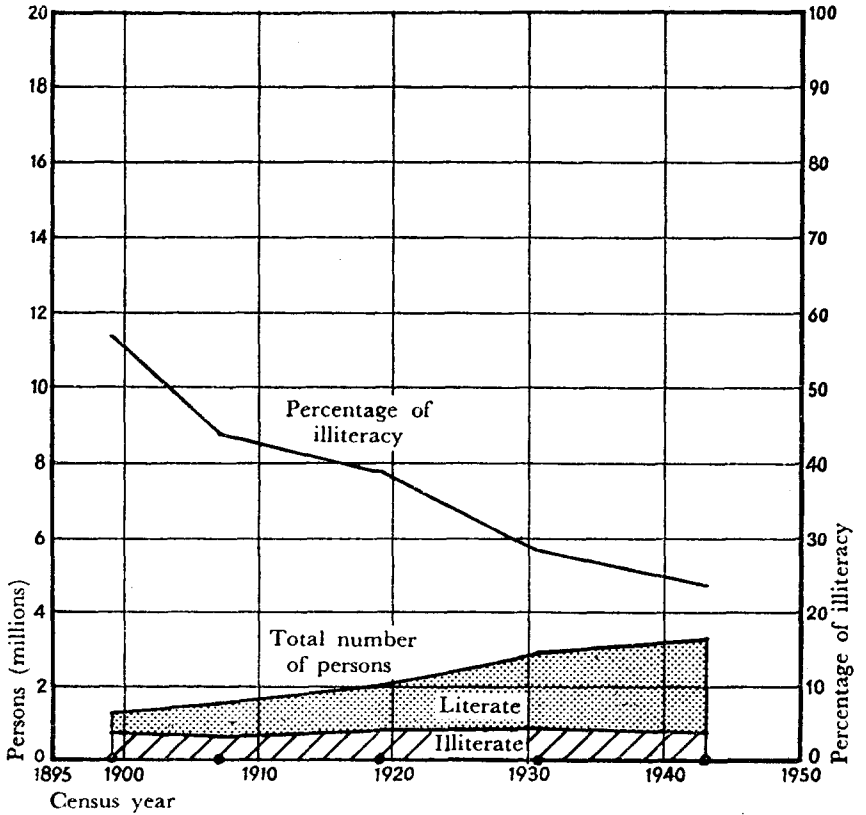
GRAPHS

GRAPH 11. Number of literates and illiterates and percentage of illiteracy in COLOMBIA (population 10 years old and over: 1918-38).

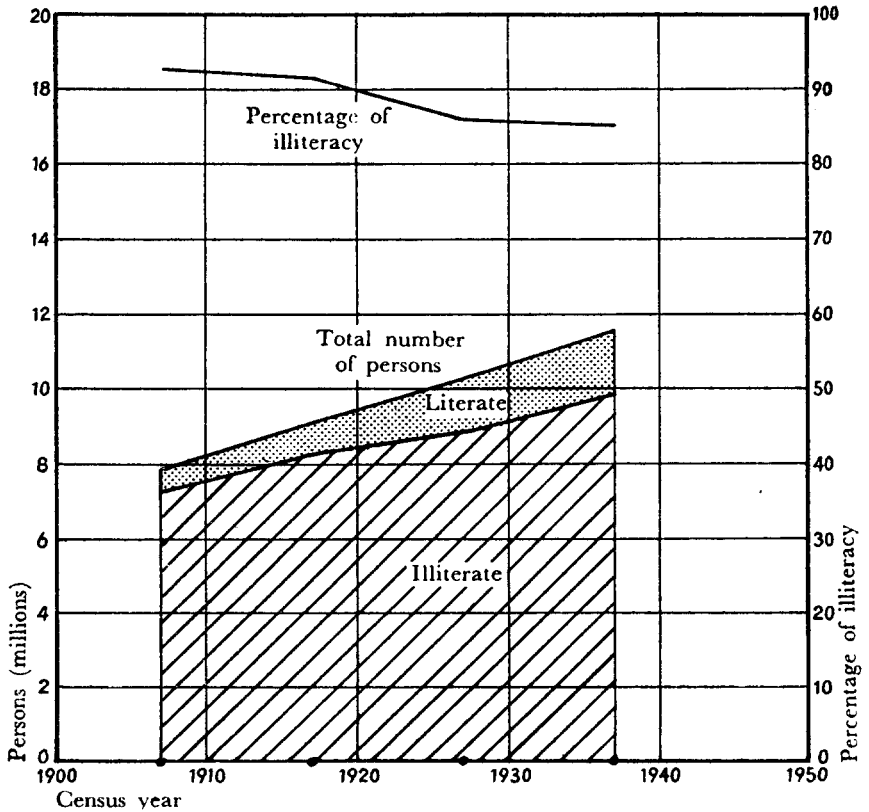


# PROGRESS OF LITERACY

GRAPH 12. Number of literates and illiterates and percentage of illiteracy in CUBA (population 10 years old and over: 1899-1943).

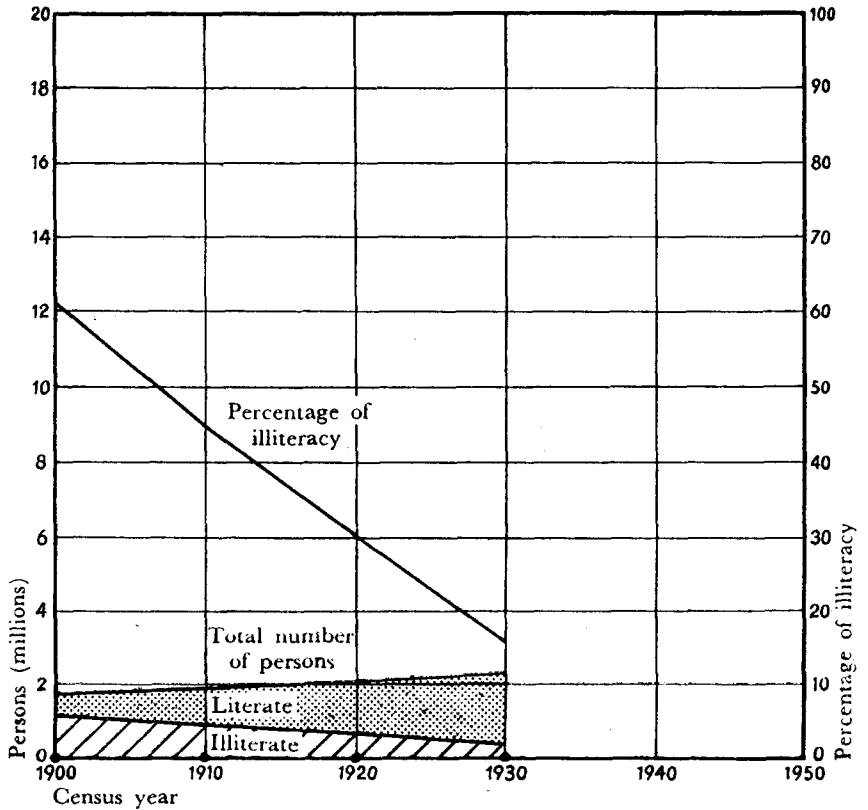


GRAPH 13. Number of literates and illiterates and percentage of illiteracy in EGYPT (population 10 years old and over: 1907-37).



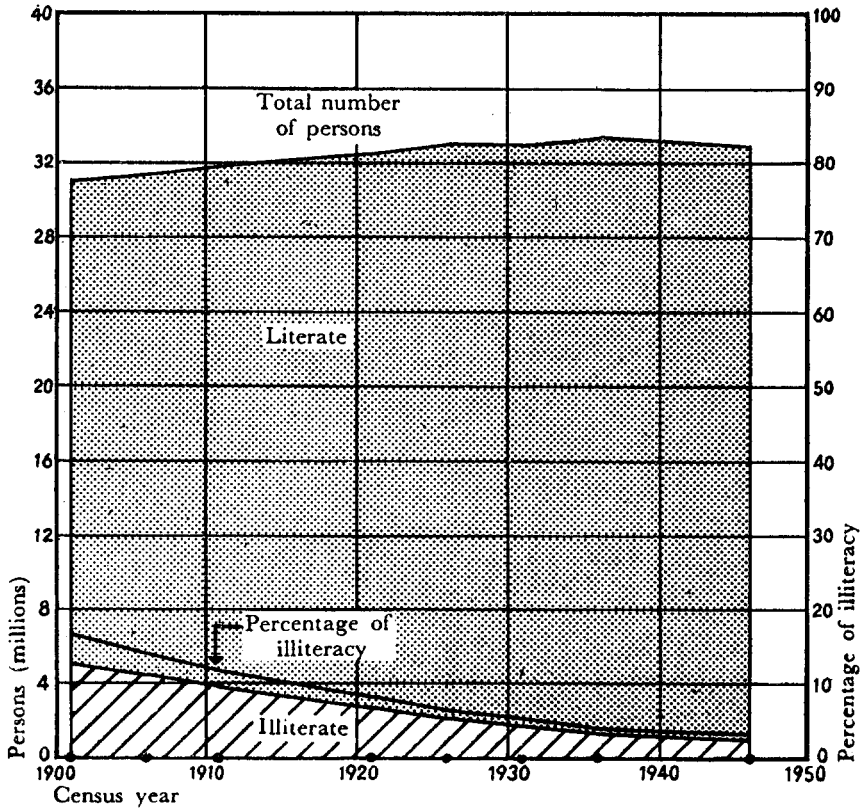
PROGRESS OF LITERACY

GRAPH 14. Number of literates and illiterates and percentage of illiteracy in FINLAND (population 15 years old and over: 1900-30).



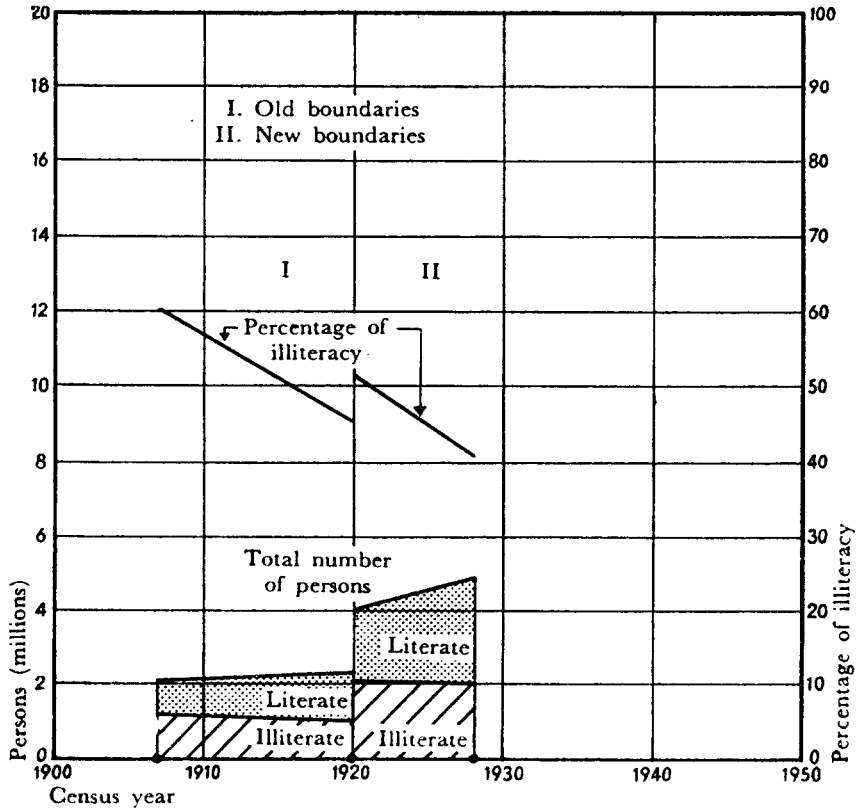
GRAPHS

GRAPH 15. Number of literates and illiterates and percentage of illiteracy in FRANCE (population 10 years old and over: 1901-46).



PROGRESS OF LITERACY

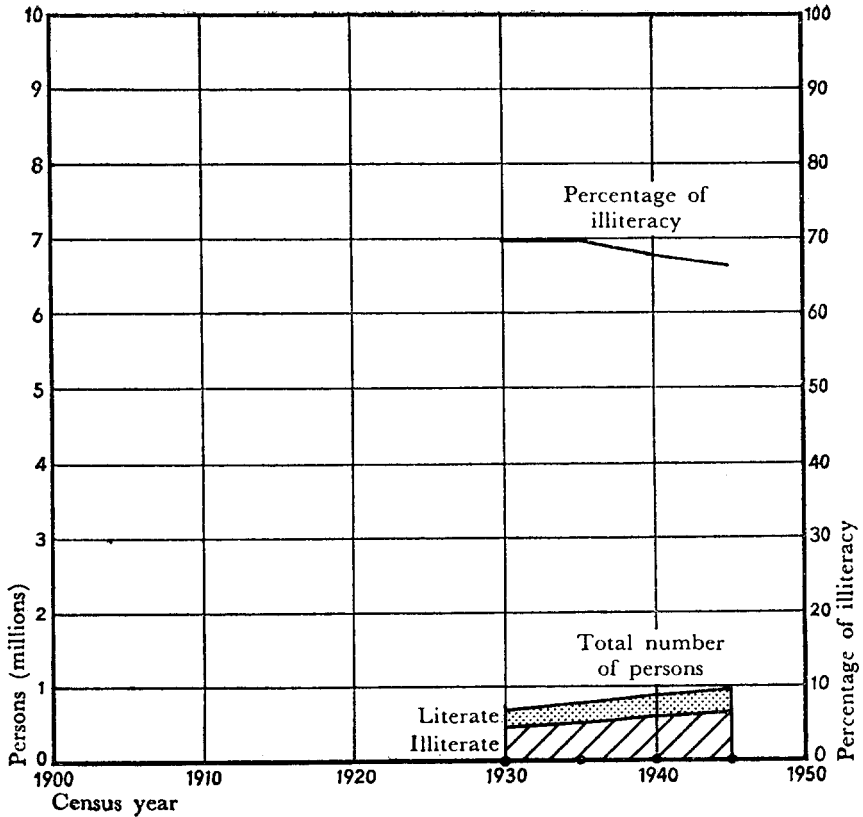
GRAPH 16. Number of literates and illiterates and percentage of illiteracy in GREECE (population 8 years old and over: 1907-28).





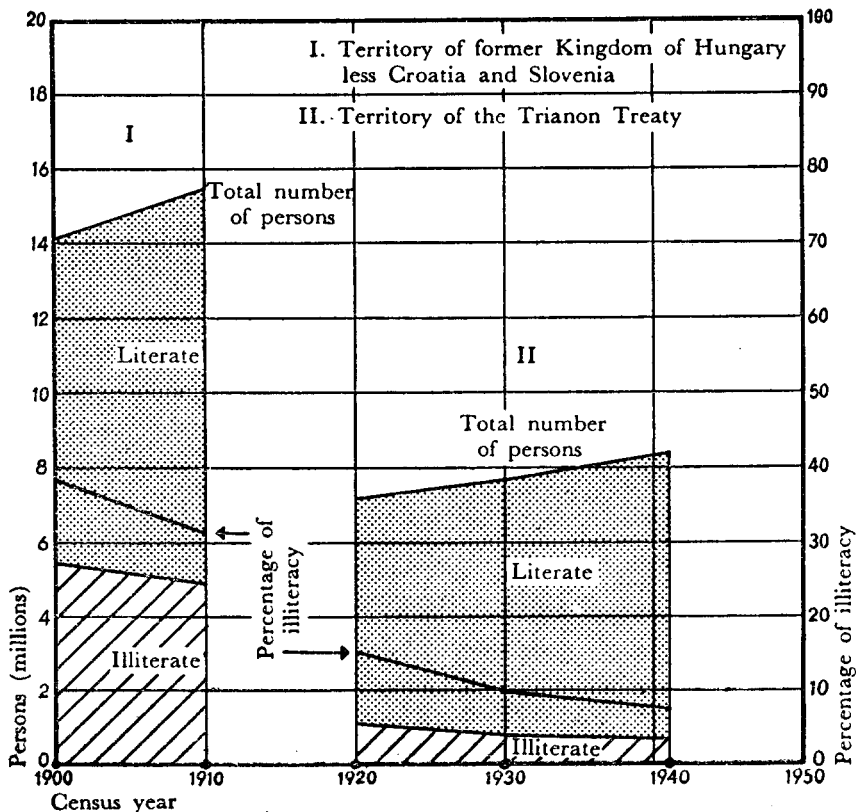
GRAPHS

GRAPH 17. Number of literates and illiterates and percentage of illiteracy in HONDURAS (population 7 years old and over: 1930-45).

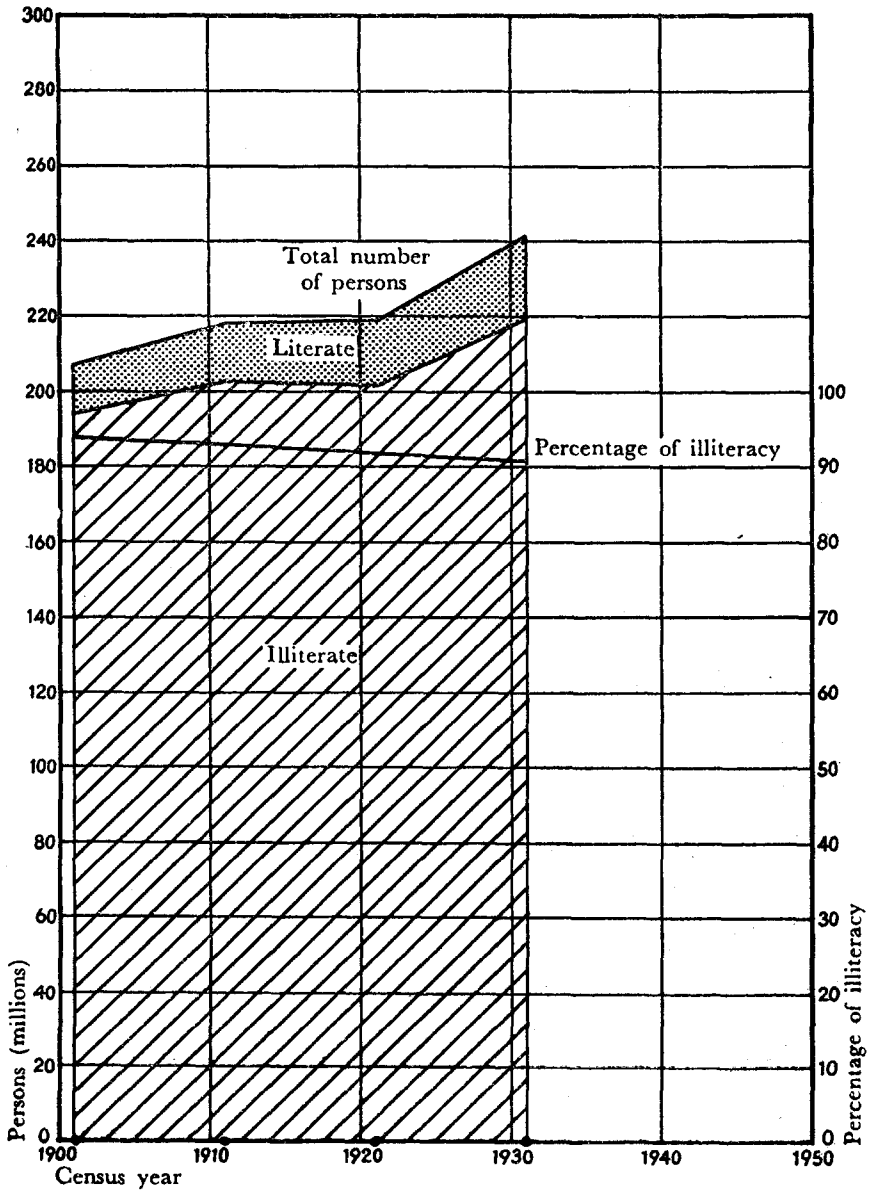


PROGRESS OF LITERACY

GRAPH 18. Number of literates and illiterates and percentage of illiteracy in HUNGARY (population 6 years old and over: 1900-41)

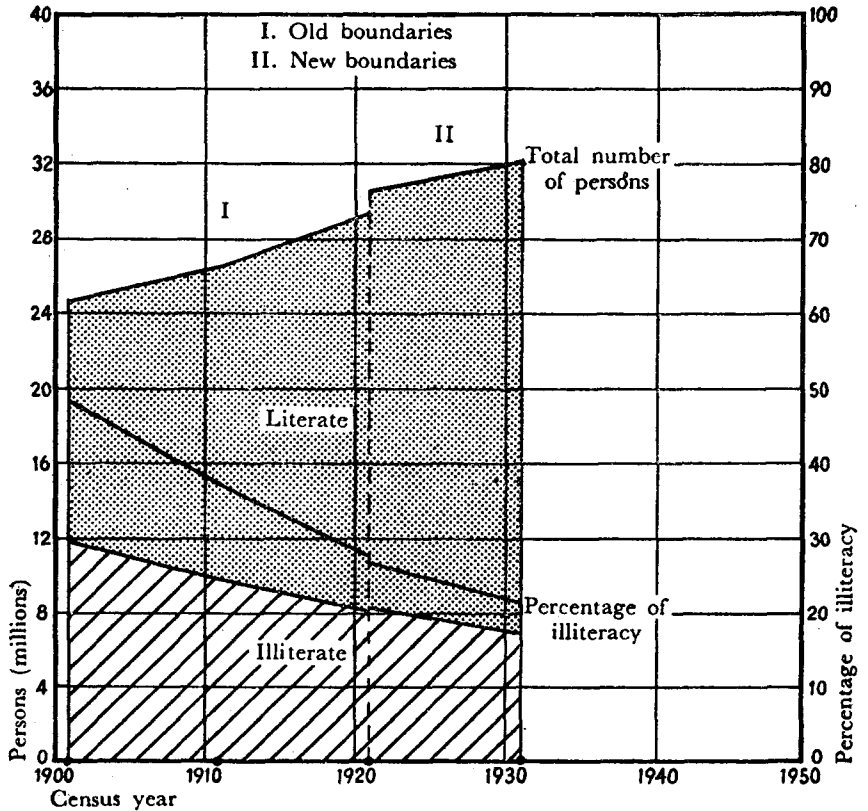


GRAPH 19. Number of literates and illiterates and percentage of illiteracy in INDIA (population 10 years old and over: 1901-31).

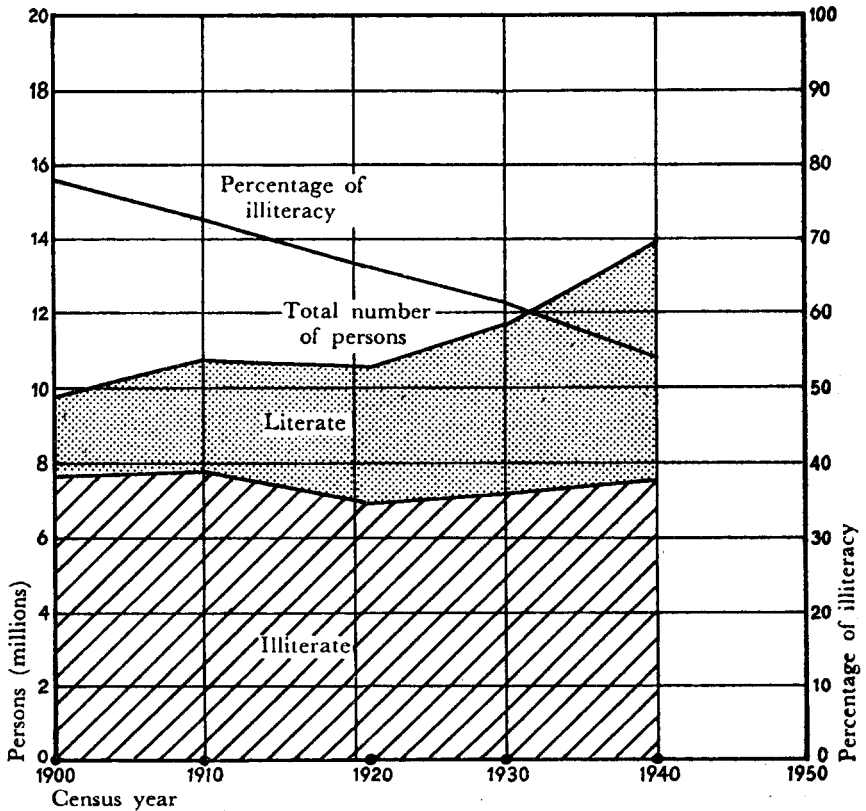


PROGRESS OF LITERACY

GRAPH 20. Number of literates and illiterates and percentage of illiteracy in ITALY (population 10 years old and over: 1901-31).

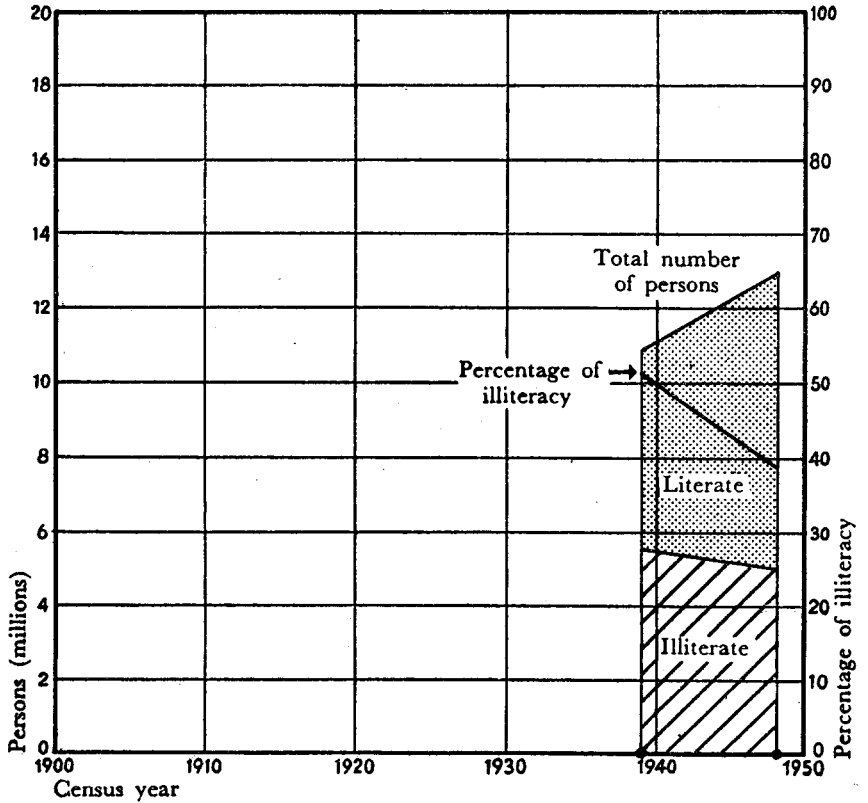


GRAPH 21. Number of literates and illiterates and percentage of illiteracy in MEXICO (population 10 years old and over: 1900-40).

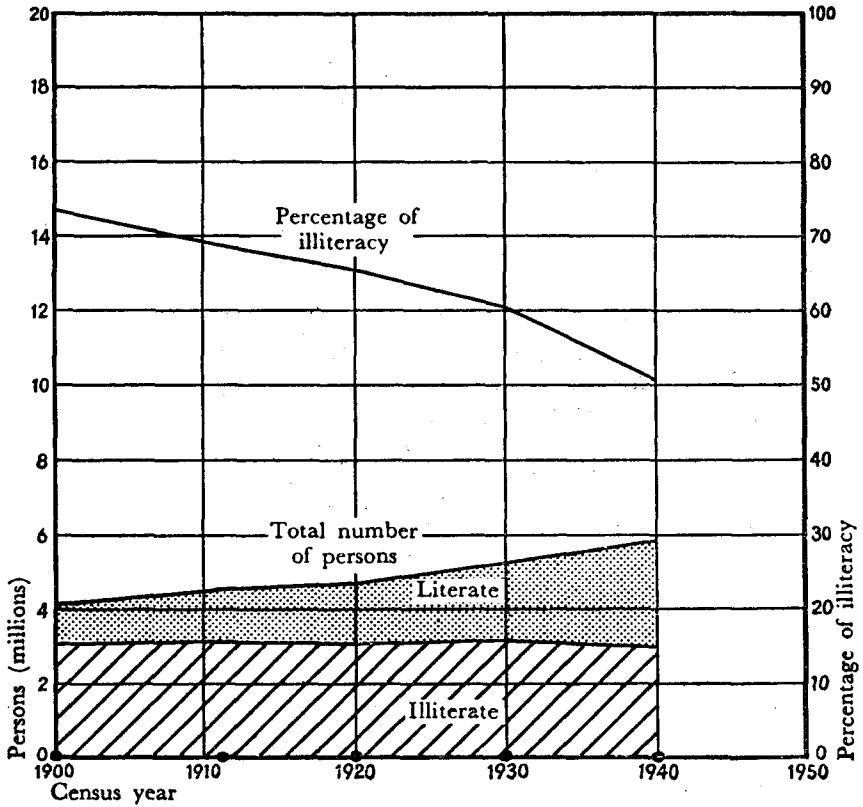


PROGRESS OF LITERACY

GRAPH 22. Number of literates and illiterates and percentage of illiteracy in the PHILIPPINES (population 10 years old and over: 1939-48).

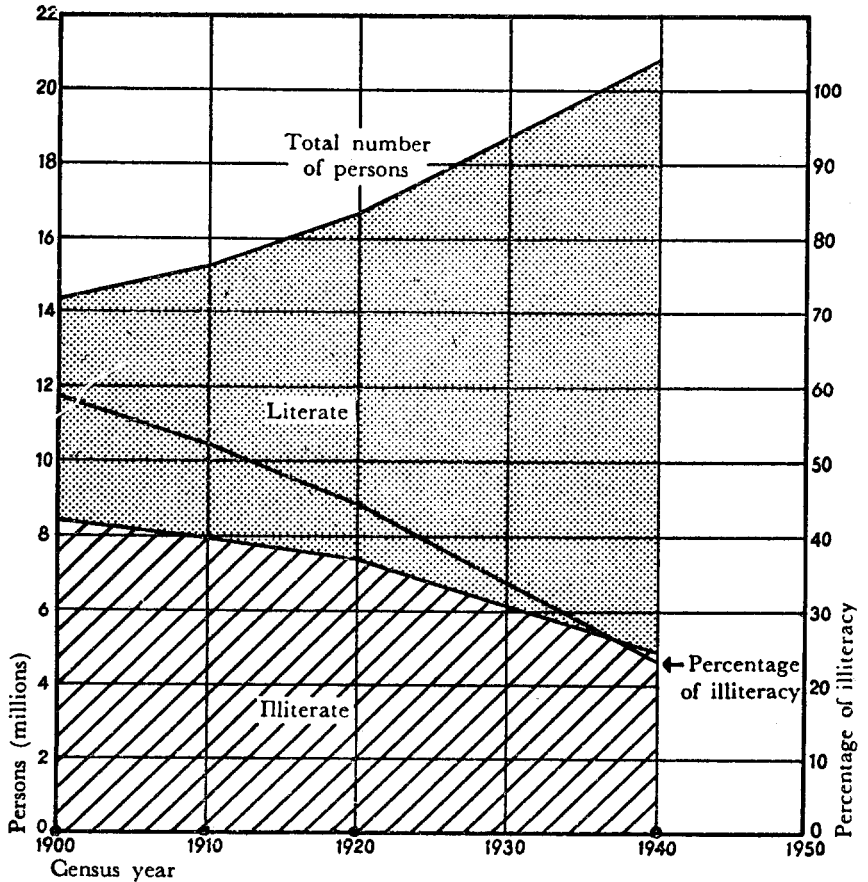


GRAPH 23. Number of literates and illiterates and percentage of illiteracy in PORTUGAL (population 10 years old and over: 1900-40).



PROGRESS OF LITERACY

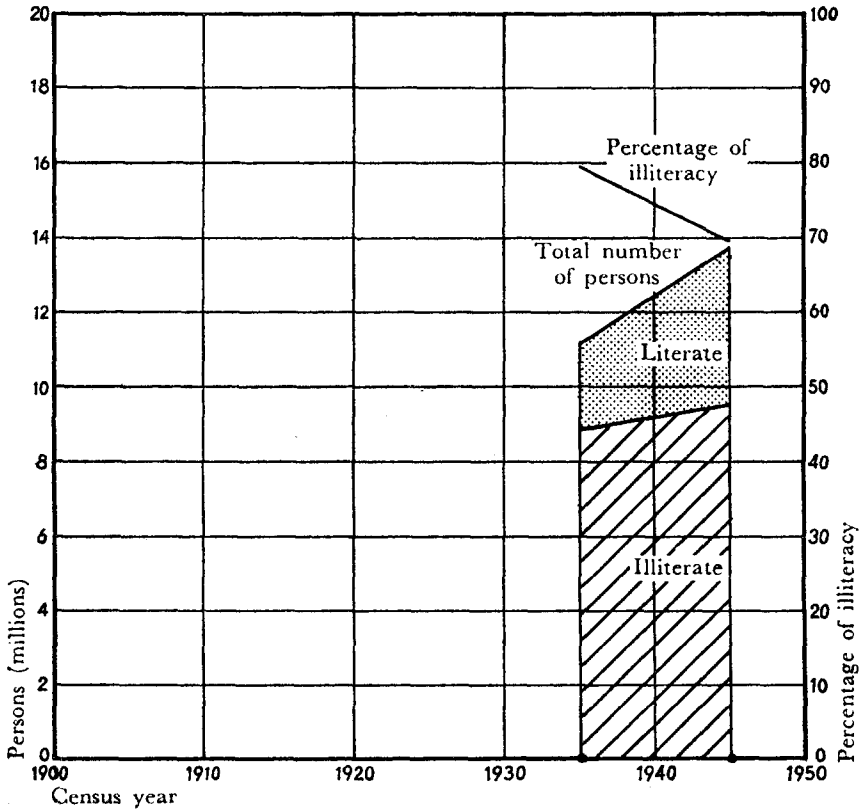
GRAPH 24. Number of literates and illiterates and percentage of illiteracy in SPAIN (population 10 years old and over: 1900-40).





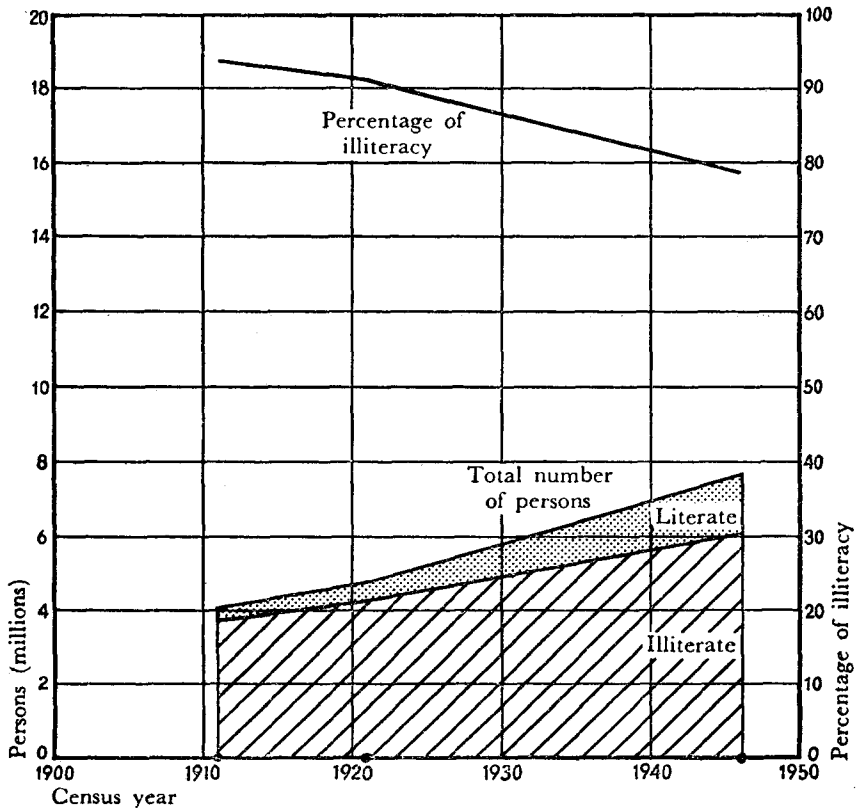
GRAPHS

GRAPH 25. Number of literates and illiterates and percentage of illiteracy in TURKEY (population 10 years old and over: 1935-45).



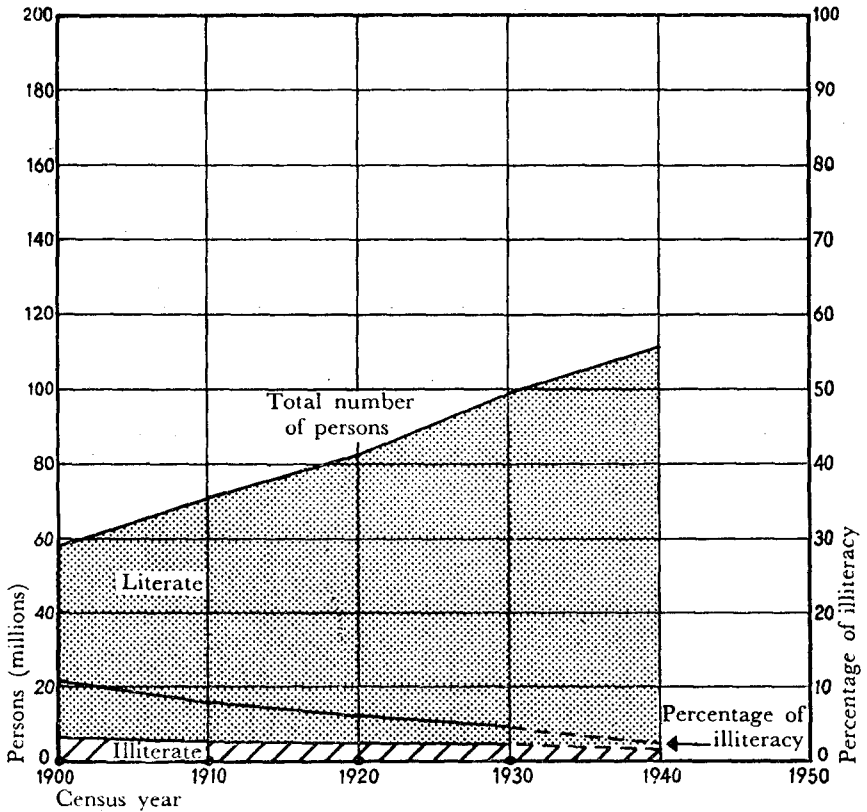
PROGRESS OF LITERACY

GRAPH 26. Number of literates and illiterates and percentage of illiteracy in the UNION OF SOUTH AFRICA (native population, all ages: 1911-46).



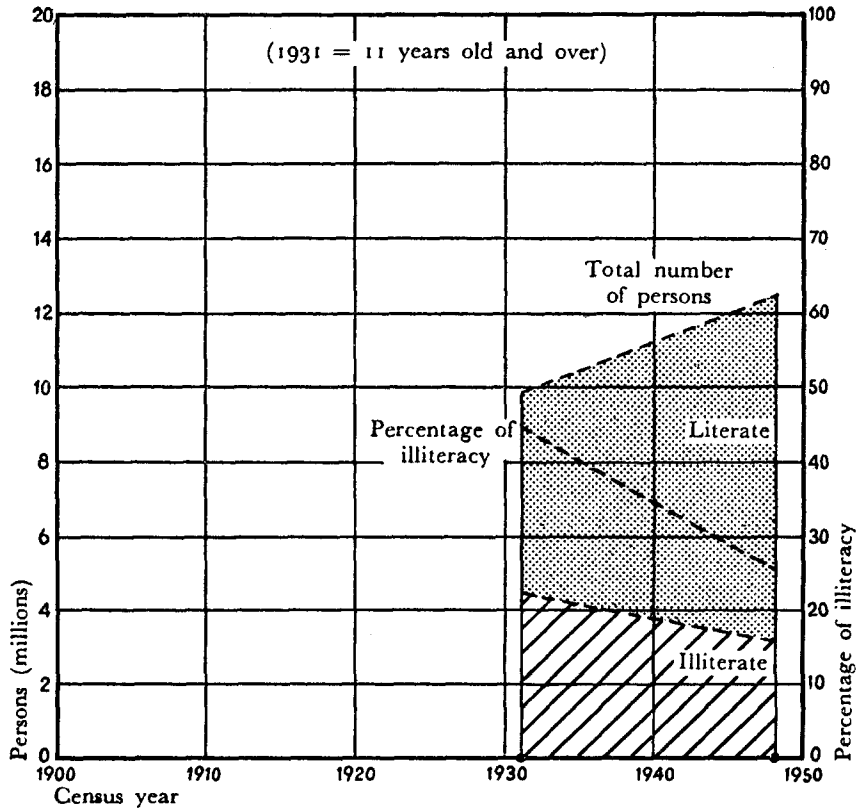
GRAPHS

GRAPH 27. Number of literates and illiterates and percentage of illiteracy in the UNITED STATES (population 10 years old and over: 1900-40).

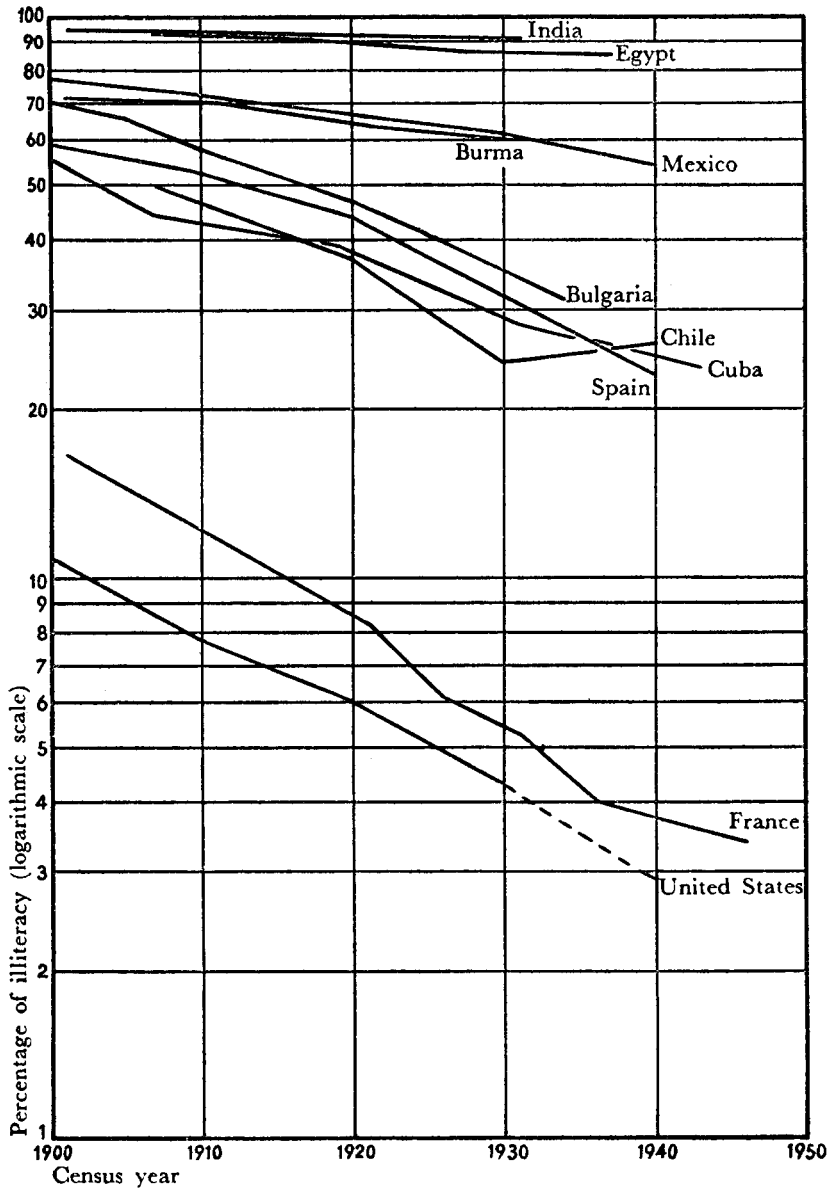


PROGRESS OF LITERACY

GRAPH 28. Number of literates and illiterates and percentage of illiteracy in YUGOSLAVIA (population 10 years old and over: 1931-48).



GRAPH 29. Rate of progress in reduction of illiteracy in 10 countries (population 10 years of age and over).



UNESCO PUBLICATIONS : NATIONAL DISTRIBUTORS

**ARGENTINA** : Editorial Sudamericana, S.A. Alsina 500, Buenos Aires; **ASSOCIATED STATES OF CAMBODIA, LAOS AND VIET-NAM** : Librairie Nouvelle Albert Portail, Boite Postale 283, Saigon. *Sub-depot* : K. Chantarith, C.C.R., 38 rue Van Vollenhoven, Phnom-Penh; **AUSTRALIA** : H. A. Goddard, Ltd., 346 Little Collins St., Melbourne; **AUSTRIA** : Wilhelm-Frick Verlag, 27 Graben, Vienna I; **BARBADOS** : S.P.C.K. Bookshop, Broad Street, Bridgetown; **BELGIUM** : Librairie Encyclopédique, 7 rue du Luxembourg, Brussels IV; **BOLIVIA** : Libreria Selecciones, Av. 16 de Julio 216, La Paz; **BRAZIL** : Livraria Agir Editora, rua México 98B, Caixa postal 3291, Rio de Janeiro; **CANADA** : University of Toronto Press, Toronto. Periodica Inc., Centre de Publications Internationales, 4234 rue de la Roche, Montreal 34; **CEYLON** : Lake House Bookshop, The Associated Newspapers of Ceylon Ltd., Colombo I; **CHILE** : Libreria Lope de Vega, Moneda 924, Santiago de Chile; **COLOMBIA** : Emilio Royo Martín, Carrera 9a, No. 1791, Bogota; **COSTA RICA** : Trejos Hermanos, Apartado 1313, San Jose; **CUBA** : Unesco Centro Regional en el Hemisfero Occidental, Calle 5 No. 306 Vedado. Apartado 1350, Havana; **CYPRUS** : M. E. Constantinides, P.O. Box 473, Nicosia; **CZECHOSLOVAKIA** : Arta Ltd, 30 Ve smečkách, Prague 2; **DENMARK** : Ejnar Munksgaard Ltd., 6 Norregade, Copenhagen K; **ECUADOR** : Casa de la Cultura Ecuatoriana, ave. 6 de Diciembre, Quito; **EGYPT** : La Renaissance d'Egypte, 9 Adly Pasha Street, Cairo; **FINLAND** : Akateeminen Kirjakauppa, 2 Keskuskatu, Helsinki; **FORMOSA** : The World Book Co. Ltd., 99 Chung King Rd., Section I, Taipei; **FRANCE** : Unesco Bookshop, 19 avenue Kléber, Paris 16<sup>e</sup>; **GERMANY** : Unesco Vertrieb für Deutschland, R. Oldenbourg, Munich; **GREECE** : Eleftheroudakis, Librairie internationale, Athens; **HAITI** : Librairie "A la Caravelle", 36 rue Roux, Boite postale III-B, Port-au-Prince; **HUNGARY** : Kultura, P.O.B. 149, Budapest 62; **INDIA** : Orient Longmans Ltd., Indian Mercantile Chamber, Nicol Road, Bombay, 17 Chittaranjan Ave, Calcutta, 36-A Mount Road, Madras. *Sub-depots* : Oxford Book and Stationery Co., Scindia House, New Delhi. Rajkamal Publications Ltd., Himalaya House, Hornby Road, Bombay I; **INDONESIA** : G.C.T. van Dorp Co., Djalan Nusanantara 22, Jakarta; **IRAQ** : McKenzie's Bookshop, Baghdad; **ISRAEL** : Blumstein's Bookstores Ltd., 35 Allenby Road, Tel Aviv; **ITALY** : Libreria Commissionaria G.C. Sansoni, via Gino Capponi 26, Casella postale 552, Florence; **JAMAICA** : Sangster's Book Room, 99 Harbour Street, Kingston. Knox Educational Services, Spaldings; **JAPAN** : Maruzen Co. Inc., 6 Tori-Nichome, Nihonbashi, Tokyo; **JORDAN** : Joseph I. Bahous Co., Dar-ul-Kutub, Salt Road, Amman; **LEBANON** : Librairie Universelle, Avenue des Français, Beirut; **LUXEMBOURG** : Librairie Paul Bruck, 50 Grand-Rue, Luxembourg; **MADAGASCAR** : La Librairie de Madagascar, Tananarive; **MALAYAN FEDERATION AND SINGAPORE** : Peter Chong Co., P.O. Box 135, Singapore; **MALTA** : Sapienza's Library, 26 Kingsway, Valletta; **MEXICO** : Difusora de las publicaciones de la Unesco, 127 Avenida Ejido, Esc. 481, Mexico, D.F.; **NETHERLANDS** : N.V. Martinus Nijhoff, Lange Voorhout 9, The Hague; **NEW ZEALAND** : Unesco Publication Centre, 7 De Lacy Street, Dunedin, N.E.2; **NIGERIA** : C.M.S. Bookshop, P.O. Box 174, Lagos; **NORWAY** : A/S Bokkjornet, Stortingplass 7, Oslo; **PAKISTAN** : Ferozsons, 60 The Mall, Lahore. McLeod Road, Karachi. 35 The Mall, Peshawar; **PANAMA** : Agencia Internacional de Publicaciones, Apartado 2052, Plaza de Arango No. 3, Panama, R.P.; **PERU** : Libreria Internacional del Perú, S.A., Apartado 1417, Lima; **PHILIPPINES** : Philippine Education Co., 1104 Castillejos, Quiapo, Manila; **PORTUGAL** : Publicações Europa-America, Ltda., 4 Rua da Barroca, Lisbon; **PUERTO RICO** : Pan-American Book Co., San Juan, 12; **SENEGAL** : Librairie "Tous les Livres", 30 rue de Thiong, Dakar; **SPAIN** : Aguilar, S.A. de Ediciones, Juan Bravo 38, Madrid; **SURINAM** : Radhakishun & Co. Ltd. (Book Dept.), Watermolenstraat 36, Paramaribo, Surinam; **SWEDEN** : A/B C.E. Fritzes Kungl., Hovbokhandel, Fredsgatan 2, Stockholm 16; **SWITZERLAND** : Librairie de l'Université, S.A., Case postale 72, Fribourg. Europa Verlag, 5 Rämistrasse, Zürich; **SYRIA** : Librairie Universelle, Damascus; **TANGIER** : Centre international, 54 rue du Statut; **THAILAND** : Suksapan Panit, Arkarn 9, Rajdamnern Ave., Bangkok; **TUNISIA** : Agence Aghlébite, 20 Grand-Rue, Postal address, B.P.2, Kairouan; **TURKEY** : Librairie Hachette, 469 Istiklal Caddesi, Beyoglu, Istanbul; **UNION OF BURMA** : Burma Educational Bookshop, 551-3 Merchant Street, P.O. Box 222, Rangoon; **UNION OF SOUTH AFRICA** : Van Schaik's Bookstore (Pty) Ltd., P.O. Box 724, Pretoria; **UNITED KINGDOM AND N. IRELAND** : H.M. Stationery Office, P.O. Box 569, London, S.E.1; **UNITED STATES OF AMERICA** : International Documents Service, Columbia University Press, 2960 Broadway, New York 27, N.Y.; **URUGUAY** : Unesco, Centro de Cooperación Científica para América Latina, Bulevar Artigas 1320, Montevideo; **VENEZUELA** : Libreria Villegas Venezolana, Madrices à Marrón, 28, Caracas; **YUGOSLAVIA** : Jugoslavenska Knjiga, Terazije 27/II, Belgrade.

UNESCO BOOK COUPONS

Unesco Book Coupons can be used to purchase all books and periodicals of an educational, scientific or cultural character. For full information please write to : UNESCO COUPON OFFICE, 19 avenue Kléber, Paris 16<sup>e</sup>, France.

# ***Visual Aids in Fundamental Education***

SOME PERSONAL EXPERIENCES

168 pp. *Illustrations Demy*

As the success of visual aids in fundamental education depends largely on those who are producing and planning their use, Unesco asked a number of persons from various parts of the world to write about their personal experiences in the field. The result is a collection of 16 "experiences" in each of which the author writes freely and informatively about his work and the people with whom he came in contact.

\$ 1.75

10/6

500 fr.



## ***The Healthy Village***

2nd IMPRESSION

120 pp. *Illustrations, colour plates, diagrams*

A report on a one-year experiment carried out in West China in 1949 by Unesco with the co-operation of the Chinese National Association of the Mass Education Movement. The goal was to make audio-visual aids which could be used in health teaching with a partly illiterate rural population; the theme chosen was "The Healthy Village". The Director's report on the background, administration, financing and other phases of the project are followed by detailed accounts of the work of the Field, Health and Art Departments.

\$ .75

4/-

200 fr.

*Obtainable through bookshops or direct from  
Unesco's National Distributors (see list).*