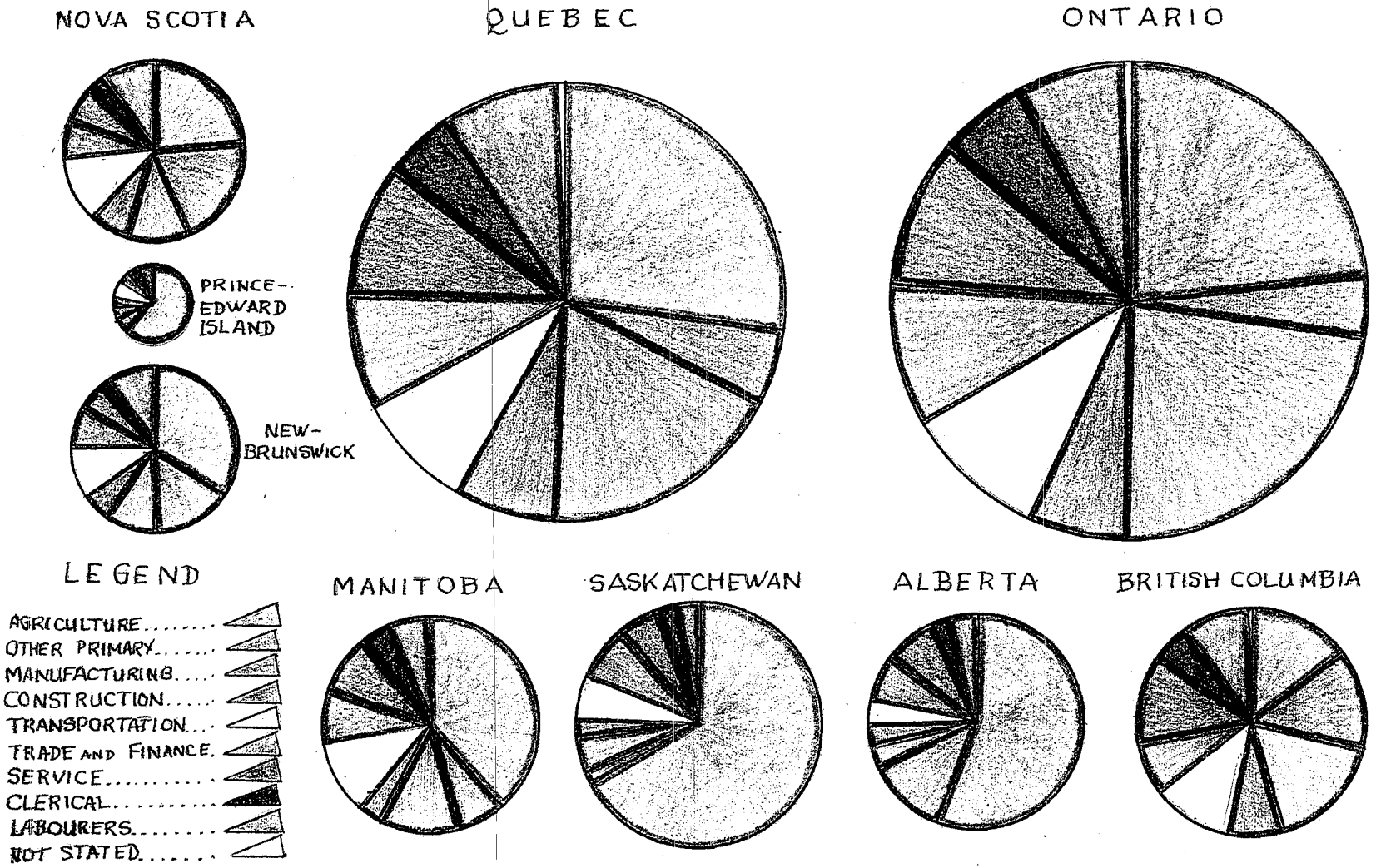
CANADA OCCUPATIONALLY

DISTRIBUTION OF GAINFULLY OCCUPIED MALES 14 YEARS AND OVER
BY OCCUPATION GROUPS
CANADIAN PROVINCES 1941



A CRITICAL STUDY OF

CANADA OCCUPATIONALLY

by

G. Eric McAllister

A Thesis

Submitted to the Faculty of the

Department of Political Economy

McMaster University

May 1949

A CRITICAL STUDY OF

CANADA OCCUPATIONALLY

Thesis Work Under the Supervision of

W. Burton Hurd, M.A., O.B.E., F.R.S.C.

and

Betty Belle Robinson, M.A.

Submitted in Partial Fulfilment

of the Requirements for the Degree of

Bachelor of Arts

in

Honour Mathematics and Political Economy

McMaster University

May 1949

PREFACE

The dynamic occupational structure of the Dominion of Canada is fraught with continual struggle between the inherent constancy of long-run trends and the fluid complexities of our ever-changing population and technology. The intertwining inseparability of these complications continuously stimulates interest and increasingly arouses the desire for deeper investigation. Herein, I have differentiated for detailed deliberation and integrated for final consummation, the economic structure of Canada occupationally.

For the reader's convenience in locating them, all tables and charts in this thesis have been denoted by prefacing the number of the respective table or chart within each chapter, by the Roman number of that chapter; for example, table IX-3 is the third table in, and primarily concerned with, chapter nine. It is thus unnecessary, when such are referred to outside their "home" chapter, to footnote chapter location.

Some schools of thought may object that I have quoted too much or too copiously, and others that I have substantiated my statements by too few quotations. However, in all cases I have followed the rule, that: (1) a direct quotation is used when a concept is much better set forth by another author than I could possibly render it; (2) where another writer has covered a concept roughly similar to that which I wish to convey, I have either paraphrased or summarized his idea and acknowledged same by a "cf." footnote; but (3) wherever possible, and constituting the majority of this thesis, everything written is entirely original.

Literary acknowledgements have been indicated in the bibliography by an asterisk. Atop this list I would place Mr. Whitworth's Canadian Census Occupational Data, and Mr. Hurd's Contemporary Demographic Movements. The relative value of other volumes and works in the research, preparation, and writing of this thesis varies roughly in proportion with the frequency of their appearance as reference footnotes.

It is a privilege to express my appreciation to those who have assisted me in the conception, preparation, and presentation of this thesis. My thanks to Mr. Hurd for his encouragement and helpful judgement. Miss Robinson has tirelessly assisted me in solving the infinitude of intricate problems and details, and constructively criticized every statement. I devotedly thank my wife for her continuous help and unceasing reassurance, for her orderly presentation of the prepared charts herein, for her persistence and accuracy typing the entirety of this thesis. I also wish to thank Statisticians A. H. LeNeveu and R. Ziola (Dominion Bureau of Statistics), Dr. George Haythorne (Department of Labour, Occupational Research), Unemployment Statistics Director Niel L. McKellar (Dominion Bureau of Statistics), Placement Director J. E. Andoff (previously Chief Counsellor, Occupational Information, Department of Veterans Affairs), Librarians M. Meikleham and I. M. Chamberlain, for advice and assistance along the way.

TABLE OF CONTENTS

		Page
PREFACE.		vii
LIST OF TABLES		x
LIST OF CHARTS		xii
Chapter		
	Book one -- INTRODUCTION TO CANADA OCCUPATIONALLY	
I	Exordium and Definitions Occupationally.	2
II	Differentiation Occupationally	8
III	Human Geography Occupationally	27
IV	Vocational Guidance Occupationally	34
	Book two -- ECONOMY OF CANADA OCCUPATIONALLY	
V	Occupational Groups.	43
VI	Income and Earnings Occupationally	60
VII	Unemployment Occupationally.	68
VIII	Canadian Women Occupationally.	80

Table of Contents, con'd.

Chapter		Page
	Book three -- DEMOGRAPHY OF CANADA OCCUPATIONALLY	
IX	Age Structure Occupationally	95
X	Birthplace and Ethnic Origin Occupationally.	104
XI	Rural-Urban Distribution Occupationally.	112
XII	Socioeconomic and Sociocultural Differentiations Occupationally.	120
XIII	The Blind and Deaf Mutes Occupationally.	128
XIV	Social Factors Occupationally.	136
XV	Provincial Regions Occupationally.	148
	Book four -- INTERPRETATION OF CANADA OCCUPATIONALLY	
XVI	Immigration Occupationally	160
XVII	Occupational Mobility.	188
XVIII	Occupational Trends.	201
XIX	Integration Occupationally	213
APPENDIX I	. . . . .	225
APPENDIX II.	. . . . .	228
BIBLIOGRAPHY	. . . . .	230

LIST OF TABLES

Table Number		Page
II-1	Status of Gainfully Occupied Males as Per Cent of Total Gainfully Occupied Males for Canada, 1941.	14
II-2	Status of Gainfully Occupied as Per Cent of Total for Each Occupation Group for Canada, 1941	16
II-3	Gainfully Occupied by Industry Group as Per Cent of Occupational Group.	22
V-1	Gainfully Occupied Males in Agriculture as a Percentage of All Gainfully Occupied Males, for Canada and Regional Divisions, 1901-1941.	44
VI-1	Average Weekly Salaries and Wages across Canada.	62
VI-2	Mean Annual Earnings of Male Wage Earners.	65
VIII-1	Number of Females to every 1,000 Males in Gainful Occupations.	82
IX-1	Per Cent of the Population, 14 years of Age and Over, Gainfully Occupied by Age and Sex, for Canada, 1921-1941	97
IX-2	Total Per Cent Gainfully Occupied, with Average Earnings and Weeks Employed for Wage Earners, by Age and Sex, for Canada, 1941	98
IX-3	Occupations Which Employed the Largest Numbers of Youth from 14-19 years of Age, 1941, Arranged in Descending Order and the Number 16-24 years for the same occupations	100

List of Tables, con'd.

Table Number		Page
X-1	Gainfully Occupied, by Occupation Group, as Per Cent of All Occupations, Showing Birthplace and Sex, for Canada, 1941	107
X-2	Gainfully Occupied, by Occupation Group as Per Cent of All Races, Showing Ethnic Origin and Sex, for Canada, 1941	109
XI-1	Per Cent of Population by Years of Residence in Province for Canada, Rural and Urban, 1941	114
XI-2	Gainfully Occupied showing Occupation Group as a Per Cent of All Occupations, by Sex for Selected Cities for Canada, 1941	117
XII-1	Gainfully Occupied in Canada, Classified in Social Economic Groups by sex	123
XIII-1	The Blind and Deaf-Mute Gainfully Occupied	131
XIV-1	Percentage of Gainfully Occupied, 14 years of age and over, by Occupation Group, by Sex, for Conjugal Condition and Years of Schooling	138
XIV-1	Gainfully Occupied by Occupation Group as Per Cent of all Occupations, showing period of Immigration and Sex . . .	166
XVI-2	Mean Annual Increase in Population of Canada by Decades, 1851-1941	180
XVII-1	Gainfully Occupied Males, 25 Years of Age and Over, by 1941 Occupation Group as a Per Cent of the Occupation Group in which employed in 1931, for Canada, 1941. . . .	193
XVIII-1	Gainfully Occupied by Occupation Group as Per Cent of All Occupations for Canada, 1901-1941 censuses	205

LIST OF CHARTS

Chart Number		Page
V-1	Distribution of Gainfully Occupied Males, 14 Years and Over, by Occupation Groups, Canadian Provinces, 1941.	11
V-2	Employment and Pay Rolls in Manufacturing.	50
VII-1	Unemployment in Canada, 1921-1940.	69
VIII-1	Age Distribution of Gainfully Occupied, Wage Earners, and Unemployed in Canada's Female Population, 1941 . . .	84
IX-1	Age Distribution of Gainfully Occupied, Wage Earners, and Unemployed in Canada's Male Population, 1941	94
XII-1	Percentage Distribution of Male and Female Social-Economic Groups by Age Division, 1941.	127
XIII-1	Percentage Age Distributions, for Canada, Blind, and Deaf-Mutes	129
XVI-1	Immigration into Canada, 1867-1945	161

BOOK ONE

INTRODUCTION TO CANADA OCCUPATIONALLY

Chapter

I Exordium and Definitions Occupationally

II Differentiation Occupationally

III Human Geography Occupationally

IV Vocational Guidance Occupationally

"Quam scit uterque libens censebo exerceat artem."

(What I advise is that each contendly
practise the occupation he understands.)

Horace, Epistles,
Bk. i, epis. 14, l. 44.

CHAPTER I

EXORDIUM AND DEFINITIONS OCCUPATIONALLY

"C'est la grande formule moderne: Du travail, toujours travail, et encore du travail."[1] An introductory chapter is not expected to be long, nor does the reader wish to be bored by unnecessary definitions. Nevertheless, the systematized treatment of a scientific subject requires the consistent use of certain carefully defined terms, which can be set forth to advantage as exordium. The field and importance of occupations, and the detailed or generalized study thereof, must necessarily be of interest to every thinking person; because almost everyone, at some crisis or crises in his or her lifetime, is confronted by the problems associated with employment and choice of occupation. Introducing the importance of an occupation:

> The work a man does, the conditions under which his work is done, and the wages he receives for doing it determine in great measure the circumstances of his life, the house he lives in, the clothes he wears, the food he eats, and his recreation. A man's occupation is, therefore, one of the most potent factors in deciding the state of his health and fixing the length of his life.[2]

At any specific point in civilized time, the occupations of a people reflect to considerable extent the stage of economic development through which their country is then passing. Basic alterations, character

---

[1] Gambetta, speech, at banquet to General Hooke (June 1872).

[2] L. I. Dublin and A. J. Lotka, Length of Life (New York: The Ronald Press Co., 1936), p. 220.

changes, and technological progress eventuated in some modification of that country's occupational structure. Although the historical problem of occupational trends continually recurs throughout this paper, such trends in Canada's occupational structure will not come into their own nor be considered in isolated detail until summarization chapter XIX.

Definitions are necessary for any adequate statement or scientific thesis. Many of these will be given as they are required throughout this thesis. It is the purpose of the present introduction to straighten out a few of the recurring occupational concepts necessary for adequate interpretation and scientific analysis, in the absorbingly interesting and inclusive field of occupations.

Occupation. -- A thesis based upon one word, concept, idea, and demographic factor, would be well advised to completely and adequately define that word. Webster[3] traces the word occupation through old French to the Latin occupatio. He gives its meaning as "that which occupies, or engages, the time and attention; the principal business of one's life; vocation; employment; calling; trade. One's occupation is that to which one's time is devoted, or in which one is regularly or habitually engaged." Crabb[4] further elaborates this concept by saying that occupation signifies "that which serves or takes possession of a person or thing to the exclusion of other things." It is the purpose of this thesis to deal with occupations in Canada, those employed therein, and relevant specialized problems.

---

[3]Webster's Collegiate Dictionary, fifth edition, 1936 and Webster's International Dictionary, unabridged, 1904.

[4]G. Crabb, English Synonyms (New York: Harper & Bros., Publishers, 1854).

In the Encyclopaedia of the Social Sciences, Mr. Salz[5] says that occupation is defined in the literature of the social sciences, as the relatively continuous activity in which the overwhelming majority of the people are engaged, in order to earn their livelihood and maintain a definite social status, within modern society with its characteristic division of labour, specialization of functions, exchange, and prevailing ideology. And he (Mr. Salz) goes on to define the current popular and statistical usage of the concept of occupation as, "that specific activity with a market value which an individual continually pursues for the purpose of obtaining a steady flow of income."[6] The work an individual carries on in his occupation may be construed as his contribution to the national dividend.

The Gainfully Occupied.[7] -- One of the most important, necessary, and vital concepts for the purpose of this thesis is now set forth. The term gainful occupation is defined for census purposes in Canada, as one "by which the person who pursues it earns money or in which he assists in the production of marketable goods." Persons unemployed on the census date (June 2, 1941) were requested to report the occupation last followed. Working age and employable age as used herein include all persons 14 years of age and over. Youths of working age, assisting their parents in productive work of the farm or family business, were classed as no pay.[8]

---

[5]Cf., Arthur Salz, "Occupation", Encyclopedia of the Social Sciences, Vol. XI., pp. 424-435.

[6]Ibid., p. 424.

[7]Cf., "Instructions to Commissioners and Enumerators", Census of Canada (Ottawa: Dominion Bureau of Statistics, 1941), and also, "Occupations Bulletin No. 0-1, (Ottawa: Dominion Bureau of Statistics).

[8]No pay workers are those who receive no fixed money payment. For more complete definition and statistical analysis refer to the succeeding chapter's section on working status.

Daughters assisting in general household duties were not returned as gainfully occupied.

Mr. Riegel[9] gives the United States definition of a gainfully employed person as one (10 years and over) who receives compensation, usually in the form of money which bears some relationship to the value of the service rendered, for his direct participation in economic activity. Similar to the Canadian census definition, exclusion from the classification gainfully employed (as housewives) does not necessarily imply unproductive activity.

Not Gainfully Occupied. -- Every person of employable age was entered in the census column "occupations". If not gainfully occupied[10] there were six other possible entries. Persons who once had a gainful occupation, but were no longer employed nor seeking employment because of old age or permanent physical disability, were entered as retired. A woman doing housework in her own home, without salary or wages, and having no other employment but the responsibility for the domestic management of her home, was entered as a homemaker. Every working age youth who was regularly attending school or college or receiving private tuition (for most of the day) was returned as a student. These three are the most important groups outside the gainfully occupied classification.

---

[9]Cf., R. E. Riegel, An Introduction to the Social Sciences (New York: D. Appleton-Century Co., 1941), p. 498.

[10]If gainfully occupied, the person's chief occupation would be entered in this column.

All persons of working age who were not gainfully occupied and were neither retired, homemakers, nor students, were reported as having no occupation. These were divided into three classes: youths (14 to 24 years) who were seeking employment, youths who were not seeking employment, and persons 25 years of age and over. It is not only interesting and important to have these census definitions straightened out, but it is necessary and indispensable for this particular scientific study. A substantial portion of the analysis in following chapters is based on the statistics and definitions of the 1941 Canadian census.

The Labour Force. -- One further occupational concept must be briefly defined. An economy's labour force usually refers to the part of the population engaged in economic pursuits; and consists of the employed and the unemployed. The labour force, (United States concept) is defined[11] to include all persons in the employable population (14 years of age and over) who report: (1) at work on a job, self-employed, or unpaid family workers; (2) with employment but temporarily (less than 30 days) not at work; (3) not at work but actively seeking work; and (4) unemployed not seeking work because of longer (more than a month) layoff, or belief that no work is available. The Canadian civilian labour force, as defined by the Labour Force Bulletin,[12] is composed of all those persons in Canada

---

[11] Cf., L. J. Ducoff and M. J. Hagood, Labor Force Definition and Measurement (New York: Social Science Research Council, 1947).

[12] Labour Force Bulletin (Ottawa: Dominion Bureau of Statistics, 1948), p. 4.

who are either working, or have jobs from which they are temporarily absent, or are seeking work. It is this group which represents the total supply of labour available at a given time. The size of this labour force is ordinarily quite stable over the shortrun, except for seasonal variation.

Summary. -- "There are diversities of nature among us which are adapted to different occupations. Man should practice the thing to which his nature is best adapted." So said Plato. We need only recall the comparative simplicity of the ancient Greek state to become aware of the complexity of life today with its tens of thousands of occupations.

The present exordium has expounded certain fundamental concepts and introduced the occupational notion. Succeeding ideas will be defined when introduced throughout the following sections. This introductory chapter has succinctly presented the occupational picture in Canada, and has defined some of the most important and useful terms. Based upon the underlying definitions of occupational phenomena, hereinafter, our survey has inaugurated and is continuing this critical study of Canada occupationally.

CHAPTER II

DIFFERENTIATION OCCUPATIONALLY

From the brief but necessary definitions temporarily terminated, this occupational survey turns to the introductory problems of differentiation. It is the purpose here to distinguish and discriminate between specific differences in Canada's occupational pattern.

Specialization is Occupational Differentiation. -- The differentiation or division of labour may be referred to broadly as specialization. As Mr. Marsh[1] puts it, "The correlative of specialization is differentiation. As a result of the Industrial Revolution, today's gainfully occupied worker is not an independent economic world in himself, dabbling in all occupations, but he is a dependent cog in the gigantic machine of a modern specialized economy. His own occupation supplements and is supplemented by all other occupations.

Specialization is the phenomenon basic to the development of occupational patterns in all modern economies. Which idea epitomizes the underlying theoretical thesis of this occupational survey.

---

[1] L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), p. 19.

Types of Occupational Differentiations. -- Every country's or district's total population contains the inclusive but distinct sub-population composed of the gainfully occupied. This working population varies widely in absolute numbers and in its proportion of the total population; it may be differentiated in many different ways. The gainfully occupied must first be studied by male and female groupings. This sex breakdown will be referred to frequently throughout our study because of its omni-present importance.[2] Book Three's demography is concerned with the problems of age structure, birthplace and ethnic origin, rural-urban status, educational levels, conjugal condition, provincial regions, and other characteristics as they relate to Canada's gainfully occupied population. The further sub-population of the blind and deaf-mute elements among the gainfully occupied is set forth in chapter XIII.

Demographic differentiation is only one aspect of the broad problem we are studying. Probably more important is the grouping of the population by separate occupations and occupational categories. Chapter V analyzes these occupations by interrelated occupational groups; appendix I lists them in detail. Another occupational differentiation is chapter XII's social-economic grouping, with individual occupations listed in appendix II.

Constant versus Variable Occupations.[3] -- This further occupational differentiation is now expounded in an attempt to lay down a plan for

---

[2]Cf., chapter VIII, infra, where the female element of Canada's working population is considered and discussed.

[3]Cf., R. H. Ojemann, The Constant and Variable Occupations of the United States in 1920 (Urbana: University of Illinois, 1927), upon which this section is based.

for ascertaining the approximate rate of demand for workers in the various occupations in places where persons domicile in relatively large numbers. The importance of this differentiation in relation to education is indicated by Inglis[4]:

> Only those occupations which have a fairly steady and general demand for skilled workers should be represented by related vocational subjects in the secondary school. No school can afford to introduce vocational subjects when the occupations for which they prepare vary widely in the rate of demand for workers thus prepared.

As defined by Mr. Ojemann, a <u>constant</u> occupation is one which offers employment to ten or more workers for each ten thousand inhabitants per community. For most Canadian cities, such constant occupations include clerks, salesmen, labourers, merchants, carpenters, bookkeepers, barbers, bakers, and so on. Since Canada's 1941 census gives the numbers of gainfully occupied in each of the occupations for all large cities, it would prove to be an extremely interesting and worthwhile survey to compute the rates for all the enumerated occupations for all large cities. (The necessary data for such computations are available from the printed 1941 Canadian census reports). Another important aspect of this differentiation is to compare these rates for the median city against that of the lowest and highest cities. Which occupations are the most constant? To what degree does this constancy vary as the urban centres considered vary in size and in regional distribution?

A <u>less constant</u> occupation offers employment to at least one worker per ten thousand persons in each city. This differentiated category

---

[4]A. Inglis, <u>Principles of Secondary Education</u> (Boston: Houghton Mifflin Co., 1918), p. 601.

includes such gainfully occupied males as chauffeurs, physicians, lawyers, commercial travelers, mechanics, etc. A complete and accurate compilation would only be possible by collecting and processing the required census data. A variable occupation is an occupation which does not offer employment to at least one worker in every ten thousand of the total population.

Using definitions exactly analogous to those above, a similar study is possible for the female workers in Canada's population. The data for a comprehensive study in the field of this particular and instructive occupational differentiation are available for all Canadian urban centres of 10,000 population and over (1941 census). Such a study should prove both interesting and profitable for some future paper on the significance of constant versus variable occupations in Canadian cities.

Position, Job, Occupation[5] -- An important differentiation for occupational information -- job analysis and survey methods -- may be quickly dispensed with by brief definitions and an illustration. A position is a group of tasks which are performed by one person; hence, there exist as many positions as workers. A job is a group of similar positions in a given organization; hence, one or more workers may be employed in the same job. An occupation, in the terminology of such occupational information literature, refers to a group of similar jobs found in several establishments.

---

[5]Cf., C. L. Shartle, Occupational Information (New York: Prentice-Hall, Inc., 1946), pp. 11-14 upon which this sections definitions are based.

Dr. Shartle[6] illustrates:

> John Jones has a position as employment interviewer in an employment office. Two other persons are employed in the same work in the office making a total of three positions. The three positions grouped together are a job. The occupation, employment interviewer, is a group of similar jobs found in several employment offices.

The Canadian census recognized over 80,000 occupations; which would include, by these definitions, many times this number of jobs; and, by hypothesis, there exist as many positions as there are employed workers.

Classification Procedure.[7] — The huge mass of unprocessed occupational statistics available from the raw census data, is virtually useless without some classification. It is also obvious that the meaning and significance of these statistics vary with the inherent principles of the classification scheme adopted. The ultimate value of occupational statistics is largely dependent upon two factors; (1) the quality of the enumerator-collected field data, and (2) organizing technique or classification procedure. Occupational census returns go through three stages before release to the public: editing, coding, tabulation. Commencing with the 1931 census, Canada's gainfully occupied have been differentiated into occupations and industries, and have been presented in respective groupings of these two classifications. This dual classification of the gainfully occupied in Canada is an extremely important and useful occupational differentiation, and will be more fully discussed later in this chapter.

---

[6] Ibid., p. 11.

[7] Cf., A. H. LeNoveu, "Evolution and Present-Day Significance of the Canadian Occupational Structure", Unpublished 1931 monograph, Dominion Bureau of Statistics, Chapter II.

Status Differentiation Occupationally

One of the most convenient and concise occupational differentiations is that of working status. This important occupational cross-classification groups Canada's gainfully occupied into four distinct classes. Although division of the gainful workers into one of these four status classes is immediately possible for most individual cases, there are some instances where placement is very difficult.

The 1941 census' column thirty-four asked each worker to state his status, as (1) employer with his own business, farm, or profession, (2) own account workers without paid employees, (3) wage-earners, or (4) unpaid family workers on farm or in business. The succeeding sections define[8] fully but briefly each of these four groupings and throw some statistical light on the differentiation of Canada's gainfully occupied by working status.

Employers Occupationally. -- Persons who employed helpers or paid workers were classed as employers by the 1941 census of Canada. Both male and female employers in Canada decreased absolutely and relatively between 1931 and 1941.[9] Table II-1 shows the wide variation of male employers about

---

[8]Cf., "Instructions to Commissioners and Enumerators," Census of Canada (Ottawa: Dominion Bureau of Statistics, 1941), for legally accurate census definitions.

[9]Decreasing from 11.9 p.c. and 2.6 p.c. in 1931 to 7.1 p.c. and 1.1 p.c. in 1941 for male and female employers respectively.

this Canadian norm for 1941 (7.1 p.c.); ranging from 3.5 p.c. of the gainfully occupied males in British Columbia to 15.2 p.c. in Saskatchewan. The largest provincial proportion of gainfully occupied females classified as employers is also found in Saskatchewan (3.3 p.c.). Although table II-2

Table II-1[10]

Status of Gainfully Occupied Males[11] as Per Cent of Total Gainfully Occupied Males for Canada, 1941.

Province	Employer	Own Account	Wage-Earner	No Pay
Canada .. Males. .	7.1	21.7	63.0	8.5
(Females)	1.1	7.1	84.0	7.8
Prince Edward Island	6.1	41.6	34.3	15.9
Nova Scotia. . . .	4.2	24.0	66.0	5.8
New Brunswick. . .	4.1	26.3	59.6	10.1
Quebec	4.4	19.1	65.1	11.4
Ontario.	6.6	16.7	71.8	4.9
Manitoba	11.0	25.9	54.5	10.6
Saskatchewan . . .	15.2	37.0	34.4	13.4
Alberta.	13.4	31.8	44.0	10.8
British Columbia .	3.5	20.0	74.6	2.0

combines the first two status classifications (employer and own account), each status is broken down for all enumerated occupations and occupational groups in the census reports.[12] In the non-agricultural primary occupations, there were nearly eight own account workers for every male employer.

---

[10]Source: Occupations Bulletin No. 0-3i, (Ottawa: Dominion Bureau of Statistics), p. 3b.

[11]14 years of age and over.

[12]Cf., Census of Canada, 1941 (Ottawa: Dominion Bureau of Statistics), Vol. VII, table 5, pp. 46-186.

An instructive aside concerns the occupational position and functions of corporate directors.[13] In all large industries and for all occupations, managerial positions are of key importance. The directors of big business corporations carry a heavy load of responsibility. The role of directors can be adequately defined only in terms of the whole complex environment of business enterprise. In management and in society there is a lack of commonly understood and accepted definitions and interpretations of the place of directors. Directors function in many different ways and yet produce outstanding results; no standard pattern need necessarily exist. Directors are a vitally important cog in our occupational wheel, and another important differentiable status. If this were a survey of occupational status, many other similar sub-status classifications would be considered and examined carefully.

Own Account Occupationally. -- Gainfully occupied persons who were neither employers nor employees were considered to be working on their own account. As the Instructions[14] illustrate:

> Such persons as farmers, physicians, lawyers, small storekeepers, country blacksmiths, etc., who employ no helpers other than unpaid family workers, -- in short, independent workers who receive neither salaries nor regular wages -- are to be classed as working on own account. Dressmakers, washerwomen, laundresses or other persons of similar occupation who work out by the day are wage-earners, but if they perform the work in their own home or shop they are to be classed as working on own account unless they employ helpers in which case they are to be returned as employers.

---

[13] Cf., J. C. Baker, Directors and Their Functions (Boston: Harvard University Press, 1945). This paragraph is based on Mr. Baker's report.

[14] Instructions to Commissioners and Enumerators, op. cit., p. 54.

The gainfully occupied males differentiated as own account status increased between 1931 and 1941 absolutely and relatively while the females increased absolutely but decreased relatively.[15] The decrease in employers and

Table II-2[16]

Status of the Gainfully Occupied[17] as Per Cent of Total for Each Occupation Group for Canada, 1941.

Occupation Group	Employer & Own Account		Wage-Earner		No Pay	
	M	F	M	F	M	F
All Occupations.	28.8	8.8	63.0	84.0	8.3	7.8
Agriculture.	59.2	74.1	16.8	9.2	24.0	16.7
Fishing, Trapping, Logging .	37.2	83.4	60.7	11.0	2.1	5.5
Mining, Quarrying.	4.6	12.0	95.2	88.0	0.1	-
Manufacturing.	9.4	5.4	90.2	93.1	0.5	1.5
Construction	18.0	11.2	81.6	88.2	0.5	0.6
Transportation	7.8	0.6	91.6	98.3	0.6	1.1
Trade.	36.5	10.6	62.3	85.5	1.2	3.7
Finance.	26.8	41.2	73.2	58.8	(18)	-
Service.	20.3	9.1	76.9	77.8	2.8	13.1
Clerical	1.0	0.1	98.7	99.0	0.3	0.8
Labourers.[19]	-	-	98.9	98.6	1.1	1.4

increase in own accounts may be primarily due to the fact that many farmers and small shop keepers were unable to hire workers to assist them, and were

---

[15]From 16.9 p.c. and 6.2 p.c. in 1931 to 21.7 p.c. and 7.1 p.c. in 1941 for male and female own account workers respectively.

[16]Source: Canada Year Book, 1943-44 (Ottawa: Dominion Bureau of Statistics, 1944), p. 1073.

[17]14 years of age and over.

[18]Less than 0.05 p.c.

[19]This group does not include agricultural, fishing, logging, or mining labourers.

forced to carry on their business themselves. Referring again to table II-1, it is observable that 21.7 p.c. of Canadian gainfully occupied males were working on their own account, and the range of provincial variance is from Prince Edward Island with 41.6 p.c. (in P.E.I., 66 p.c. of the fishermen were own accounts) to Ontario with only 16.7 p.c. of the gainfully occupied males as own account workers. This subsection is aptly terminated in the words of Dauphinee[20]:

> Canada's small towns abound in opportunities for the man who wants to be his own boss..... Canada is a land of small businesses..... The business founded in a place of 2,000 residents will grow with the town if it is efficiently run -- that is why the Dominion offers such great advantages to a man or woman working for himself or herself.

Wage-Earners Occupationally. -- A wage-earner was defined by the 1941 census as a person who works for salary, wages, commission, or on piece rates, subject to the control and direction of those whom they serve. This status differentiation is perhaps the most important, not only because it includes a larger proportion than three out of every five males (63.0 p.c.) and four out of every five females (84.0 p.c.); but also because many important national statistics are collected only for wage-earners (as unemployment reports, indices of employment and earnings, wage rates, etc.). Table II-1 sets forth the male percentage distribution of each province which vary from the Canadian norm (63.0 p.c.) down to 54.3 p.c. in Prince Edward Island and 34.4 p.c. in Saskatchewan, and up to 71.8 p.c.

---

[20] J. Dauphinee, Opportunity in Canada (London: Rockliff, Salisbury Square, 1948), pp. 144-147.

in Ontario and 74.6 p.c. in British Columbia. Historically, the pre-1941 census decade saw a slight increase in male and female wage earners absolutely and relatively.[21]

The wage-earner distribution by occupation is set out in table II-2, where it is observed that nearly 99 p.c. of the males in clerical and labouring occupations were wage-earners, but only 16.6 p.c. of those in agriculture. In all of the non-agricultural occupations, 84.3 p.c. of the males were wage-earners. It has been said that the percentage of wage-earners may give some rough index of urbanization. The fishing, trapping, logging group in table II-2 may be misleading in total, because four-fifths of the fishermen and trappers were own account workers while seven-eighths of those in logging were wage-earners. Except for the primary occupations,[22] considerably more than half of the gainfully occupied women were wage-earners. The study of Canada's wage-earning population would be excellent material for another study, but further detailed analysis herein passes beyond the scope of this occupational survey.

No Pays Occupationally. — No pay workers are those who received no fixed money payment, any remuneration being limited to a living allowance mainly in kind. By far the largest majority of no pay workers were found in agricultural occupations with 24.0 p.c. of the gainfully occupied males

---

[21] From 62.0 p.c. and 82.3 p.c. to 63.0 p.c. and 84.0 p.c. for the males and females gainfully occupied respectively.

[22] This is strictly true for agriculture with 9.2 p.c. and fishing, trapping, logging with 11.0 p.c.; but since there were only 25 women in mining and quarrying occupations, any percentages based thereon are unreliable and not comparable.

in agriculture; and no other occupational group is represented by more than 3 p.c. of the males in the no pay classification. In the professional service occupations, 53.4 p.c. of the females are in this no pay status, due to a large number of nuns and nurses-in-training in these occupations. Gainful workers vary around the Canadian male norm of 8.3 p.c., from British Columbia with 2.0 p.c., up to Saskatchewan with 13.4 p.c.

This brief analysis has served to introduce the reader to the important differentiation by working status of gainfully occupied into the four classifications herein discussed -- employer, own account, wage-earner, no pay. The census working status breakdown and other data on Canada's wage-earning population constitute more than adequate material for a comprehensive thesis within itself. The importance and usefulness of census differentiation of Canada's gainfully occupied into these status classifications, is indispensable to any comprehensive understanding of the occupational pattern of the Dominion.

Industrial Differentiation Occupationally

The study and discussion of occupations versus industries, or industries versus occupations, is both intriguing and vital. Before proceeding with an examination of the industrial differentiation of the census reports, it is profitable to introduce the whole broad pattern of industry in the

words of Mr. Cole[23]:

> Industrialism represents essentially a particular stage in human knowledge and in man's command over nature..... It is a phase in material progress..... Industrialism is fundamentally an affair of productive technique.

It is into this inclusive interpretation of industry that the present analysis injects occupationalism, in an effort to differentiate the two interrelated yet separate aspects -- industry versus occupation.

The idea of industrial differentiation is so important that it is worth examining another conception thereof. According to Mr. Florence,[24] industry may be defined as any kind of transaction for exchange in which a group of firms specialize, ordinarily to the exclusion of other transactions. He also wrote:

> Just as the population of the country consists in the population of the counties within that country, so the population of industry consists of the population of the plants scheduled as within the industry..... This purely additive conception of industry runs counter to the more popular notion of industries as easily distinguishable by the type of work or transaction in which they are engaged.[25]

The practice of dual classification of the gainfully occupied by occupation and industry is in keeping with a resolution adopted in 1930 at the British Empire Statistical Conference.[26] This practice was first

---

[23]G. D. H. Cole, "Industrialism", Encyclopaedia of the Social Sciences, Vol. VIII, p. 18.

[24]Cf., P. S. Florence, The Logic of Industrial Organization (London: Kegan Paul and Co., Ltd., 1933).

[25]Ibid., pp. 3-4.

[26]Cf., A. H. LaMoreau, "Evolution and Present-Day Significance of the Canadian Occupational Structure", Unpublished 1931 monograph, Dominion Bureau of Statistics.

initiated in Canada in the census of 1931. The resolution adopted at this conference may be stated in extract:

> The classification (of industries and occupations) should be based on two lists, one of industries and the other of occupations..... The basic principle of the industrial classification should be the product or type of service, and that of the occupational classification, the process carried out and the materials worked in.[27]

The extent to which occupations are scattered throughout the whole range of industry varies widely. Some occupations have a wide representation throughout industry (for example, clerks, guards, caretakers, truck drivers, etc.); while others are found only in a very limited number of industries and services (for example, flour millers, paper makers, street-car conductors, etc.). The general distribution of occupations in the industries outside the fields where they are most commonly found shows marked differences in the variety of industrial employment offered.

Opportunities for employment, as measured by lack of unemployment, are not direct functions varying with the spread of occupations over the whole field of industries. It was found that even at the 1931 census, a number of occupations found in only one or two industries recorded very little unemployment. Even at the 1931 census when unemployment in the construction industry was very heavy, it was seen that wage-earners in the building trades which were least dependent upon the construction industry

---

[27] Systems of Classification of Industries and Occupations, Resolutions of British Empire Statistical Conference (Geneva: International Labour Office, 1923), appendix II.

Table II-3

Gainfully Occupied by Industry Group as Per Cent of Occupational Group.[28]

Occupation Group ↓ / Industry Group →	PRIMARY	GAS ELECTRICITY MANUFACTURING WATER	CONSTRUCTION	TRANSPORTATION COMMUNICATION	TRADE AND FINANCE	SERVICE
	MALES					
ALL OCCUPATIONS[29]	38.6	24.1	6.5	7.3	12.5	9.9
Agriculture	99.6	(30)	(30)	(30)	(30)	0.3
Fishing, Hunting, Trapping	97.0	0.2	(-)	(30)	(30)	2.6
Logging	97.7	1.5	(30)	(30)	(30)	0.4
Mining and Quarrying	98.7	0.1	0.9	(30)	(30)	(30)
Manufacturing	2.3	88.2	1.3	2.2	4.2	1.5
Construction	1.6	20.7	72.7	2.2	1.1	1.5
Transportation, Communication	2.9	6.6	2.3	66.2	15.2	5.5
Trade	0.1	6.5	(30)	2.1	86.5	2.5
Finance	(30)	0.1	(30)	0.1	99.4	0.4
Service	2.9	10.3	1.4	3.7	4.7	76.3
Clerical	1.9	38.5	1.5	11.9	23.6	22.5
Labourers	1.2	48.1	19.8	8.5	5.3	6.9
	FEMALES					
ALL OCCUPATIONS[31]	2.5	22.1	0.2	2.4	16.9	56.3
Agriculture	99.2	(30)	(-)	(-)	0.1	0.7
Fishing, Hunting, Trapping	98.6	0.3	(-)	(-)	(-)	0.6
Manufacturing	(30)	94.0	(30)	(30)	3.5	2.3
Construction	(-)	74.9	24.5	(-)	(-)	(-)
Transportation, Communication	0.1	5.4	0.1	80.5	7.4	6.5
Trade	(30)	12.2	(30)	0.3	84.7	2.7
Finance	(-)	(-)	(-)	(-)	98.8	1.2
Service	0.1	0.5	(30)	0.2	0.7	98.4
Clerical	0.5	24.8	0.8	4.8	39.8	27.2
Labourers	0.2	87.5	0.4	0.7	4.3	6.7

[28]Source: A. H. LaNoveu, Distribution of Occupations by Industry Ottawa: Dominion Bureau of Statistics, 1945), pp. 8-21; for gainfully occupied 14 years of age and over; for Canada not including Yukon and Northwest Territories, 1941 census. Each industrial group is given as a percentage of all industries for the occupational group. Excluded are 41,049 males and 4,926 females with industry not stated.

[29]Includes 9,695 males and 1,713 females with occupation group not stated.

[30]Less than 0.05 per cent.

[31]Includes 1,713 females with occupation not stated; includes 2 females in logging occupations, and 25 females in mining and quarrying occupations, all of whom are in primary industries.

for employment exhibited much less unemployment than those more fully attached to the industry. However, occupations widely scattered throughout industry do not necessarily ensure steady employment.

It is necessary to have a clear idea of the census differentiation of statistics between occupations and industries. Table II-3 summarizes the 1941 census of Canada differentiation of occupations by industry. Herein tabulated is perhaps the most important and useful of all the occupational differentiations. An occupation is a particular type of work; it is a calling or craft, and includes all those persons who do the same type of work. An industry is a unit of production which employs workers from many occupations. The occupational versus industrial classification differentiation is perhaps best illustrated by the census example:

> The industrial group, "Manufacturing", includes all persons employed by manufacturing firms, whether engaged in the processes of production, or in the sale or transport of the product, or in clerical or other occupations associated with the industry. On the other hand, only such persons as are following so-called "processing" occupations at the census date, that is, occupations in which they are directly engaged in the process of manufacture or repair, are included in the occupation group "Manufacturing", and all persons following such occupations are classified in this group, irrespective of whether they are employed by manufacturing firms or by mining, construction, transportation, etc., companies at that time.[38]

A thorough examination of the complete differentiation as tabulated by the 1941 Canadian census would be far beyond the scope of this survey, but the concise tabulations in table II-3 summarize the industrial distribution as a percentage of all industries for each respective occupation.

---

[38] Cf., A. H. LeNoveu, Distribution of Occupations by Industry (Ottawa: Dominion Bureau of Statistics, 1945).

By occupation, 37.7 p.c. of the gainfully occupied males were in primary occupations; whereas, by industry, 38.6 p.c. of the gainfully occupied males were in primary industries. Perhaps one of the most noticeable facts from table II-3's male distribution, is that there were gainfully occupied males from each occupation group in every industry group tabulated; with the sole exception of no fishermen or hunters in construction industries. Less than three per cent of all primary male workers were employed outside the primary industries. Although 88.2 p.c. of the males in manufacturing occupations were in that industry, one-fifth of those in construction occupations, one-tenth in service occupations, one-third in clerical occupations, and nearly one-half of the gainfully occupied males in labouring occupations were in manufacturing industries. Next to agricultural workers in primary industries, gainfully occupied males in financial occupations show the greatest affinity to their own industry (99.4 p.c.). Males in clerical occupations are the most widely distributed over the industrial groups, with no more than one-third in any industrial group.

A brief glance at table II-3's female differentiation of occupations by industry brings to light many interesting statistical facts. Of the gainfully occupied females in primary occupations, 99.1 p.c. were in primary industries. Perhaps the most unexpected fact is that less than one-quarter of the gainfully occupied females in construction occupations were in construction industries (74.9 p.c. were enumerated in manufacturing industries). Similar to the distribution of male clerks, the gainfully occupied females in clerical occupations are the most widely dispersed throughout the various industries. Many more pertinent and useful facts are brought to light by th e further and more complete differentiation as presented by the census reports.

Summary. -- The present chapter is unquestionably the most important in this introductory book. It has introduced many concepts which will be elaborated more fully throughout the thesis, many others which will be referred to again, and some which have their only mention herein. Only a very few of the multitude of possible differentiations have been presented, but these are the most important for occupational understanding, the most necessary to build this into a meaningful thesis.

In conclusion, it is in order to refer to the two occupational forces -- one making for change and the other tending to redress the balance -- which were suggested by Mr. Salz[33]:

> With regard to the social division of labor, which lies at the basis of occupational differentiation, these forces may be identified as the rational adaption to the demands of the economic system and the traditional adherence to the institutions of the past.

These two forces -- the tendency of the population and technology to adopt themselves to occupational requirements and inclination of new generations to revert to the occupational footsteps of their forefathers -- could profitably be discussed at great length.

The concept of <u>non-competing groups</u> which cannot be substituted for one another must be alluded to before this survey leaves occupational differentiation. Non-competing groups and the division of workers therein, give rise to many occupational differences. Expounding this forced

---

[33]Arthur Salz, "Occupation", <u>Encyclopaedia of the Social Sciences</u>, Vol. XI, p. 426.

differentiation, Mr. Lester[34] wrote:

> The street cleaner cannot take the place of the doctor, nor the university janitor the place of a certain professor, even though some students might consider that a step in the right direction. Occupational stratification in the form of non-competing groups also tends to perpetuate itself in a world where the cost of training for any occupation or calling must be borne by the individual worker or his parents.

Thus draws to a close one of the most inclusive and embracing chapters in this occupational survey. Herein have been discussed many of the possible demographic and related differentiations of occupations and occupational statistics. The underlying theoretical doctrine may be summarized in the four pregnant words -- specialization is occupational differentiation. Occupations may be differentiated into constant, less constant, and variable occupations. A very convenient and concise occupational differentiation is that of working status, which divides Canada's gainfully occupied workers as employers, own accounts, wage-earners, or no pay workers. The last and most important occupational differentiation discussed, broke down the occupations by the industry wherein the workers were employed. Thus has been initiated demographic differentiation of Canada's occupational structure as an introduction to Canada occupationally.

---

[34]R. A. Lester, Economics of Labor (New York: The MacMillan Co., 1948), p. 207.

CHAPTER III

HUMAN GEOGRAPHY OCCUPATIONALLY[1]

What is Human Geography? -- All over the world the peoples of different localities vary in appearance, dress, manners, ideas, food, pleasures, government; and particularly, they differ in the way they work and in their capacity for work -- that is, environmental factors influence occupational tendencies. In supplying their material needs, the peoples of different parts of the earth generally follow the occupations in which their geographical surroundings give them the greatest chance of success.[2]

Human geography is the study of the specific group of geographical phenomena related more or less directly to human activity. Jean Brunhes[3] defines human geography:

> The ensemble of all the facts in which human activity has a part forms a truly special group of surface phenomena -- a complex group of facts infinitely variable and varied, always contained within the limits of physical geography, but having always the easily discernible characteristic of being related more or less directly to man. To the study of this specific group of geographical phenomena we give the name "human geography".

We may define human geography more succinctly as the study of the relation of geographical environment to human activities. The present chapter is

---

[1]Cf., A. J. & F. D. Herbertson, Man and His Work (London: A. & C. Black, Ltd., 1940), upon this work, is the chapter based.

[2]Cf., E. Huntington and S. W. Cushing, Principles of Human Geography (New York: John Wiley & Sons, 1920), p. 8, for examples of this statement.

[3]Jean Brunhes, Human Geography (Chicago: Rand McNally & Co., 1920), p. 4.

concerned with the interrelationship between human occupations and geographical influences, that is, human geography occupationally.

Natural Influences Occupationally. -- Before studying the more geographical environments individually, let us look at the influence of natural conditions on mankind. The earth's physical features have helped to make the human race what it is -- here adventurous and progressive, there indolent and backward. Climatic influences exceed all others in their effect on human history; climate affects human energy and the desire to work. The climates of our earth vary from the frozen north where plant and vegetable life practically ceases to the hot moist equatorial regions where plant and vegetable life reach their fullest development. Between these extremes the greater part of the inhabited world enjoys a temperate climate.

Climate varies not only as the latitude, but also the elevation. Four hundred feet of elevation would be roughly equal to a degree of latitude, from the point of view of temperature. In the Himalayas, many hill stations are crowded during the height of the Indian hot season, because temperature varies inversely with the elevation. Another example is Quito Ecuador which, although on the equator, has a temperate climate because of its elevation. A further natural influence determining occupational tendencies is the distance from the sea. Proximity to the sea usually renders the climate more uniform and provides natural harbours which facilitate transportation.

The continents differ widely in their environmental attractiveness to human settlement and in the occupations their position and climates

facilitate. The vegetation zones, as differentiated in the remainder of this chapter, lead to the development of special occupations. We are interested in how the occupations of different groups of mankind depend on their geographical surroundings and how these occupations affect every phase of human life.

The Tundras Occupationally. -- The Tundra or Frozen Desert is a belt of dwarf and scanty vegetation surrounding the Artic, bounded on the north by fields of unbroken ice and snow, and bounded on the south by stunted thickets of small trees which pass into the northern temperate forests. The tundra in Northern Canada is expressively called the "Barren Lands". The tundra has little to offer to its inhabitants occupationally. For most of the year all trace of what scanty vegetation exists is buried beneath the northern snow. The soil never thaws more than a foot or two, making agriculture virtually impossible. Fishing and hunting are the chief summer occupations. An important part of the women's summer work is the drying of fish for winter use. Most of the tundra's hunting tribes supplement fishing and hunting by keeping reindeer, which roam in a semi-wild condition in search of food. All these occupations involve a nomadic life -- one of constant wandering from place to place. There is division of labour between the sexes; the men do most of the actual work of procuring food, while the women make the most economical use of the supplies which the men procure. The tundras, and the icy regions beyond seem capable of no other occupations than hunting and fishing, together with a little trade in furs.

The Temperate Forests Occupationally. -- Virgin forests still cover a great part of our North American continent. Occupations in this zone of northern temperate forests vary widely. In Europe, forests have been mostly cleared and now support races dependent more upon agriculture than upon any other single group of occupations. This is also becoming increasingly true for the United States and southern Canada.

The occupations in the uncleared forests of Canada and Siberia are those which utilize the animal life and tribes of the forests. Fishing is important in Canada's numerous rivers and lakes. Out of the Canadian lumber trade, various other industries arise. In the parts of Europe and North America which have been cleared for agriculture, the occupations are much more varied. The occupations and modes of life possible in the forest both cleared and uncleared -- are thus much more complex and less uniform than on the tundra.

The Steppes Occupationally. -- Steppe is a Russian word denoting "unwooded tracts in middle latitudes, of considerable extent, and covered with useful vegetation."[4] We are particularly interested in the vast prairies of central North America, where the rainfall is insufficient to nourish forest trees, and grass prevails.

The domestication and breeding of animals is the occupation for which the steppe in general is perfectly suited. Shepherding and cattle-tending generally necessitate large families supplimented by retinues of servants.

---

[4]Herbertson, op. cit., p. 24.

The Hot Deserts Occupationally. -- Wherever the tropics cross large land masses, areas are to be found which, due to lack of rain, become hot deserts. These areas are very sparsely inhabited or entirely lacking in population. Life is only possible where there is water and vegetation to provide basic food needs. Consequently the occupations of such sedentary populations as exist are restricted to agriculture, the keeping of domestic animals, and trade. The latter occupations are carried on by the nomads who with their camels and caravans roam the desert.

The hot and cold deserts, in common, lack vegetation thus obviating or restricting agriculture.

The Equatorial Forests Occupationally. -- As rainfall increases the hot deserts pass gradually into virgin equatorial forests. Commenting on these equatorial rain regions, Huntington and Cushing[5] note how strange it seems that the finest vegetation should be associated with the most backward types of men. In such tropical forests fishing, hunting, collecting the valuable vegetable produce, and felling timber are the chief occupations.

Mountain Occupations. -- "Every mountain slope from summit to piedmont is, from the anthropo-geographical standpoint, a complex phenomenon."[6] Wide variations in altitude which are characteristic of mountain regions affect climate in a manner comparable to differences in latitude. In mountainous areas all occupations are theoretically possible -- hunting in the forests, mining where mineral beds occur, agriculture in the valleys

---

[5] Op. cit., p. 277.

[6] E. C. Semple, Influences of Geographic Environment, (New York: Henry Holt and Co., 1911), p. 557.

or open lands, manufacturing in metropolitan areas, and pasturage in the high mountains.

Coastal Occupations. -- The most important of all geographical boundaries is that between land and sea. Mr. Semple[7] expounds:

> The coast, in its physical nature, is a zone of transition between these two dominant forms of the earth's surface; it bears the mark of their contending forces, varying in its width with every stronger onslaught of the unresting sea, and with every degree of passive resistance made by granite or sandy shore.

Coasts may be flat or rocky, accessible or inaccessible; all of which factors accumulate to dictate the optimum occupational policy for each individual coastal region. Fiord coasts in mountainous countries and lagoon coasts in the lowlands both make fishing an occupation of great importance.

Influence of Occupation. -- In general, the peoples of the earth follow the occupations which give them the greatest chance of success in their particular geographical environment; these occupations modify their modes of life in many and varied ways. Similar occupations tend to produce societies of the same general type. Occupations tend to influence the dwellings, clothing, and food of the peoples so employed.

Canada Geographically. -- An inclusive survey of all human geography, to complete our overall occupational pattern, has required an examination of extra-Canadian occupations. Of the climatic factors discussed herein, all tend to condition the occupational structure of Canada with the exception of hot deserts and equitorial forests. Canada's vast expanses include many of the geographical environments with which we have dealt in this

---

[7] Op. cit., p. 842.

chapter -- coastal fishing, the northern tundras, the Rocky Mountain region, the prairies, huge areas of uncleared temperate forests especially in northern Ontario and Quebec, together with the cleared industrial and agricultural sections along our southern border.

Summary. -- Monsieur Febvre[8] comments:

> Men can never entirely rid themselves, whatever they do, of the hold their environment has on them. Taking this into consideration, they utilize their geographical circumstances, more or less, according to what they are, and take advantage more or less completely of their geographical possibilities.

The past sections have attempted to show how, for definite climatic and vegetation areas, geographical environment influences and requires the peoples living in such an area to adopt and pursue specific occupations. This chapter has indicated that environmental factors influence occupational tendencies and relate geographical phenomena to human occupations in the study of human geography occupationally.

---

[8] L. Lebvre, A Geographical Introduction to History (New York: Alfred A. Knopf, 1925), p. 315.

"Farewell! Othello's occupation's gone!"

Shakespeare, Othello,
Act iii, sc. 3, l. 357.

CHAPTER IV

VOCATIONAL GUIDANCE OCCUPATIONALLY

An occupational thesis, entitled as this one is, could easily be considered, or could easily be made, a thesis on occupational information and vocational guidance in Canada. Most of the Canadian occupational authorities with whom the author has had communication while this thesis was in the embryo, took this point of view for granted; to them, "Canada Occupationally" means vocational guidance. However, as this is a Political Economy thesis, it is also expected to treat "Canada Occupationally" from a demographic and statistical viewpoint. During the process of preparing to write this thesis, the author has gathered together and had sent to him, more pertinent occupational information relating directly to vocational guidance in Canada, than all the other aspects of this occupational study combined. The University library's section on occupations, relates them mainly to vocational guidance. Some may debate that this vital part of the study of occupations should have been given considerably more space than is afforded it in the present condensed chapter IV; while others may argue with equal justification that too much space has been expended. Mindful of the arguments of both schools, and realizing the increasing importance of vocational guidance, the present chapter completes this introduction to Canada occupationally.

What is Vocational Guidance? -- A careful definition is a necessary prerequisite to the introduction and use of any scientific concept. From the principles adopted by the National Vocational Guidance Association, we obtain perhaps the best possible definition:

> Vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon and progress in it. It is concerned primarily with helping individuals make decisions and choices involved in planning a future and building a career -- decisions and choices necessary in effecting satisfactory vocational adjustment.[1]

This statement is the carefully framed concept accepted by a national organization in this field, after discussion and study by committees covering a period of more than fifteen years.[2] Professor Myers[3] succinctly refers to vocational guidance as "helping Johnny to see through himself and to see himself through." There exist innumerable definitions concerning all phases of vocational guidance, but the above will suffice for our purpose in dealing with the occupational aspects of this interesting field, and its relation to Canada occupationally.

Occupational Information.[4] -- The subjects of vocational guidance occupationally and occupational information are broad enough to be theses

---

[1]Report of the Committee of the National Vocational Guidance Association, "The Principles and Practices of Educational and Vocational Guidance", Occupations: The Vocational Guidance Magazine, XV (May, 1937), pp. 772-778.

[2]Cf., comment and paraphrase by G. E. Myers, Principles and Techniques of Vocational Guidance (New York: McGraw-Hill Book Co., Inc., 1941), pp. 3-7.

[3]Ibid., p. 4.

[4]Cf., C. L. Shartle, Occupational Information (New York: Prentice-Hall, Inc., 1946) for an excellent introduction to the development of occupational information and a description of the uses of such occupational information in problems in industry, government, education, and community agencies.

in themselves. The definition of occupational information given by Professor Shartle[5] is as follows:

> Occupational information.... includes accurate and usable information about jobs and occupations. It also includes information about industries and processes insofar as such information is directly related to jobs. Occupational information also includes pertinent and usable facts about occupational trends and the supply and demand of labor..... Occupational information is the principal tool in exploring with an individual the jobs, occupations, families of occupations, industries, and relative opportunities that may be ahead for him if he makes certain vocational choices.

A vast wealth of all types of such occupational information is in existence in Canada, and appears to be readily available to all who seek it. Within the scope of a thesis twice the size of the present one, on this topic alone, a complete coverage of all such occupational information in Canada would be virtually impossible; however, this subsection purports to at least mention a few of the more important Canadian sources of occupational information.

The Occupational Reviews series[6] presents an individual pamphlet for the most important occupations, and includes for each, that occupation's history, importance, present status, trends, duties, qualifications, preparation, related occupations, earnings, hours of work, regularity of employment, health and accident hazards, typical places of employment, professional organizations, recommended readings, and so forth. The Let's Consider Jobs series[7] covers the individual occupations in booklet form in a more

---

[5] Ibid., pp. 1-2.

[6] Occupational Reviews series, R. C. A. F. Personnel Counselling Programme, Ottawa.

[7] Let's Consider Jobs series, Canadian Legion Educational Service, Ottawa, 1944.

informal, but still informative manner as presentable to service personnel being discharged after World War II. The Occupational Outlook Bulletins[8] contain the most complete official coverage of Canada's occupations. These bulletins are the result of extensive and exhaustive occupational research across the nation and give the results of the Department's survey of occupational trends and vocational training requirements under the direction of McMaster University's J. E. Andoff[9] who was Chief Counsellor, Occupational Information, Department of Veterans Affairs. The Vocational Guidance Centre Occupational Information Monographs,[10] based on the Canadian census classification of occupations, present each occupation fully and completely with sections on history, importance, nature of work, working conditions, qualifications necessary for success, preparations needed, opportunities for advancement, remuneration, advantages and disadvantages, and so on, for each occupation. The army's Occupational Outlines[11] are studies of some two to three hundred of the more important Canadian occupations designed to serve as a reference for Army counsellors, prepared by the Research and Statistics Branch, Occupational Research Division, Department of Labour, and cover the various aspects and requisites of each individual occupation.

---

[8] Occupational Outlook Bulletins, Vocational Survey series, Department of Veterans Affairs, Ottawa, 1947.

[9] Cf., J. E. Andoff, Report on the Survey of Occupational Trends and Vocational Training Requirements (Ottawa: D. V. A., 1947), for a concise summary of the results of this survey and its application to the Occupational Outlook Bulletins.

[10] V. G. C. Occupational Information Monographs series (Toronto: Vocational Guidance Centre, Ontario College of Education, University of Toronto, 1947).

[11] Occupational Outlines series, Directorate of Personnel Selection (Army), (Ottawa: Department of Labour).

(Careers for Men & Women series[12] present a detailed description of qualifications, training and prospects of employment by occupations for Great Britain.) As previously intimated, an adequate study of occupational information is more than material for a thesis, in itself; this section has only attempted to briefly mention a few of the most important sources of Canadian occupational information.

Education and Preparation for Occupations. -- It is an obvious truism that each academic subject has many occupations closely related to it. Mr. Stewart[13] lists under each school subject, its related occupations. High school or college cannot increase a student's ability, give him any new abilities, or raise his I. Q., but "it does provide opportunity for us so to train ourselves that we can make effective use of whatever ability we have".[14] And again, "High school and college are in a position to give students a chance to make profitable these years of occupational training prior to delayed employment".[15] The army has prepared a guide to civilian occupations related to army employment, entitled Army Employment Civilian Jobs[16] and the stated purpose of this guide is:

---

[12]Careers for Men and Women series (London, England: Ministry of Labour and National Service).

[13]J. H. Stewart, Young Canada Goes to Work (Toronto: The Ryerson Press, 1940), pp. x-xi.

[14]E. G. Williamson, Students and Occupations (New York: Henry Holt & Co., Inc., 1937), p. 7.

[15]Ibid., p. 9.

[16]Department of National Defence, Army Employment Civilian Jobs (Ottawa: King's Printer, 1945).

> ....to assist employers in selecting jobs that are suitable for ex-service personnel, and to assist ex-service personnel in making the most efficient use of their Army training and experience when returning to civilian employment.[17]

Vocational guidance is very specifically and consciously concerned with the prospective employee's education and preparation occupationally.

Analyzing an Occupation. -- Vocational guidance is concerned with two basic elements, the occupation and the prospective employee. It is the individual's duty and obligation to carefully study the occupations in which he is most interested. He is well advised to examine and analyze such aspects of the occupations in which he is most interested as nature of the work, working conditions, qualifications, training, rewards, promotion, trends, advantages, and disadvantages.[18]

Analyzing the Employee. -- ....and he must analyze himself. Mr. Stewart[19] asks:

> What are the facts about yourself that govern your chances of finding a suitable occupation -- one that will challenge your ability, satisfy your interest, provide you with a reasonable income, and allow you enough leisure to live a full life?

An individual inventory[20] is necessary for vocational guidance and counselling. This individual or personal inventory is essentially "an array of

---

[17] Ibid., p. v.

[18] Cf., Stewart, op. cit., for typical and suggestive questions which the individual should ask himself on each of these aspects.

[19] Ibid., p. ix., where he lists further questions in this useful self-analysis preceeding an occupational choice.

[20] Cf., F. C. Seamster, A Handbook on Occupational Information and Guidance (Jefferson City: Mid-State Printing Co., 1941), pp. 29-33.

those facts about a pupil which distinguish him as an individual apart from others."[21] For this purpose many ability and intelligence tests have been prepared and are available to Canadian vocational guidance.[22]

Summary. -- Vocational guidance, occupational information, and the other related topics mentioned or referred to in this chapter form the basis for any study of occupations. Certainly this field is the most dynamic and perhaps the most important in our entire occupational survey. There is material here for many theses and numerous studies within the field of occupations and vocational guidance occupationally.

The purpose of this first book has been to introduce the reader to various aspects of the occupational situation. We shall now proceed to elaborate upon some points and to introduce others. Herein, many of the concepts which are being developed, have been accurately defined, and carefully differentiated. Chapter III's human geography serves as an introduction to mankind occupationally. The present chapter's vocational guidance illustrates one of the most important uses of occupational information. In general, in particular, and in total, this first book is an introduction to Canada occupationally.

---

[21] Ibid., p. 29.

[22] Guidance Materials, Vocational Guidance Centre, Ontario College of Education (Toronto: University of Toronto Press, 1948), contains a full and comprehensive list of such tests as are available to Canadian vocational guidance counsellors.

BOOK TWO

ECONOMY OF CANADA OCCUPATIONALLY

Chapter

V	Occupational Groups
VI	Income and Earnings Occupationally
VII	Unemployment Occupationally
VIII	Canadian Women Occupationally

"The ugliest of trades have their moments of pleasure. Now, if I were a grave-digger, or even a hangman, there are some people I would work for with a great deal of enjoyment."

Douglas Jerrold,
Jerrold's Wit: Ugly Trades.

CHAPTER V

OCCUPATIONAL GROUPS

From the introductory chapters just terminated, this occupational study turns to a generalized overall survey of the Canadian economy. Since 1867, Canada has undergone noteworthy economic advance.[1] Such economic expansion has been closely associated with the use of power machinery, the assembling of huge labour forces, and the rapid accumulation of capital. The majority of Canada's industrial growth has taken place since the middle of the nineteenth century. This period has witnessed rapid development and relatively full employment with periodic cyclical fluctuations.

A particularized and inclusive picture of the individual occupational groups in the Canadian economy is now painted. Frontispiece chart V-1 graphically sets forth the proportion of each province's gainfully occupied males enumerated by the 1941 census in each of these occupational groups.

And now, to agriculture!

Agricultural Occupations. -- Behind the dynamic growth and expansion, noted above, there are the hidden factors of science and technology.

---

[1] Cf., F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), pp. 18ff., for statistical verification and elaboration.

Relating these developments to the field of agriculture, Dr. Whitworth[2] wrote:

> Farms increased in size with each producing more and better varieties. More food was provided for home consumption and export while improved methods of preserving, processing and transporting allowed for the movement of food products over long distances at comparatively low cost. Improved machinery enabled each farmer to work more land. For a time farmers and farm helpers released from the farms were mainly absorbed in placing more land under cultivation. Later, many of them gravitated to the urban areas as the expansion of farming areas slowed down. Improved scientific methods had shifted them off the farm.

No survey of occupations can claim adequacy without some study of those occupations which compose the labour force. It is advisedly, that such a survey should choose the agricultural occupations as the first and relatively most important, since agriculture employs a larger proportion of the world's population than any other occupation.[3]

A speaker at one of the annual meetings of the American Farm Bureau Federation made the following comments about the unobtrusive role of the average gainfully occupied male in agriculture:

> The unknown farmer lives and dies a life of service for others, unheralded and unsung. Legion is his name. He lives in your country and mine..... This unknown farmer doesn't amount to much. He doesn't make a great deal of noise..... He is one of the general average. No monument has ever been erected to this unknown farmer. He really doesn't figure very big. All he does is to feed the world.[4]

---

[2] Ibid., p. 12. The following sections of this chapter are based on Dr. Whitworth's outline.

[3] Cf., L. K. Howard, Labour in Agriculture (London: Oxford University Press, 1935), for an adequate international substantiation of this inclusive statement.

[4] C. M. MacConnell, The Rural Billion (New York: Friendship Press, 1951), pp. 1-2.

How does this "unknown farmer" fit into the Canadian occupational scene? His relative importance across the Dominion regionally for the last five decennial census reports is given in table V-1.[5]

Table V-1[6]

Gainfully Occupied males in Agriculture as a Percentage of All Gainfully Occupied Males,[7] for Canada and Regional Divisions, 1901 - 1941.

Year	Canada	Maritimes	Quebec	Ontario	Prairie Provinces	British Columbia
1901	46	50	45	47	64	13
1911	39	40	37	36	56	13
1921	38	38	34	31	60	10
1931	34	35	27	27	56	16
1941	32	32	27	23	56	15

The most obvious and most important fact is the continuous decline of males engaged in agriculture in Canada as a whole and in the three eastern provincial regions. In the west, the proportions rose in 1920, and thereafter, turned down again. Quebec and Ontario show the most drastic

---

[5]Cf., W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), pp. 48ff.

[6]Source: Occupations and Industries bulletin, No. 0-6, Occupational Trends in Canada, 1901-1941 (Ottawa: Dominion Bureau of Statistics, where similar data are available for the female gainfully occupied in agriculture.

[7]10 years of age and over; except for 1941, 14 years of age and over, and omitting 39,732 males on Active Service.

declines in the average farmer's relative occupational position. Which trends are summarized by Professor Hurd[8]:

> The declining importance of agriculture in the occupational structure of the country would seem to be casually related to the fact that despite persistent and increasing emphasis on agricultural immigration, two thirds of the net immigrant additions to our population during the decade 1921-1931 were found in urban rather than rural centres at close of the ten year period.

Even although urban populations have increased so appreciably,[9] thus increasing urban demand for agricultural products, the rural farm populations in the whole of Eastern Canada and large areas of the west has actually declined.

Canada's 1941 census enumerated 1,064,847 males and 18,970 females gainfully occupied in agriculture, and 785,000 farm women. For every twenty gainfully occupied males in agriculture three were illiterate and thirteen had only public school education. Over three-quarters of the farmers and stock raisers were married men; while four-fifths of the farm labourers were single (mainly because half of the labourers were 22 years of age or younger). Other agricultural topics of interest in this occupational analysis include: subsistence versus commercial farming;[10] agricultural occupations in comparative climates[11]; farmers and farm workers[12]; farm per-

---

[8] Ibid., p. 49.

[9] Cf., infra., chapter XI.

[10] Cf., Hurd, op. cit., pp. 72ff.

[11] Cf., A. J. and F. D. Herbertson, Man and His Work (London: A. and C. Black Ltd., 1940), pp. 65-81.

[12] Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 33ff.

sonnel ethnically[13]; agricultural research in Canada[14]; agricultural income[15]; technological progress[16]; stationariness of farm and rural populations[17]; postwar agriculture in Canada[18]; the outlook for the extension of agricultural settlement[19]; and so on. With such an immense volume of available data in existence it is most difficult to terminate a review of Canada's agricultural occupations.

Other Primary Occupations. -- Leaving agriculture, the present section proposes to deal with the remaining primary occupations of: (1) fisheries and fishing; (2) hunting, trapping, and fur farming; (3) forestry and logging; and (4) mining. Mr. MacArthur[20] of the Department of Fisheries (Ottawa), wrote:

> The Canadian seaboard on the North Atlantic and the North Pacific, and the Great Lakes and innumerable inland lakes and rivers, provide Canada with immense fishery resources and with a great variety of both sea and fresh-water species..... The statistics indicate that there is likely to be a wide range in the efficiency of the individual fishing operations; the predominance of small boat operators suggests that much of the fishing is carried on by relatively inefficient methods.

---

[13] Cf., ibid., p. 136.

[14] Cf., E. S. Hopkins, "Agricultural Research in Canada", The Annals, Vol. CVII (May 1923).

[15] Cf., Whitworth, op. cit., p. 97.

[16] Cf., loc. cit.

[17] Cf., infra., chapter XI.

[18] Cf., V. C. Fowke, "Canadian Agriculture in the Postwar World", The Annals, Vol. 253 (September 1947).

[19] Cf., W. B. Hurd, "Demographic Trends in Canada", The Annals, Vol. 253 (September 1947).

[20] I. S. MacArthur, "The Fisheries of Canada", The Annals, Vol. 253 pp. 59, 61.

Of Canada's gainfully occupied in 1941, the fishing industry employed about one per cent, and contributed from one-half to one per cent of the national income. The average fisherman was 37 years of age; his probability of being single was 0.38, and of being married, 0.57; he had very little formal schooling; and his average earnings had decreased from $460 in 1931 to $409 in 1941.

Canada's fur industry dates back to the pioneer days when fur exports exceeded all others. The average age for hunters and trappers in the 1941 census was 36 years. Over half (57.5 p.c.) were married, and the larger majority (68.8 p.c.) had spent less than five years at school. "In Canada fur farming is actively carried on by trappers, many of whom are Indians or half-breed."[21] By working status, nearly all (15,762) were classed as enterprisers. Predictions give little reason for expecting the number of gainfully occupied in the fur industry to decrease in the immediate future.

Canadian forests cover more than one-third (30 p.c.) of the total land area. About two-thirds of Canada's estimated 388,650 million cubic feet of merchantable timber is commercially accessible. About one-third of the annually felled timber is used for pulpwood, with slightly more being used for lumber, and a little less for firewood. Forest replacement requires an average annual rate of growth of about fourteen cubic feet per acre. Logging in British Columbia is less seasonal than in the eastern and central forests. Of the 93,313 males in forestry and logging in 1941, nearly 35,000 were in Quebec, 18,000 in British Columbia, 16,000 in Ontario,

---

[21] Herbertson, op. cit., p. 20.

and 13,000 in New Brunswick. For all the gainfully occupied in logging the average 1941 age was 35 years. As anticipated, marriage increased with age and with better position. Schooling fell below the all occupations average. The continued heavy demand for lumber and paper products caused the annual index of employment in 1947 to increase more than 15 p.c. over the previous year (to a new high of 309.1 p.c. or the 1935-39 base). These remarks on logging occupationally are aptly concluded with Dauphinee's[22] comments:

> Lumbermen are turning out record quantities of timber but still the demand outruns supply. The first French explorers who sailed up the St. Lawrence and tried to push on into the interior found the country one huge forest. Much of it has since been cleared to make way for settlement and fearsome forests fires have ruined an immense quantity, but more than a million square miles remain. Nine-tenths of the timber is owned by the Crown, with great tracts leased to logging companies by the Dominion or Provincial Governments. More men are needed in the woods and in the giant sawmills.

Untold mineral wealth lies buried beneath the extensive hard-rock wastes of northern Canada. "Mining is Canada's second primary industry today, but this has been almost entirely a development of the current generation."[23] In the thirties, mining was much less affected by the depression than most other occupations. Of the 71,861 gainfully occupied males enumerated in 1941 in mining and quarrying occupations, over 24,000 were in Ontario, 14,000 in Nova Scotia, over 10,000 in British Columbia, and nearly 10,000 in Quebec. Mine owners and managers averaged 48 years of age, labourers 42 years, foremen 40, while miners, millmen, and drillers

---

[22] J. Dauphinee, Opportunity in Canada (London: Rockliff, Salisbury Square, 1948), pp. 62-63.

[23] A. Skelton, "The Canadian Mining Industry Today", The Annals, Vol. 253 (September 1947), p. 66.

averaged only 35 years of age. More than half of the gainfully occupied mining personnel in each occupation were married. More than one-quarter of the owners and managers had college educations; while over three-quarters of the quarriers and rock drillers had only public school or less. The University of Toronto's Counsellor's Guide[24] sets forth:

> The mining business requires a sound technical training, not only in the basic sciences -- mathematics, mechanics, physics, and chemistry, -- but also the more specialized subjects of mining, ore dressing, geology, metallurgy, surveying, and assaying. It further requires a very extensive appreciation of business principles and industrial relationships.

With an employment index of 89.2 for 1947, mining is the only industry whose employment has decreased since the 1941 census. These index numbers of employment represent the percentage relationship between the number of persons employed by the establishments (with 15 or more employees) currently furnishing data, and the number which they had employed in the basic period. Again, concluding in the words of Mr. Dauphinee[25]:

> Mining has been responsible for the great expansion of Canada's frontiers in the North during the last few decades, an expansion comparable only with the expansion brought by the early fur trade. It has made the Dominion the world's biggest producer of nickel, asbestos, platinum, radium and uranium; second in output of gold and zinc, third in copper, and fourth in silver and lead. All that from a country of 12,000,000 population! No wonder Canada is a land of opportunity.

Manufacturing Occupations. -- The history of manufacturing in Canada,[26] from the first mill built at Niagara Falls in 1786 to the modern technology and industrialization of today, presents an excellent commentary

---

[24] Counsellor's Guide, Engineering Alumni Association, University of Toronto (Toronto, 1944), p. 5.

[25] Op. cit., pp. 60-61.

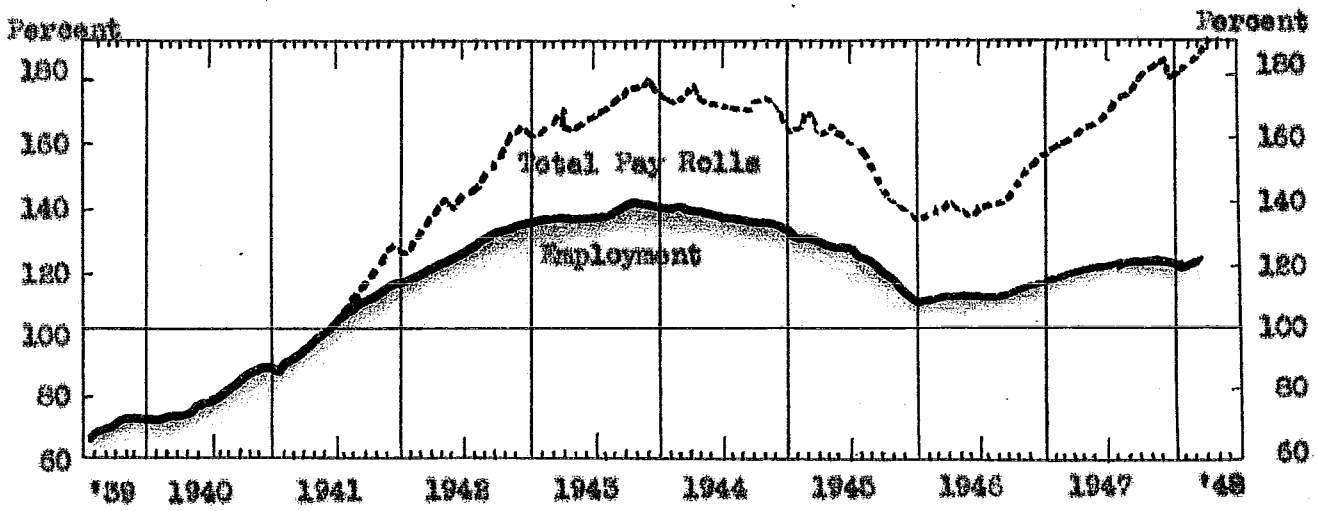
[26] Cf., L. R. Thomson, "Power and Manufacturing in Canada", The Annals, Vol. 253, (September 1947), pp. 74-80 for a good coverage of Canada's realized and potential power as related to manufacturing.

on the ingenuity and ability of the Canadian people. In discussing the occupational implications and forced alterations due to the displacement of skill by machinery, Mr. Barnett[27] wrote that the introduction of machinery constitutes:

Chart V-2

EMPLOYMENT AND PAY ROLLS IN MANUFACTURING[28]

June 1941 = 100



> ....an important means of increasing the national income, and of improving the condition of labour as a whole. But this advance in well-being is frequently bought at the price of hardship to the worker in the trades directly affected.

Manufacturing in Canada aims to supply the domestic market and make available goods processed for export. War production increased Canadian manufac-

---

[28]Source: M. E. K. Roughsedge, Annual Review of Employment and Payrolls in Canada, 1947 (Ottawa: Dominion Bureau of Statistics, 1948), p. 18.

[27]G. E. Barnett, Machinery and Labor (Cambridge: Harvard University Press, 1926).

turing by nearly 70 p.c. from 1939 to 1943. Since 1915, investment has almost tripled and the average investment per wage-earner has increased. Average hours worked per week in 1943 varied from 43 hours for females in Manitoba to 56 hours for males in Prince Edward Island. The 1941 census reported about one female for every three males in manufacturing occupations. Education varied from the boot and shoe repairers with 22.4 p.c. illiterate, to the owners and managers where 17.5 p.c. had a college education. Not only do the manufacturing occupations employ about one-third of all the gainfully occupied, but they provide a greater array of jobs than any other occupational group. Herbertson and Herbertson generalize:

> Among all races except the most backward, division of labour has proceeded far enough to create not merely special manufacturing tribes, but special manufacturing classes within a single tribe..... As manufactures grow, they tend to become of superior excellence in different localities. This depends on many causes, the distribution of raw material, special demand, hereditary skill.[29]

Construction Occupations. -- The gainfully occupied in construction have a peculiar interest in the economy's cyclical fluctuation. Mr. Hansen[30] in describing the building cycle shows how building construction over the last hundred years has followed a fairly regular cyclical pattern of seventeen to eighteen years. Relating construction to cyclical fluctuations, Mr. Whitworth[31] wrote:

> Construction is particularly sensitive to economic influences, many of which are really psychological in origin. During boom times factories and houses are erected and public works constructed; during times of recession there is general retrenchment.... Growth is,

---

[29]Herbertson, op. cit., pp. 96-97.

[30]Cf., A. H. Hansen, Fiscal Policy and Business Cycles (New York: W. W. Norton and Co., Inc., 1941).

[31]Op. cit., pp. 129-130.

> however, spasmodic and somewhat haphazard. The lack of organization and long-time planning has resulted in construction being one of the worst offenders among industries causing unemployment, aggravating depressions or encouraging wanton spending. The workers themselves in some of the trade groups, carpenters, masons, etc. have formed unions in an attempt to stabilize wages at a high level. Their efforts have met with some success in maintaining wage levels but have failed to control employment.... During the long depression of the thirties construction was harder hit than most industries.

And again:

> Construction costs seem to have an abnormal power of resisting deflation in depression. Prices of building materials are "sticky" prices, and wages in the building trades are notoriously inflexible. Labor unions in construction seem to prefer an extraordinarily high percentage of unemployment in depression to any substantial concession in wages. Indexes of construction costs exhibit this tendency clearly.[32]

Turning to the 1941 census reports, it is observed that the percentage of the male gainfully occupied population engaged in construction[33] has remained fairly constant over the past five censuses, varying from 5.8 p.c. in 1901 to 6.4 p.c. in 1911, to 6.1 p.c. in 1921, to 6.8 p.c. in 1931, back to 6.3 p.c. in 1941. Regionally, the proportion of gainfully occupied males employed in construction varied from 2.1 p.c. in Saskatchewan to 7.6 p.c. in Nova Scotia and in British Columbia; while the proportion just exceeded one in ten in the cities of Kingston, Victoria, Montreal, Quebec, and Verdun.[34] It is important, in these comparable data, to notice the very small deviation both historically and regionally, except between rural and urban districts. Despite the shortages of labour and materials in some

---

[32]J. A. Estey, Business Cycles (New York: Prentice-Hall, Inc., 1941), p. 450.

[33]Cf., Occupations and Industries bulletin, No. 0-6, Occupational Trends in Canada, 1901-1941 (Ottawa: Dominion Bureau of Statistics), table 5.

[34]With percentages of 10.9, 10.5, 10.4, 10.2, 10.1 respectively.

areas, the 1947 volume of employment,[35] afforded by the large firms in the construction and maintenance occupations, was greater than in any earlier year.

Transportation and Communication Occupations. -- The importance of Canadian transportation is well stated by Mr. Currie[36]:

> Canada exceeds the United States (without Alaska) in area, but her population is approximately that of New York State. Need any more be said regarding the importance of transportation to the Canadian economy? Efficient and economical transport in all its forms is essential to Canadian prosperity and to national unity.

In 1943, Canada's railways had 48,359 miles of track in operation. The number of motor vehicles reached its peak and began to decline after 1941, at which time there were one and a half million registered. For ocean shipping, Canada has six main harbours -- Halifax, St. John, Quebec, Three Rivers, Montreal, and Vancouver.[37] Supplementing continental lines, Canadian telegraphs have fourteen Atlantic and two Pacific cables. There is about one telephone for every seven persons in Canada. The radio, postal service, and the press complete Canada's communication network. As measured by the numbers gainfully occupied, the railways are easily the dominant group,[38] representing the employment of all others (road, water, local, and express) combined.

The 1941 census figures show a steady increase in the proportion of the country's gainfully occupied in transportation and communication occupations from 1901 with 5.3 p.c., up to 1941 with 8.8 p.c.; and, varying

---

[35] A. W. Currie, "The Transportation Problem", The Annals, Vol. 253 (September 1947), p. 87.

[37] To this list has been added Newfoundland's St. Johns, since that country has become our tenth province (March 31, 1949).

[38] Cf., L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), pp. 84-86, for substantiation.

regionally in 1941 from Prince Edward Island with 5.2 p.c. to Nova Scotia and British Columbia with 10.6 p.c. each. For radio announcers and aviators, about one-third[39] had a college education; while for sectionmen and trackmen, and for longshoremen and stevedores, about one-quarter[40] were illiterate. The 1947 employment index[41] was 130.5 for transportation and 169.0 for communication.

Trade Occupations. -- "Trade begins with the attempt of men to obtain something they have not in exchange for something of which they have more than enough."[42] Commodity trade depends upon the unequal distribution of goods and the existence of facilities for transport. Modern economic civilization has been said to depend upon the availability and exchange of commodities. Mathematically stated, trade is a function of supply and demand plus or minus the resultant of numerous interacting factors.

From 1921 to 1941, the number of occupied in trade increased considerably. The age of trade workers in 1941 ranged from newsboys (34.3 p.c., less than 20 years of age) to auctioneers and appraisers (18.3 p.c., 65 years of age and over).[43] On the average, the gainfully occupied in the trade occupations rated considerably higher educationally than the average for the working population; ranging from advertising agents and credit men, about one-quarter[44] of whom reported college educations, to

---

[39]Accurately, 36.6 p.c. and 31.0 p.c. respectively.

[40]Accurately, 27.0 p.c. and 31.0 p.c., respectively.

[41]Employment indices are based on June 1941 as 100 p.c.

[42]Robertson, op. cit., p. 108.

[43]Cf., Census of Canada, 1941, Vol. VII (Ottawa: Dominion Bureau of Statistics), table 5 for a complete list by age, by sex, and by province.

[44]Accurately, 27.3 p.c. and 24.1 p.c., respectively.

hawkers and pedlars of whom 35.3 p.c. were illiterate. Two-thirds of those in trade occupations were wage-earners. The 1947 employment index stood at 132.1 for trade occupations.

Financial Occupations. -- "Les affaires? C'est simple, c'est l'argent des autres."[45] Money may be defined in many ways. According to F. A. Walker,[46] "Money is that money does"; D. H. Robertson[47] regards money as "anything which is widely accepted in payment for goods"; Cassel[48] declares, "An article that has the function of common measure for the valuation of other goods is called money"; and technically, according to Steiner[49], money is "a mechanism of exchange as well as a measure of valuation." As such, money is the basis, bulwark, and battleground of the present financial structure -- its handling, control, and use constitute the employment of those in financial occupations.

The 1941 census enumerated 33,104 males and 616 females in finance occupations. The eldest occupation in this group (in terms of average age of workers) was that of male real estate agents and dealers, and the young-

---

[45]Alexandre Dumas, fils, La Question d'Argent, Act ii, scene 7 (1857).

[46]F. A. Walker, Money and Its Relation to Trade and Industry (New York, 1889), p. 1.

[47]D. H. Robertson, Money (rev. ed., New York, 1949), p. 3.

[48]G. Cassel, The Theory of Social Economy, trans. by S. L. Barron (New rev. ed., New York, 1932), p. 46.

[49]W. H. Steiner and E. Shapiro, Money and Banking (rev., New York: Henry Holt & Co., 1941), p. 7; Cf., also 3-22 for an excellent discussion of money and the financial system.

est, insurance agents.[50] Less than one per cent of persons in financial occupations were under 20 years of age. It is interesting to notice that 85 p.c. of the males in finance occupations were married, while over half of the females were single. For every five males in finance occupations, one had been to college, only one other had not reached high school. The index of employment (based on number of employees as defined above) rose from 112.4 in 1945, to 125.9 in 1946, to 132.9 in 1947 for finance occupations.

Service Occupations. -- "Of the professions it may be said that soldiers are becoming too popular, parsons too lazy, physicians too mercenary, and lawyers too powerful."[51] Canada's broad service classification covers the professional, public, recreational, business, and personal occupations.[52] These component occupational groups are very different in nature. In analyzing them it is more important to recognize the individual characteristics of the occupations which combine to make up these groups, than to differentiate them regionally. Regarding the professional service occupations,[53] many require a high degree of education and ability. Entrance requirements for the public service occupations vary as do the duties performed. The relative proportion employed in personal service occupations

---

[50] With 16.2 p.c., 65 years and over, and 52.9 p.c. less than 45 years of age, respectively.

[51] C. C. Colton, Lacon, Pt., i.

[52] A full list, of the occupations included in these groupings, is given in appendix I.

[53] For a more thorough review of the professions, as such, compare the socioeconomic classification in chapter XII, infra.

is a function of at least three variables -- urbanization, standard of living, and amount of leisure time.

As anticipated, service occupations are primarily urban. In 1941 Ottawa had the largest percentage of males in these occupations (22.2 p.c.), closely followed by Victoria (21.0 p.c.), Saskatoon (19.6 p.c.), and Regina (19.5 p.c.). The proportion of Canadian males gainfully occupied in service occupations has risen steadily from 5.9 p.c. in 1911, to 7.2 p.c. in 1921, to 8.3 p.c. in 1931, to 9.2 p.c. in 1941. About half of Canada's gainfully occupied females are in service occupations; varying from 57.0 p.c. in 1901, down to 50.4 p.c. in 1911, further down to 46.3 p.c. in 1921, back up to 52.1 p.c. in 1931, and leveling off at 50.1 p.c. in 1941. Provincially, male proportions varied from 4.6 p.c. in Prince Edward Island, across the continent to 11.9 p.c. in British Columbia; and the female proportion ranged from 42.9 p.c. in Ontario, to 68.8 p.c. in Prince Edward Island, where the women in service occupations numerically exceed the men by nearly three to one. More than 90 p.c. in each of the following occupations reported a college education: physicians and surgeons, dentists, lawyers and notaries.[54] Over 90 p.c. of the professional females were single.[55] In general, the great majority of service males were married, while a greater majority of service females were single. These differences are partially explainable by the varying age differentials. Of judges and magistrates, 43.2 p.c. were 65 years of age or over; 37.6 p.c. of male and 32.7 p.c. of female ushers

---

[54]Accurately, 95.6 p.c., 90.7 p.c., and 90.2 p.c. respectively.

[55]Of the remainder, 5.1 p.c. were married, 3.0 p.c. were widowed, and 0.9 were divorced or separated.

were in their teens; and 33.0 p.c. of female domestic servants were under twenty. The service employment index for 1947 was 139.4, while aggregate weekly payrolls were more than double those of the base period, June 1941.

Clerical Occupations. -- The gainfully occupied in this group are commonly known as office workers, or "white collar" workers. Employment herein varies directly with business expansion, greater specialization, and bureaucracy. The 1941 census shows the members of the clerical group distributed over a wide range of industries[56] -- with 31.1 p.c. of the clerical males in manufacturing industries, 17.7 p.c. in trade industries, 22.3 p.c. in service occupations, and so on. By ages, the clerically occupied were concentrated between ages 20 and 44 (63.6 p.c. for males, and 76.8 p.c. for females). The great majority of clerks had a high school education (61.6 p.c. for males, and 72.0 p.c. for females). It is interesting to notice that a larger proportion of stenographers and typists were college girls, than any other clerical occupations. The average male clerk earned $1,218, while the average female clerk earned only $736.

Summary. -- The individual occupations, within each of the inclusive occupational groups dealt with in this chapter, are listed in order of census classification in appendix I. The subsections of this chapter have dealt with these occupational groups in the 1941 census classification. The breakdown of Canada's gainfully occupied males in 1941 into these occupational groups is best shown graphically by chart V-1, where a pie diagram is presented for each province, showing the proportion of the gainfully occupied for that province employed in each occupational group.

---

[56] Cf., A. H. LaMoreau, Distribution of Occupations by Industry (Ottawa: Dominion Bureau of Statistics, 1945), table 1.

The 1941 census enumerated over one million males gainfully occupied in agriculture. The agricultural group is definitely the largest (31.7 p.c. of the gainfully occupied), but has been steadily decreasing in relative importance over the past five decennial censuses. Canada's other primary occupations as discussed herein include fisheries and fishing; hunting, trapping, and fur farming; forestry and logging; and mining. The manufacturing occupations claimed more men numerically, but a larger proportion of women. Employment in construction occupations varies with the buiding cycle. Over the past three decades in the transportation and communication occupations, the proportion of males gainfully occupied has steadily increased while the comparable female proportion has decreased. The average trade worker has a much higher education than the average worker; as a wage-earner, he was fairly steadily employed. On a proportionate basis the financial group employed fewer gainfully occupied than any other occupational group. One out of two gainfully occupied females was in a service occupation. The gainfully occupied in the clerical group were distributed over a range of industrial organizations as extensive as the range of industries itself.

And thus is brought to a conclusion this necessary and indispensable scrutiny of the occupational groups in Canada as an integral part in the present book's critical analysis of the Canadian economy occupationally.

CHAPTER VI

INCOME AND EARNINGS OCCUPATIONALLY

"Our economy is primarily the method by which Canada's twelve million people make a living and our national income is the aggregate of monies at the disposal of Canada's population."[1] Within any book on the Canadian economy occupationally, a chapter on income and earnings is an integral part.

The National Income Occupationally.[2] -- Neither statistics nor argument are required to verify that the Canadian economy has expanded greatly since 1867. The estimated national income of the Dominion since 1911 has increased more than fourfold. This increase is not wholly due to an increase in population, because, when the national income per gainfully occupied in dollars adjusted to make allowance for changes in the cost of living index, is computed, the same upward trend is observable, indicating that each gainfully occupied individual contributes more to the national income today than thirty years ago. Since it represents a part of the income of Canada, international trade may also be used to give some indication of national income trend. Previous to 1930, the general trend was unmistakably upward, though conspicuously irregular. The average dollar income per gainfully occupied

---

[1] F. T. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 14.

[2] Cf., S. E. Smith, National Income of Canada, 1919-1938 (Ottawa: Dominion Bureau of Statistics), for national income data, and Cf., also, Whitworth, op. cit., pp. 14ff.

reached a long-run low in 1933. From the depths of the Great Depression, economic activity has risen sharply and steadily, except for the slight recession circa 1939.

Earnings of The Working Forces. -- The census definition of earnings is the amount of money received as salary, wages, commission, or piece-rate payment. The wage-earners and salaried employees who were asked for this information were to include such items as deductions from pay for pension schemes, income tax, War Savings certificates and bonds, and unemployment insurance; but were to exclude income from pensions, investments, workmen's compensation, relief, and other sources of this kind. In 1941, half of Canada's male wage-earners received more, and half less, than $890; while for the females, the comparable median salary was $455.[5] The twenty-fifth and seventy-fifth percentiles for men were $424 and $1,880, respectively. More than six hundred thousand Canadian male wage-earners received less than $500 during the year preceding June 1941 (that is, less than $9.00 per week). The average weekly salaries and wages for Canada and the provincial districts, for the consecutive years, 1945-1947, are presented in tabular form in table VI-1. These data show a marked increase in salaries and wages during the period under consideration. They also show a regional variation -- the provincial districts roughly maintaining their relative position on the wage scale, with the Maritimes at the bottom, Quebec next, and British Columbia on top (figures being well above the Canadian average). Illustrating the relative occupational importance of the two central provinces, it is readily observed that the Canadian mean wage is situated between Quebec's and Ontario's

[5]These median salaries vary regionally from the male and female lows of $620 and 351, respectively, for the Maritimes; to the male and female highs of $1,077 and $640, respectively, for Ontario.

mean wage for each year tabulated.

Earnings by Occupational Groups and Age. -- As well as the above-substantiated regional variation, earnings also vary from occupation to occupation and even within each occupation. The mean annual earnings of

Table VI-1

Average Weekly Salaries and Wages Across Canada[4]

Region	1945	1946	1947
Canada.	$31.99	$32.39	$35.15
Maritimes	30.42	30.37	32.80
Quebec.	30.73	31.24	34.64
Ontario	32.49	32.68	37.11
Prairies.	32.30	33.28	36.46
British Columbia. . .	34.82	35.30	38.74

male wage-earners for the past three census enumerations are tabulated in table VI-2 by occupational group. This table shows the remarkable, but anticipated interoccupational variation. The average agricultural wage-earner only received $300 in 1941 which represents an appreciable drop from the 1921 and 1931 earnings. It is of interest to notice that the average wage-earner in each occupation in 1941 made less than he did in 1921, except the mean wage-earning minor whose income was more in 1941 than in either 1921 or 1931, and the average financial wage-earner[5] who earned more than

[4]Source: M. E. K. Roughsedge, Annual Review of Employment and Payrolls in Canada, 1947 (Ottawa: Dominion Bureau of Statistics, 1948), p. 2.

[5]Nearly half of the financial wage-earners were insurance agents.

his average friends in any other occupational group, but less than he did himself in 1931. General movement is indicated by data for "all occupations".

The median annual earnings for the social economic grouping of chapter XII are shown in row nine of table XII-1, together with weeks employed in row ten. This hereinafter-mentioned grouping will be found to possess

Table VI-2

Mean Annual Earnings of Male Wage-Earners[6]

Occupation group	1921	1931	1941
All occupations.	$1,057	$ 927	$ 993
Agriculture.	547	326	300
Fishing, hunting, trapping . .	557	457	409
Logging.	770	455	487
Mining, quarrying.	1,109	817	1,149
Manufacturing.	1,176	1,068	1,120
Building, construction	1,068	881	897
Transportation, communication.	1,276	1,112	1,073
Trade.	1,340	1,415	1,326
Finance, insurance	2,234	2,449	2,333
Service.	1,249	1,404	1,234
Clerical	1,249	1,170	1,213
Labourers, unskilled workers .	769	480	602

certain advantages and some limitations as compared with the census occupational grouping.[7] All male groups earned more than the comparable female groups. The managerial group was the most steadily employed and reported the highest wages. Both wages and employment decreased directly down the social-economic scale. It is worthwhile to reiterate the caution that all

[6]Source: Whitworth, op. cit., table 10.

[7]Appendix II lists, in detail, the occupations included in each of these six social-economic groups.

such earnings are only for the wage-earners in the working population, as the census enumerators did not collect earnings for enterprisers. Does the age factor influence salaries and wages? Relative earnings and weeks employed are presented for the census age group in table IX-2. As will be noted more completely in age chapter IX, earnings for both males and females increased directly with age, to age bracket 45-54 years[8], and thereafter decreased as age increased. These age differences are not explained away by the variation in employment, because when corrected for weeks employed, average earnings per week follow an exactly analogous age pattern.[9]

Occupational Wage Reporting Schedules.[10] -- The Department of Labour has collected and compiled wage rate statistics for many years. An Ottawa interview with Dr. George Haythorne led to the discovery that the Research and Statistics Branch of the Department of Labour has prepared an outline and will release individual copies of this new proposed method of reporting wages occupationally. There exist occupational wage reporting schedules for each industry or division of industry as required; and each schedule contains (1) an indication of its industrial coverage, (2) a list of selected occupations, and (3) occupational summaries. The occupations listed in the schedules are selected with a view to obtaining a dependable cross-section of

---

[8]Which age group maximized earnings for both the average male with $1,265, and the average female with $701.

[9]Increasing from $5.66 (male) and $3.92 (female) at age of 14 years, steadily up to $29.35 (male) and $15.89 (female), for ages 45 to 54 years, and dropping as age increases to $23.41 (male) and $8.98 (female) for those 70 years and over.

[10]Cf., Department of Labour, Research and Statistics Branch, Occupational Wage Reporting Schedule series (Ottawa: Department of Labour, 1948).

wage rate statistics on occupations in an industry. Each schedule contains short descriptions of the occupations selected in order to provide identification of the occupations listed and the standardization of occupational terminology.

Present Value of Average Earnings.[11] -- Even although average salaries indicate roughly what a typical member of the occupation with an average amount of experience may expect to earn annually, Dr. Clark[12] has defined and prepared comparable figures for "the present value of average earnings for a working lifetime," for which he claims many advantages. Regarding his concept, he wrote:

> These figures allow for the fact that in some occupations the worker starts at a relatively high rate of wages and in others at a relatively low rate, and, likewise, that in some occupations the earnings remain about the same whereas in others increased experience brings greatly increased remuneration..... The figures of Present Value are most useful in comparing the promise of the occupations because they take account of the importance of the point in the occupational life of the individual at which the given salary is earned.[13]

He gives the present value of average earnings for a working lifetime in dollars for selected occupations, ranging from the occupations of medicine and law with $117,000 through college teaching with $74,000, journalism with $44,000, nursing with $28,000, down to $12,000 for farm labour occupations.

Summary. -- Income and earnings form a vital and integral part of any occupational structure; and their discussion herein is confined to a

---

[11] Which section is presented, not necessarily for its immediate relative importance, but for its uniqueness, and for its psychological value to vocational guidance.

[12] F. Clark, Life Earnings (New York: Harper and Brothers, Publishers, 1937).

[13] Ibid., pp. 7, 10.

few of the most important aspects. Relating earnings and fertility, Dr. Charles[14] wrote:

> While part of the difference in family size is associated with the occupational characteristics of groups at different earnings levels, low and high earnings within the same broad occupational group were still found to be associated with differences in family size..... Among those with low earnings and low educational status, the largest families were found among workers in lumbering and mining.

The term "fair wages" is used in Britain and Canada, "to denote the wages required by Government policy to be paid to persons employed in the execution of contracts for the Government".[15] Minimum wages[16] and workmen's compensation[17] are two other pertinent aspects of the income and earnings problem. The annual index number of weekly payrolls[18] in the eight leading industries in 1947 was 21.6 p.c. higher than in 1946; which increase was accompanied by that of 8.5 p.c. in the index of employment. The integration of income and occupations also suggests such related topics as: income and earnings of provincial regions[19]; earnings by industries[20]; progressive wages,

---

[14]Enid Charles, "The Changing Size of the Family in Canada", Census of Canada, 1941, Monograph No. 1 (Ottawa: Dominion Bureau of Statistics, 1948), p. 136.

[15]Health, Welfare, and Labour: Reference book for Dominion-Provincial Conference on Reconstruction, p. 82.

[16]Ibid., p. 81.

[17]Loc. cit.

[18]Cf., Roughsedge, op. cit., pp. 5ff., for a complete picture of Canadian payrolls for 1947. All indices are to base June 1941 equals 100.

[19]Cf., Whitworth, op. cit., p. 41, table 9.

[20]Cf., M. E. K. Roughsedge "Advance Statement of Hours of work and weekly earnings of male and female wage-earners and salaried employers reported by leading manufacturers for the last week of November 1946," Dominion Bureau of Statistics 9-1030, Ottawa.

where the minimum wage is supplemented by a premium on efficiency[21]; farm incomes[22]; the upper income brackets occupationally[23]; the psychology of incentive wages[24]; international wage comparisons[25]; and numerous other such subjects. Income and earnings have been treated in their relation to occupations, under various headings, which brought them together at different times and at dissimilar points in the economy of Canada occupationally.

---

[21]Cf., D. F. Schloss, Methods of Industrial Remuneration (London: Williams and Norgeit, 1898).

[22]Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), p. 173.

[23]Ibid., p. 184.

[24]Cf., J. F. Lincoln, Lincoln's Incentive System (New York: McGraw-Hill Book Co., Inc., 1946).

[25]Cf., Social Science Research Council, International Wage Comparisons (New York: Manchester University Press, 1939).

"Industry is the mother of fortune".

John Ray,
English Proverbs.

CHAPTER VII

UNEMPLOYMENT OCCUPATIONALLY

All the various aspects of Canada's occupations must be condensed greatly, in order to attempt a coverage of even the most important points. This statement is particularly true in the case of unemployment. It is virtually impossible to pick up any book on, or related to, occupations, without finding at least a mention of the problems of unemployment; certainly no author writing in the thirties could omit unemployment. "Labor wants not only good wages and leisure; it also wants security, particularly security of the job. Unemployment is the most serious menace confronting the modern wage-earner."[1]

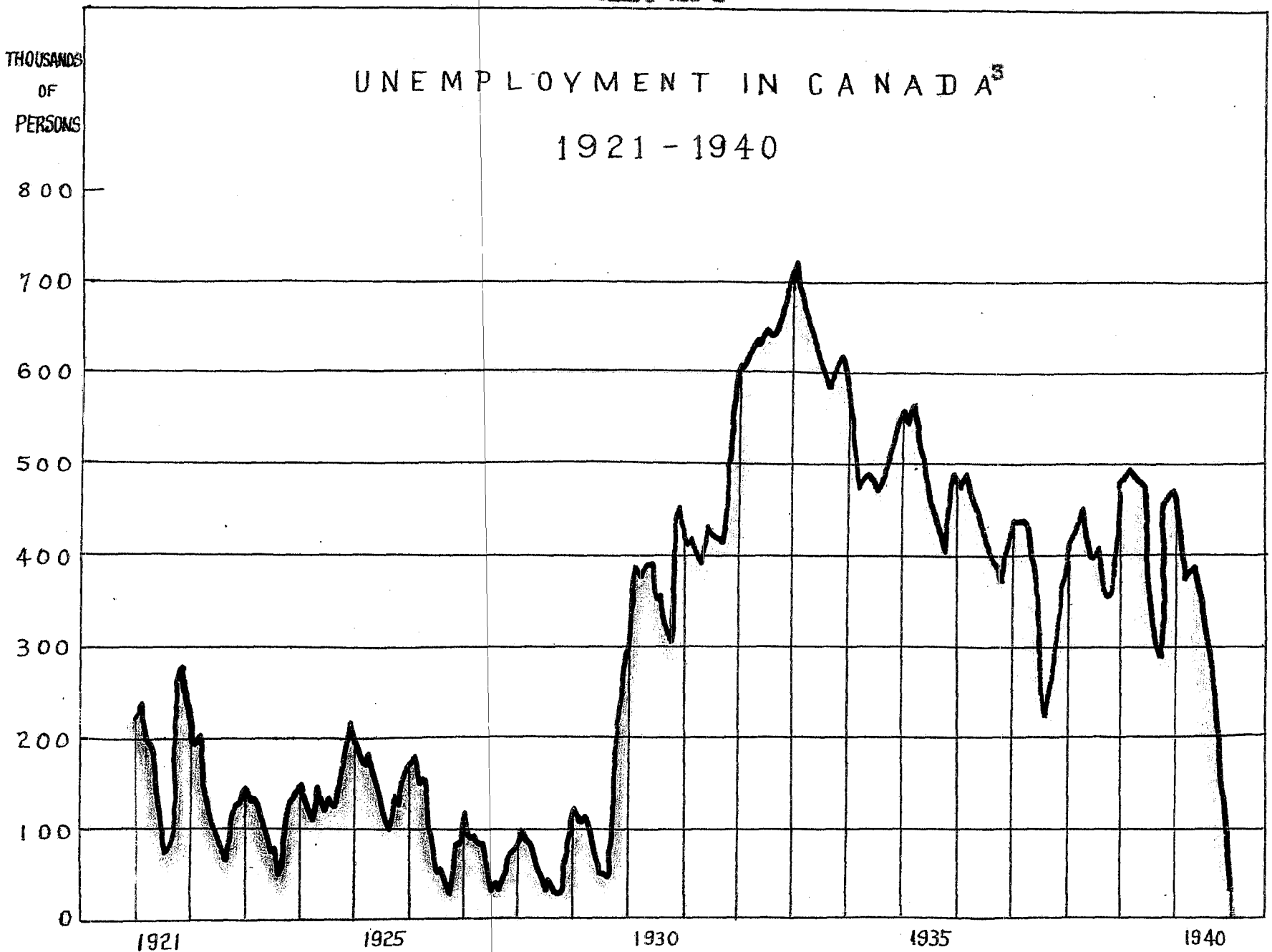
The general level of employment in Canada, as elsewhere in the civilized world, is characterized by the instability of periodic booms and depression. It is observable from chart VII-1, and in historical unemployment tabulations, that the incidence of unemployment tends to vary inversely with the phases of the business cycle. "Employment during the Great Depression followed a course similar to that of general business activity when seasonal fluctuations are neglected."[2] Short periods of anticipated seasonal unemploy-

---

[1] F. B. Garver and A. H. Hansen, Principles of Economics (Boston: Ginn and Co., 1928), p. 487.

[2] F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 45.

Chart VII-1


UNEMPLOYMENT IN CANADA[3]
1921 - 1940
THOUSANDS OF PERSONS
800
700
600
500
400
300
200
100
0
1921
1925
1930
1935
1940

ment are by no means as serious as long periods. Short periods of unemployment are expected in many occupations, but long lay-offs may adversely affect the worker's morale and complicate his readjustment to employment. These longer periods of cyclical unemployment are maximized during the depression minimum of the cycle. Concerning which, Dunoff and Hagood[4] wrote:

> The net effect of a depression on the total size of the labor force has not been documented in the past. Undoubtedly a depression serves to bring into the labor force many who otherwise would not have entered it, but also causes some people to retire from the labor force, and prevents others from entering because jobs are difficult or impossible to get.

Once unemployed, a worker's probability of reemployment is likely to vary inversely with the degree of specialization in his previous occupation, and directly with his ability to readapt himself to new circumstances or revert to less skilled occupations.

Keynesian Unemployment.[5] -- This section purports only to define briefly three necessary concepts in the integration of unemployment and occupations, as taken from Keynesian theory. "Between jobs" or frictional unemployment is defined as the various inexactnesses of adjustment inhibiting continuous full employment. The changeover from one employment to another necessitates a certain delay involving temporary or frictional unemployment. Thus, in any non-static society, there always tends to exist a certain

---

[3] Ibid., p. 44: Source.

[4] L. J. Dunoff and M. J. Hagood, Labor Force Definition and Measurement (New York: Social Science Research Council, 1947), p. 72. Cf., also, W. S. Woytinsky, Additional Workers and the Volume of Unemployment in the Depression (Washington: Social Science Research Council, 1940). and cf., D. D. Humphrey, "Alleged 'Additional Workers' in the Measurement of Unemployment", Journal of Political Economy, Vol. 48 (June 1940).

[5] Cf., J. M. Keynes, The General Theory of Employment, Interest and Money (London: MacMillan & Co., Ltd.).

proportion of workers[6] who are unemployed "between jobs".

The refusal or inability of a unit of labour to accept a reward corresponding to the value of the product attributable to its marginal productivity, is the accepted definition of voluntary unemployment. Such refusal or inability may arise as a result of (1) legislation, or (2) social practices, or (3) combination for collective bargaining, or (4) slow response to change, or (5) mere human obstinancy.

Involuntary unemployment exists if, in the event of a small rise in the price of wage-goods[7] relatively to the money-wage, both the aggregate supply of labour willing to work for the current money wage and the aggregate demand for it at that wage would be greater than the existing volume of employment. The absence of such involuntary unemployment constitutes Keynes' definition of full employment. The remaining residue of unemployment includes both frictional unemployment and voluntary unemployment, both of which are consistent with the Keynesian concept of full employment.

If this thesis were a survey of Canadian unemployment occupationally, it would be in order, at this point, to discuss the many and varied theories of unemployment which have been set forth. Keynesian theory is referred to only in order to obtain the above three definitions in a clear differenti-

---

[6]Although Keynesian theory at this point is referring to any frictionally unemployed resource, the present interpretation requires only reference to the working population.

[7]Goods upon the price of which the utility of the money-wage depends.

ation of these concepts. Professor Pigou's The Theory of Unemployment[8] presents his point of view, which is well summarized by Haberler in his Prosperity and Depression.[9] The theoretical implications and foundations underlying the occupational statistics this survey is discussing, are most absorbing and should rightly be dealt with in a thesis on such theory as above. Although the author's research has led him into most of these fields of underlying unemployment theory, they cannot all be covered in this chapter. A thesis on occupational unemployment would, of course, deal fully with the theories of unemployment; the present brief summary only purports to state their existence and outline their significance.

Underemployment.[10] -- From theoretical references, we turn to applied concepts. Unemployment may be minimized by underemployment, where workers are employed for short times and paid accordingly. Professor Freeman[11] refers to "an irreducible minimum of unemployment", which exists no matter how great the general shortage of labour may be. This is another way of stating the tendency that the demand for labour is unlikely to coincide with the supply. For each occupation, there is an irreducible minimum which constitutes its reserve of labour. "Incessant leakage of labour power is found to some extent in nearly all occupations and among

---

[8]A. C. Pigou, The Theory of Unemployment (London: MacMillan & Co., Ltd., 1933).

[9]G. V. Haberler, Prosperity and Depression (Geneva: League of Nations Publication, 1941), pp. 237-244.

[10]Cf., W. H. Beveridge, Unemployment (London: Longmans, Green & Co., 1930), pp. 68-110 for an exhaustive study of the problems of under-employment and casual labour.

[11]R. E. Freeman, Economics for Canadians (Toronto: Sir Isaac Pitman & Sons, Ltd., 1934), pp. 246-248.

all grades of workmen."[12] The leakage of employment may be so great relative to the hourly wages as to involve "underemployment", and give rise to problems of chronic distress. Sir William[13] compares:

> The social consequences of this under-employment and of under-payment or sweating in the ordinary sense are ultimately indistinguishable. Each means the maintenance, as an integral part of industry, of a low and miserable form of life. Where the two differ the disadvantage is with under-employment as the subtler and therefore the more dangerous disease.

The underemployed labour which is called on often enough to be prevented from drifting elsewhere, may be classed as casual labour, examples of which appear on the fringe of almost all occupations, but especially at the docks. In the words of Sir William,[14] again:

> A casual occupation is one in which, whatever the number of competitors for work, each has some chance; the more casual the employment the more equal the chances..... In practice not only are the potential sources of supply of labour to a casual unskilled occupation such as that of the docks unlimited, but the supply is largely composed of men whose instinctive standard of life is low to start with or has been beaten down by misfortune.

Thus casual employment drives real earnings far below the normal level of regular workmen. Mr. Marsh[15] differentiates between the underemployed and the truly casual, in that while the former would welcome steady employment, the latter accepts intermittent work as his mode of life. Underemployment and casual labour, within the reserve of labour, constitute the variable margin between employment and unemployment.

---

[12] Beveridge, op. cit., p. 103.

[13] Ibid., p. 107.

[14] Loc. cit.

[15] Cf., L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), p. 129.

The Unemployable Group. -- From the underemployed and casual labourer, following in logical sequence, the unemployable is met. Just beyond the casual workers, whose mode of life consists of odd jobs and temporary employments, the unemployables are found at the "fringe" of the labour market. Casual employment is demoralizing, and "acts as a trap to catch the unemployed and turn them into unemployables."[16] Many unemployables have become so since they lost their jobs or went on relief. It has been shown[17] that unemployability in Canada and the duration of unemployment itself are closely related.

Summarizing the school of thought whose students are in agreement in recognizing at least four main types or levels among unemployed, Marsh[18] lists these levels of different order, as: (1) the workers who normally are employed steadily throughout the year, and who lose their jobs only if conditions are abnormal; (2) those who secure a fair amount of work in the aggregate but are irregular, with several or "seasonal" jobs, caused by economic instability and occupational defects; (3) casual workers[19] who depend for any continuous income on the integration of various temporary jobs; and (4) the unemployables, who may have become unemployable from either unwillingness or from inability to work, and who are of every type "from the footloose hobo and the mute beggar down to the gangster and the burglar." The worker who becomes unemployed may easily drift down these steps, but

---

[16]Beveridge, op. cit., p. 108.

[17]Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), p. 370.

[18]Employment Research, op. cit., pp. 128-130.

[19]This class is discussed above in the section on underemployment.

will find it extremely difficult to swim back upstream again.

Mr. Marsh[20] wrote:

> The steps from the irregular to the underemployed and casual strata are the significant ones; they are the ones which every worker will do his utmost to avoid but finds hardest to retrace. The step from casual to unemployable is even shorter and may be irrevocable.

The evils of lengthy unemployment are intensified if the worker is driven further down the occupational scale.

Cyclical, Seasonal, and Technological Unemployment. -- Three important types and causes of unemployment are now considered briefly. One of the most important causes of unemployment, is the business cycle. Cyclical unemployment[21] comes more unexpectedly than seasonal, lasts longer and is less easily understood by the wage-earners. There is an appreciable falling off in production and a great increase in unemployment, in the years of recession and depression. These brief remarks on cyclical unemployment may be concluded in the words of Marsh[22]:

> Severe depression, of course, attacks every part of the occupational scale in some degree; and those caught in the vicious spiral of prolonged unemployment -- white-collar and manual, skilled and unskilled, young and old alike -- find it hard to escape its downward pull.

The regularly anticipated unemployment that comes and goes with the seasons, is known as seasonal unemployment. These seasonal fluctuations are observable irrespective of whether employment is high or low, but they may alter in degree and amplitude. This fact is well illustrated by chart

---

[20] Ibid., p. 130.

[21] Cf., P. H. Douglas and A. Director, The Problem of Unemployment (New York: The MacMillan Co., 1931), pp. 167-251, for a very complete discussion of cyclical unemployment.

[22] Canadians In and Out of Work, op. cit., p. 301.

VII-1 which shows the number of persons unemployed in Canada from 1921 to 1940. It is noticed that the high point for employment usually occurs around October and the greatest unemployment in the early spring. In order to minimize the resulting unemployment of such seasonal slumps, Mr. Smith[23] suggests:

> When attempts to prevent seasonal fluctuations in production are not entirely successful, management is faced with the problem of how it can partially stabilize its labor force and avoid absolute lay off..... Undue expansion of the labor supply during rush times followed by lay offs in dull periods can frequently be avoided by resort to overtime during the busy period.

Before concluding this section it is instructive to observe that seasonal fluctuation is a question of wages as well as of unemployment; as Sir William Beveridge[24] wrote:

> Where in any occupation seasonal fluctuation year after year brings round acute distress, that occupation must be judged as one in which wages are too low or ill-spent, because they do not average out to a sufficiency for the slack months as well as for the busy ones.

Modern advances in machinery and technology have ushered in higher standards of living, but, as observed by Mr. Barnett,[25] these improvements in machinery have frequently been purchased at the price of hardship to the workers in the occupations immediately affected. This technological unemployment[26] is the temporary displacement of workers by the continuous

---

[23]E. S. Smith, Reducing Seasonal Unemployment (New York: McGraw-Hill Book Co., Inc., 1931), pp. 253,255.

[24]Op. cit., p. 37.

[25]G. E. Barnett, Machinery and Labor (Cambridge: Harvard University Press, 1926).

[26]Cf., Carver and Hanson, op. cit., where the authors refer to "structural unemployment", and
Cf., also, Douglas and Director, op. cit., pp. 121-164 for a very thorough discussion of technological unemployment.

introduction of machinery and other labour-saving devices. Douglas and Director[27] epitomize:

> The amount of displacement from former to other jobs will vary inversely with the elasticity of demand, the importance of labor in the final product, the degree of competition, and the relative importance of the operation or operations primarily affected by the technical changes..... In the long run therefore the improvement of machinery in a given industry and the greater efficiency of management do not throw workers permanently out of employment nor create permanent technological unemployment. Instead they raise the national income and enable the level of earnings and of individual incomes to rise.

Personal causes of unemployment which must be referred to before leaving this section, were the most prevalent a century ago, when it was a common view that unemployment was a matter of personal responsibility. They drew no distinction between the unable and the unwilling to work. Although such indiscriminate thinking is not permissable today, no one can deny the existence of the personal element at every point in the unemployment problem. Sir William Beveridge interprets unemployment as primarily an industrial and occupational problem, and afterwards a personal problem.

Summary. -- It proves most difficult to avoid the omnipresent urge to continue in this occupational field of unemployment, developing the present chapter into many times its existing length. A veritable infinitude of pertinent topics continue to arise as occupational research extends into the field of unemployment; this chapter concludes by referring to a few of these fields of inquiry. Professor Hurd[28] directs attention to the circum-

---

[27] Ibid., p. 141.

[28] W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), p. 6.

stances that heavy inflows of immigrants to this continent have served to increase unemployment during the ensuing depression. Unemployment Insurance Statistics,[29] their compilation, use, meaning, and occupational interpretation form an entire field of relevant enquiry. Other topics of interest include: juvenile unemployment,[30] where most Canadian boys lose two years in unemployment before becoming anchored to some one occupation; causes of discharge[31] (most dismissals are for such things as personal defects, lack of job wisdom, or emotional immaturity); employment and occupational maladjustment[32] which may cause greater suffering than actual unemployment; unemployment in labour unions[33]; average unemployment, which would consider the "average industry" in abstract[34]; occupations, earnings, and duration of unemployment[35]; unemployment and relief[36]; (Australian unemployment[37], and that of other comparable economies); restoration from the evils of unemployment[38]; insecurity as related to unemployment and occupations[39];

---

[29]The Labour and Price Statistics Division of the Dominion Bureau of Statistics presents an "Annual Report on Current Benefit Years Under the Unemployment Insurance Act" compiled from materials supplied by the Unemployment Insurance Commission.

[30]Cf., Whitworth, op. cit., p. 61.

[31]Ibid., p. 49.

[32]Cf., Employment Research, op. cit., pp. 42ff.

[33]Cf., Census of Canada, 1931, Vol. XIII (Ottawa: Dominion Bureau of Statistics, 1942), p. 39.

[34]Cf., Ibid., p. 138.

[35]Cf., Ibid., p. 177, for these and numerous other unemployment problems related to occupations.

[36]Cf., Canadians In and Out of Work, op. cit., pp. 340ff.

[37]Cf., G. Anderson, "Unemployment and Its Amelioration", The Annals, Vol. 158 (November 1931).

[38]Cf., E. N. White, Canadian Restoration (Toronto: The Ryerson Press, 1944), pp. 16-22.

[39]R. E. Riegel, An Introduction to the Social Sciences, Vols. I and II (New York: D. Appleton-Century Co., 1941), pp. 457-476.

and so on, but how can such a list be terminated?

Unemployment is a vital and omnipresent[40] problem of the Canadian economy. The present survey has attempted to bring together such unemployment problems as concern the occupational structure of our great Dominion. Better than words, chart VII-1 graphically presents the unemployment picture in Canada for the inter-war period; it also shows clearly the seasonal pattern of unemployment during each twelve-month period. Supplemented by this chart and numerous references, each subsection within our unemployment chapter has formed an integral part in our survey of the Canadian economy occupationally.

---

[40]Although omnipresent, the magnitude of the unemployment problem varies inversely with the levels and vicissitudes of the business cycle.

"Never fear the want of business. A man who qualifies himself well for his calling, never fails of employment."

Thomas Jefferson, Writings,
Vol. viii, p. 366.

CHAPTER VIII

CANADIAN WOMEN OCCUPATIONALLY

"....and the rib, which the Lord God had taken from man, made He a woman, and brought her unto the man.... she shall be called Woman, because she was taken out of Man."[1] From the occupational groups, from incomes, and from unemployment problems, this survey turns to one of the most important and readily differentiable aspects of the Canadian economy --- the female labour force. Presenting the feminine cause of confusion, Mrs. Bruton[2] describes the girl on leaving school:

> She cannot in actual fact have a career on equal terms with men because, on the one hand, custom and prejudice bar her from many occupations and assign her to a subsidiary role in most others; and on the other, a fulltime career would compel her to sacrifice to a greater or less degree the satisfaction of her own emotional and instinctual life..... The crux of the woman problem today lies in the necessity for the modern woman to combine satisfactorily her need or desire for a vocation outside the home with the role of wife and mother.[3]

This chapter's study of Canada's gainfully occupied females is purposely placed in its present position, more as a carry over into the next book's demography, than as a conclusion to this book's occupational

---

[1] Genesis, 2: 22-23.

[2] M. P. Bruton, "Present-Day Thinking on the Woman Question", The Annals, Vol. 251 (May 1947).

[3] Ibid., p. 10.

survey of the Canadian economy. Nominally, a conclusion is impossible because virtually all occupational problems fall within the possible scope of such an inclusive title.

Perhaps the most striking biological characteristic of any population is sex, which naturally differentiates the population in terms of reproductive propensities. If sex differences are so important in the study of population as a whole, surely such are definitely more important in the study of that part of a population whose members are classed as gainfully occupied. While sex as a component part of any study is essentially demographic, the present chapter is concerned less with the conventional male-female split, and more with the place of women in the occupational structure of the Canadian economy.

Femininity Trends. -- The number of females per fixed number of males (here, standardized to number of females per 1,000 males) is usually referred to statistically, and here defined, as a "femininity rate". A careful study of the trends in these femininity rates will present an accurate idea of the shifting ratio of men to women, and the relative proportion of females in the working force. Table VIII-1 presents the number of females to every 1,000 males in gainful occupations for Canada and the provinces for the last three census enumerations. The most evident factor is that the femininity ratio has increased over the period under consideration for Canada as a whole, and for each of the nine provinces individually (with the exception of the 1931 rate for Nova Scotia which fell 1 in 1,000). This trend is not just confined to the last three decades;

Professor Hurd[4] notes that the femininity rate has increased from 144 females per 1,000 males gainfully occupied in 1891, to 154 in 1901, to 155 in 1911, and on up to 183, 204, and 227 (as shown in table VIII-1).

Table VIII-1

Number of Females to every 1,000 Males in Gainful Occupations.[5]

Census Year	Canada[6]	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1921	183	149	183	176	216	211	171	103	108	131
1931	204	156	182	187	246	228	199	124	132	167
1941[7]	227	169	209	208	266	251	208	144	149	192

An interesting recalculation reveals that in 1891 there were nearly fourteen men for every two gainfully occupied women, while the proportion had altered to less than nine men for every two gainfully occupied woman by 1941. Referring again to table VIII-1, it is noticed provincially, that for each of the three census years under consideration, Quebec had the largest proportion and Ontario the second largest proportion of females among their gainfully occupied, while Saskatchewan had the largest and Alberta the second largest proportion of males among their gainfully occupied. If the

---

[4]Cf., W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), p. 48, for these pre-1921 figures.

[5]Source: Occupations and Industries bulletin, No. 0-6, Occupational Trends in Canada, 1901-1941 (Ottawa: Dominion Bureau of Statistics), p. 9.

[6]Not including Yukon and Northwest Territories.

[7]Including Active Service.

active service personnel are not included in the 1941 ratios, the femininity rate for that year rises to 248 for Canada, with a comparable rise for each province.

If this section were to conclude here, the reader would be left with a false impression, because post-census (1941) data reveal that the proportion of women among the gainfully occupied is falling, and has fallen steadily since the 1944 war-employment peak. The Bureau of Statistics' Employment and Payroll Statistics Branch[8] computes monthly and annual ratios of women per 1,000 persons in recorded employment.[9] These annual ratios increased from 233 in 1942, to 262 in 1943, to the maximum of 271 in 1944, and thereafter have decreased annually to 253 in 1945, to 232 in 1946, down to 220 in 1947 which is the lowest year of their current record. These 1947 ratios varied from the Canadian norm of 220 women per 1000 gainfully occupied, down to 127 for Nova Scotia, and up to 240 for Ontario; from 136 in Fort William-Port Arthur, up to 337 in Regina. By industry they were down to 17 in construction and 18 in logging, and up to a majority of 628 in communication and 536 in service industries. These ratios condense the relative position of the woman worker among the total gainfully occupied in the Canadian economy occupationally.

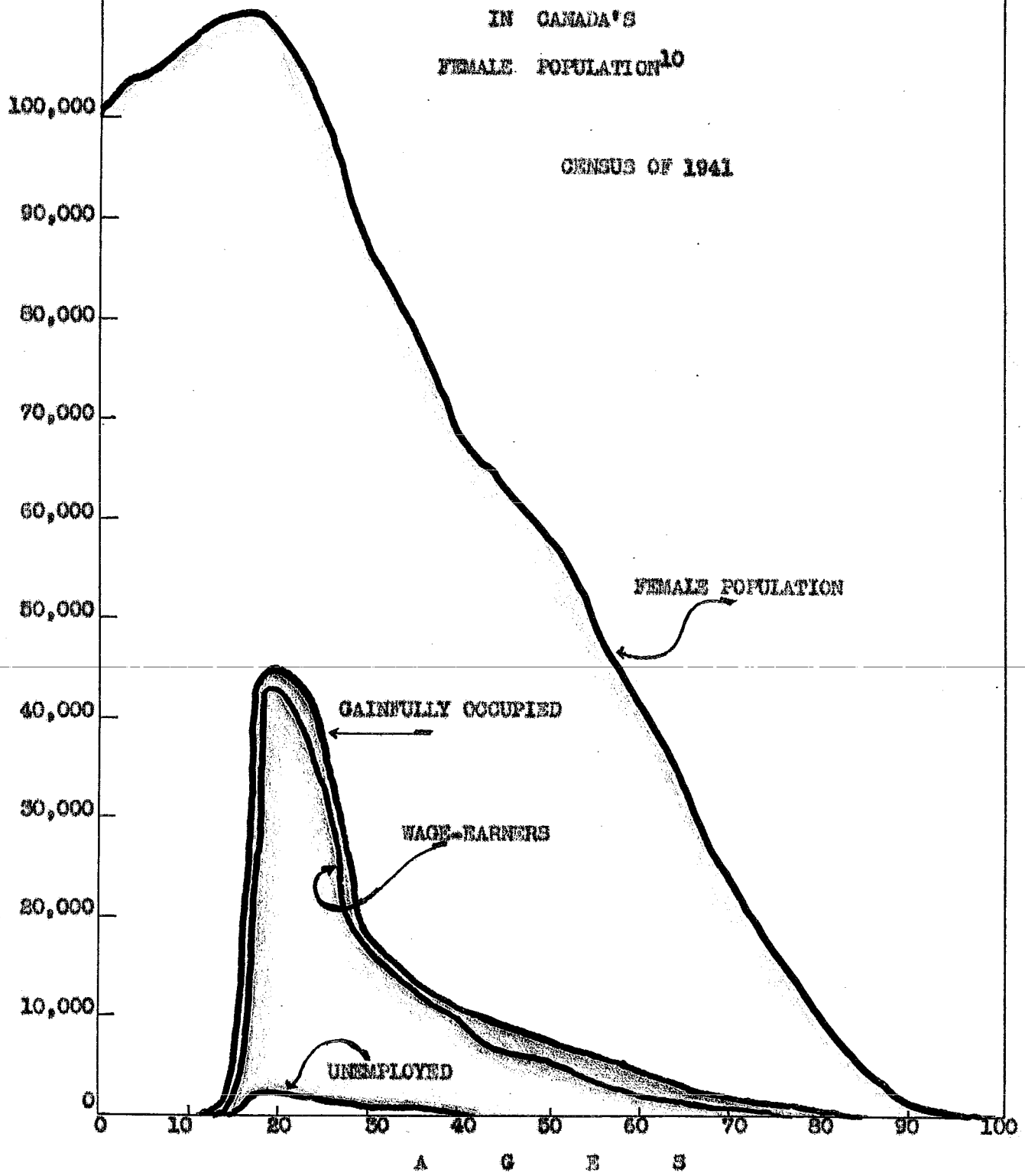
---

[8]M. E. K. Roughsedge, Annual Review of Employment and Payrolls in Canada, 1947 (Ottawa: Dominion Bureau of Statistics, 1948), which reports give employment and payroll statistics annually.

[9]Note carefully that these are not femininity rates as defined above, but give the proportion of women in gainful occupations. Numerically, this rate plus the comparable male rate always total 1,000.

AGE DISTRIBUTION OF GAINFULLY OCCUPIED, WAGE-EARNERS, AND UNEMPLOYED IN CANADA'S FEMALE POPULATION[10]

CENSUS OF 1941



The Woman Worker. -- The past section has given the relative numerical importance of the gainfully occupied female in Canada's labour force; this numerical importance has been shown to vary historically, regionally, occupationally. It is now the purpose of this survey to turn to a hypothetical gainfully occupied woman worker and examine her characteristics.

How old is she? Chart VIII-1 presents graphically the most complete and composite answer to this question of age. For any age range, her mathematical probability of being gainfully occupied, a wage-earner, or unemployed (at that age), is given by the definite integral for the respective curve over that range[11] referred to the population curve. More than half of all the gainfully occupied females enumerated in this 1941 census were between 18 and 24 years of age. Of the female population 14 years and over, 40 p.c. were in the 18-19 age group, nearly 42 p.c. were in the 20-24 age group, and the proportions in the age groups younger and older than these maxima, decreased as the distance from them increased, to less than 2 p.c. at age 14 years and less than 4 p.c. over 70 years of age.

Where was she born?[12] The immediate and most obvious answer to this question, for the average woman worker, is Canada; and her probabil-

---

[10]Source: F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 31.

[11]This, of course, gives the area under the required curve for the given range, which is the mathematical probability, where the total curve is equated to unity.

[12]Cf., W. B. Hurd, "Ethnic Origin and Nativity of the Canadian People" (Ottawa: Dominion Bureau of Statistics). Monograph under preparation for 1941 census of Canada, pp. 1-7, for a thorough discussion of the occupations of the population by sex and birthplace.

ity[13] was .85 of being born in Canada. Her probability[13] of being British in origin was .54, of being French was .30, and her chances were .16 of being of any other ethnic origin. Looking more closely, it is observed that the femininity rate[14] was 286 for the Canadian born worker. For the other nativities it was lower, and in some cases much lower. The rate was 176 gainfully occupied females for every 1000 gainfully occupied males, for both the British and United States born; the rate was 105 for European born; and was only 36 for Asiatic born. Although considerable, these wide differences are probably attributable mainly to extraneous distribution differences such as age, conjugal condition, rural-urban status, and so on. These observations are aptly summarized by Professor Hurd[15]:

> The sex ratio[16] was much more favourable to a high ratio of occupied females to occupied males in the case of the Canadian born than in the case of the immigrants. Indeed, it was even more favourable than the above figures suggest because relatively more of the Canadian born males were away on active service since in that nativity young adults were relatively more numerous than among the immigrant born.

The proportion of females gainfully occupied in 1941 was materially greater for Canadian born, but significantly less for all foreign born; because of, "normal ageing coupled with a paucity of recruits in the lower adult age brackets because of arrested immigration."[17]

---

[13]Based on 1941 census figures.

[14]Number of females per 1,000 gainfully occupied males.

[15]Ibid., p. 2.

[16]This ratio is similar, and mathematically proportional, to the above defined femininity ratio.

[17]Ibid., p. 6.

The proportion of women in the labour force differs according to their conjugal condition.[18] Of the gainfully occupied females enumerated by Canada's 1941 census, 79.9 p.c. were single, 10.3 p.c. were married, 6.8 p.c. were widowed, and 3.0 p.c. divorced or permanently separated for domestic reasons. The range of variability within these all-occupations proportions is shown tabularly in table XIV-1 broken down by occupation groups. The social-economic regrouping (of chapter XII[19]) shows that 92.2 p.c. of the women in professional occupations were single, 87.9 p.c. in clerical-commercial occupations, and approximately three-quarters or more of the females in all other groupings were single, with the noticeable exception of owner-managerial women, nearly half of whom (47.2 p.c.) were widows. Relating female age to conjugal condition, Mr. LeNeveu[20] wrote:

> Since the age composition of married women seeking gainful employment more closely resembles the ages of single women in gainful occupations than does that of the widowed, it is to be expected that single women will experience some competition from married women in certain occupational fields where the presence of widowed women is negligible. However, ...widowed women in gainful occupations, in spite of the marked difference in their age composition from that of single women, or even from the age distribution of married women, are found in a much wider range of employments than might be expected and in numbers that compare favourably with representation of married women in these employments.

To conclude this descriptive section on "The Woman Worker" in abstract, is an almost impossible task. A full description of her capabilities, potentialities, desires, ambitions, and of her place in the Canadian economy

---

[18] Cf., chapter XIV, infra.

[19] Cf., table XII-1, infra.

[20] A. H. LeNeveu, "Evolution and Present-Day Significance of the Canadian Occupational Structure", Unpublished 1931 monograph, (Ottawa: Dominion Bureau of Statistics).

occupationally, is a field far beyond the aspirations of this thesis. A

A generalized statement on trends for women workers:

> Occupational trends among female workers follow the general trends ..... Single women earning their own living constitute the largest group of those gainfully employed. The post-war employment problems facing this group are quite as varied, and in some cases equally complex, as those that will face men.[21]

Women and Work. -- Many books, pamphlets, and articles have been written to women for women about women; to some of these this survey briefly turns. Commenting on the place of women in the American labour force, Miss Miller[22] wrote, "During the recent war period significant changes took place in the occupational and industrial distribution of women workers." Mrs. Beard integrates the interpretation of woman with those of society in her "Woman's Role in Society".[23] In "Who Works and Why", Dr. Kyrk[24] summarizes the position of the female workers, and concludes, "The higher the standard of living, the more things considered essential that only money can buy, the larger the proportion of married women who will work for pay or profit."[25] Dr. Brady[26] advocates, "equalizing the earnings of women and men in the service occupations and even between occupations." In her hand

---

[21]S. E. Smith, Youth and Jobs in Canada (Toronto: The Ryerson Press, 1945), p. 155.

[22]F. S. Miller, "Women in the Labor Force", The Annals, Vol. 251 (May 1947), p. 37.

[23]M. R. Beard, "Woman's Role in Society", The Annals, Vol. 251 (May 1947).

[24]H. Kyrk, "Who Works and Why", The Annals, Vol. 251 (May 1947).

[25]Ibid., p. 51.

[26]D. S. Brady, "Equal Pay for Women Workers", The Annals, Vol. 251 (May 1947), p. 60.

book, Miss Massey[27] discusses and answers two important questions, (1) what occupations in Canada are open to trained women, and (2) what provisions exist for their training. Miss Bennet[28] reiterates the economic value of college training to the working girl, and relates her psychology and her physiology to her occupation.

The fact, discovered in chapter IV, that most occupational writings refer to vocational guidance, is equally true in occupational books for women. Miss MacMurchy's The Canadian Girl at Work[29] was written to assist Canadian girls in finding satisfactory employment; and, "the further aim of showing them what constitutes a right attitude toward work and toward life through work, underlies the account of each occupation."[30] Another, and more comprehensive, guidance volume is Dr. Hatchers' Occupations for Women[31]. In introducing The Girl and Her Future,[32] Mrs. Roosevelt said: "There never was a time when girls, starting out to earn their own living, needed more help in the choosing of occupations."

---

[27]A. V. Massey, Occupations for Trained Women in Canada (Toronto: J. M. Dent & Sons, Ltd., 1920).

[28]H. M. Bennet, Women and Work (New York: D. Appleton & Co., 1917).

[29]M. MacMurchy, The Canadian Girl at Work (Toronto: Thomas Nelson & Sons, Ltd., 1920).

[30]Ibid., p. iii.

[31]O. L. Thatcher, Occupations for Women (Richmond, Va.: J. H. Jenkins, Inc., 1927).

[32]H. Hoerle, The Girl and Her Future (New York: Harrison Smith and Robert Haas, 1935).

Although statistics usually classify women who work as those in the labour force, many housewives work harder and contribute more to the Canadian economy than some of those classified as gainfully occupied. Dr. Margaret Reid[33] wrote:

> Most private households, especially those including husband and wife or mother and child, have at least one woman who makes an important contribution to the family's real income through household tasks performed. In fact, marital status in large measure determines whether a woman is in the labor force or is a full-time homemaker.

The Woman Immigrant Worker. -- Many interesting and important occupational subjects would fit neatly into the scheme of this chapter. Some must merely be alluded to (in the following summary), but the immigrant question is worth individual mention here. As previously shown in this chapter, 15 p.c. of the gainfully occupied women in Canada, as enumerated by the 1941 census, were immigrants. As shown in table V-1, British female immigrants tended toward service, clerical and manufacturing occupations (in proportions closely approximating those of the Canadian born). Immigrant females from the United States exceeded Canadian born in agricultural and service occupations, European born in agricultural and manufacturing occupations, and Asiatic born in trade, clerical, and agricultural occupations. The opportunity in Canada for immigrant women is concisely set forth by Mr. John Dauphinee.[34] In summary, Dr. Loiserson[35] wrote:

---

[33] M. C. Reid, "The Economic Contribution of Homemakers", The Annals, Vol. 251 (May 1947).

[34] J. Dauphinee, Opportunity in Canada (London: Rockliff, Salisbury Square, 1948), pp. 167-171.

[35] G. M. Loiserson, Adjusting Immigrant and Industry (New York: Harper & Bros. Publishers, 1924), p. 297.

> When the immigrant worker is a woman, her adjustment to conditions of American industrial life requires the assistance from the employer, the trade union, the government, and the people of her own nationality ..... She combines the problem of the immigrant in industry with that of the woman in industry. The difficulties which she would naturally encounter as an immigrant, in finding work in America, in becoming accustomed to new occupations and new industrial methods, and in acquiring a new language, new associations, and new customs are greatly multiplied by the fact that she is a woman.

Summary. -- Women have a definite and indispensable place in Canada's occupational economy. It has been the purpose of this chapter to set forth and briefly elaborate this position of relationship. Many other pertinent topics have entered the author's research; some of which will be mentioned now, in summary. With reference to the problem of unemployment among women, Mr. Marsh[36] notes that (1) the range of women's occupations is relatively narrow, (2) unemployment among women is almost entirely an urban problem, and (3) the large majority of unemployed women are not married. A few of the many other pertinent problems include: women in business[39]; women as wage-earners[39]; varying status of the female worker[40]; the educational background of women workers[41]; movement of women into the labour market[42]; social economic groups[43]; and so forth.

---

[36] L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1938), p. 255.

[39] Cf., W. T. Whitwrth, op. cit., pp. 118-120.

[39] Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 91-95.

[40] Cf., Ibid., pp. 100-101.

[41] Cf., Ibid., pp. 233-235.

[42] Cf., J. D. Durand, The Labor Force in the United States, 1890-1960 (New York: Social Science Research Council, 1948), pp. 235f.

[43] Cf., Whitworth, op. cit.

Herein, this chapter has introduced the idea of fertility rates and trends, which show a long-run gradual increase, but a short-run decrease over the last few years. The average woman worker was about 21 years of age; she was born in Canada; she was single; and she was in one of the service occupations. Many other topics could have also been discussed, and many other problems dealt with. However, the present chapter has dealt with some of the most important occupational inclinations and tendencies of Canadian women in their relation to the Canadian economy occupationally.

Could any study of the occupational structure of the Canadian economy dare to consider itself <u>complete</u>? The present book's survey has presented four vitally important and occupationally indispensable aspects of the economy of Canada. Chapter V's occupational groupings enables a partial differentiation of the Dominion's complicated occupational organization, and has shown the general trends within each occupational group. Since one of the fundamental motives and reasons for employment is that of remuneration, income and earnings were considered in chapter VI for the Canadian economy and the Canadian wage-earners segregated occupationally. Although the relative importance of the problem of unemployment varies cyclically, unemployment in some form is always present in any civilized economy -- absolute full employment in a dynamic economy is an idealized impossibility. Within Canada's labour force, perhaps the most important minority population is composed of the women workers, who have been discussed in this chapter in their occupational relation to the economy of Canada.

In particular, book two has dealt with the census classification of occupational groups individually, with Canadian income and employee's earnings, with the occupational problem of unemployment, and with the occupational place of women in Canada's economy; in total, book two has critically analyzed the economy of Canada occupationally.

"There are worse occupations in this world than feeling a woman's pulse."

Rev. L. Sterne:
A Sentimental Journey, (1768).

BOOK THREE

DEMOGRAPHY OF CANADA OCCUPATIONALLY

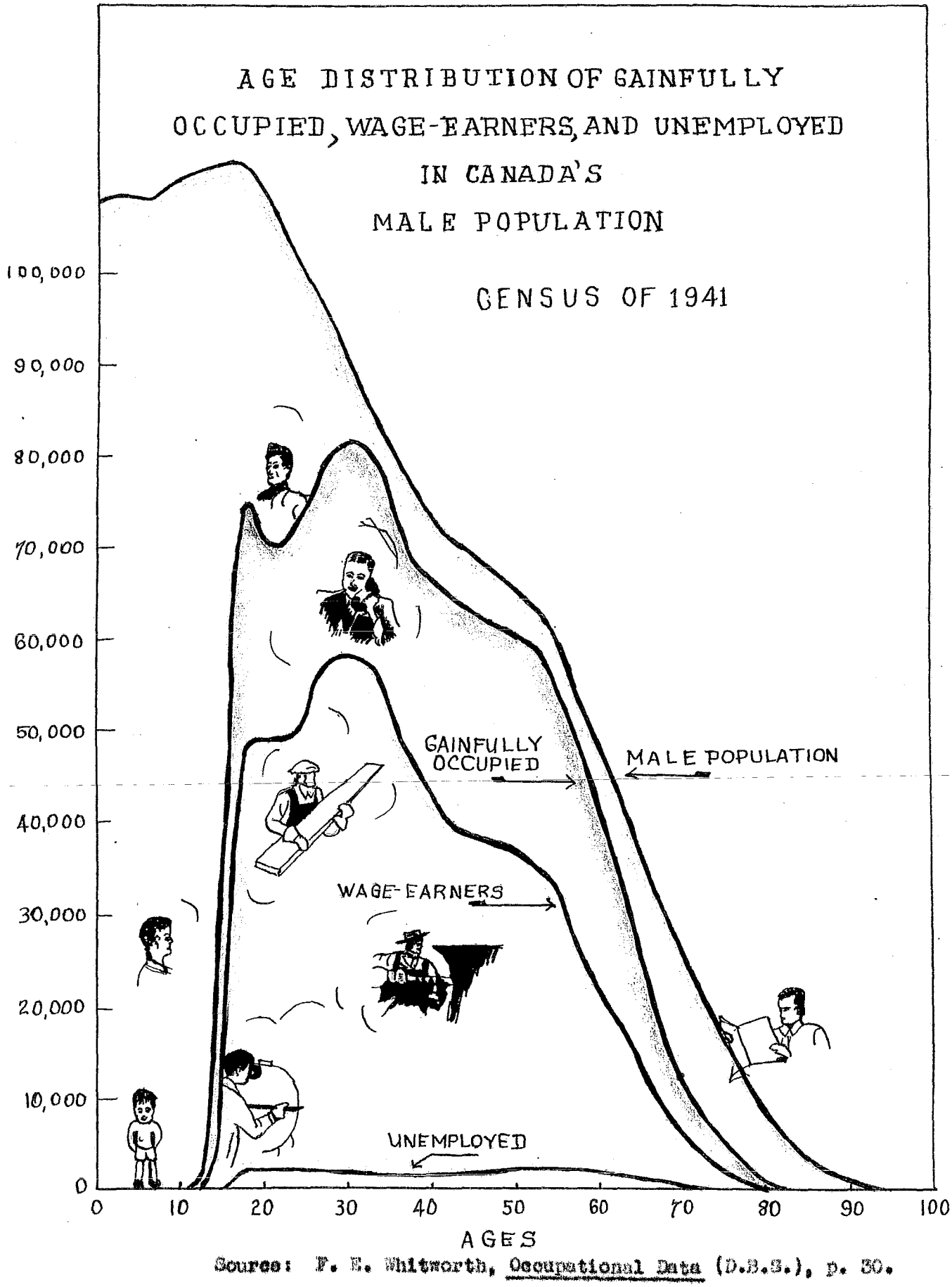
Chapter

IX	Age Structure Occupationally
X	Birthplace and Ethnic Origin Occupationally
XI	Rural-Urban Distribution Occupationally
XII	Socioeconomic and Sociocultural Differentiations Occupationally
XIII	The Blind and Deaf Mutes Occupationally
XIV	Social Factors Occupationally
XV	Provincial Regions Occupationally

"Oh, let us love our occupations,
Bless the squire and his relations,
Live upon our daily rations,
And always know our proper station."

Dickens,
The Chimes.

Chart IX-1



Source: F. E. Whitworth, Occupational Data (D.B.S.), p. 30.

CHAPTER IX

AGE STRUCTURE OCCUPATIONALLY

The televised picture being projected onto this thesis' screen is gradually changing from its occupational view of the overall Canadian economy to this book's more particularized observations of the occupational demography of our Dominion. As originally conceived, this book on Canadian demography, analyzed with respect to occupational distribution, was to have constituted the entire thesis. However, as so many other closely related fields ascended to prominence during the embryonic research period, the present has been condensed into this one book. It is impossible to treat such a broad topic in any full sense. The present book, then, can only attempt to deal superficially with a few of the most pertinent, interesting, and instructive aspects of Canadian demography occupationally.

As a demographic factor, age is perhaps the most significant element in any population study, with the possible exception of sex; this is particularly true in an occupational study. As a physiological factor, age sets the lower limit below which the youth is not expected to enter the employable world and the upper limit above which the worker will probably retire -- both limits varying by occupation. As a biological factor, age has considerable social significance. "No society can fully

ignore the factor of age and understand itself"[1]; and so, no population thesis can ignore the factor of age in any demographic study.

The Working Ages. -- The title of this subsection is chosen advisedly to refer to the ages within which most of the gainfully occupied are employed. These might be arbitrarily limited by 20 and 60 years of age, or extended to 18 and 64 years of age. The proportion of the population of a country or province or district which falls within these "working ages" will indicate the potential labour force of that region. It would be most interesting, if time permitted, to break down Canada's population in this manner. It should also be instructive to test each occupation, to ascertain the magnitude of the percentage of the working force employed in that individual occupation which falls outside these working ages.

Mr. Landis[2] gives the percentage of the population of the United States in the working ages (20 to 64), as 40.0 p.c. before 1890, 54.5 p.c. in 1920, 55.0 p.c. in 1930, 57.7 p.c. in 1940, and predicted to increase to 61.0 p.c. by 1950. Obviously, the working force can be predicted with a good degree of accuracy for 20 years in advance, because these potential workers are already born (and life expectancy tables exist to accurately estimate the number who may be expected to die before reaching the working age).

---

[1] P. H. Landis, Population Problems (New York: American Book Co., 1943), p. 277.

[2] Cf., ibid., pp. 279-280.

Age Trends. -- The per cent of Canada's population (14 years of age and over) who were gainfully occupied in the past three censuses are classified by broad age groups in table IX-1, and the 1941 proportions by more detailed age groups in table IX-2. The proportion of males gainfully occupied has decreased from 86.6 p.c. in 1921, to 85.4 p.c. in 1931, to 76.7 p.c. in 1941; while the proportion of females has increased from 17.2 p.c. in 1921, to 19.1 p.c. in 1931 to 20.2 p.c. in 1941. The precipitous drop in male per cent gainfully occupied between 1931 and 1941 is not as great as appears above, because these figures for 1941 exclude active service; but if active service males are included, as in table IX-2, it is observed that 83.8 p.c. of the males were gainfully occupied. This active service differential accounts for the great drop in males between

Table IX-1[3]

Per Cent of the Population, 14 years of Age and Over, Gainfully Occupied, by Age and Sex, for Canada,[4] 1921-1941 Censuses.

Age	1921		1931		1941[5]	
	M	F	M	F	M	F
Total.	86.6	17.2	85.4	19.1	76.7	20.2
14-15 years . . .	29.3	8.4	13.8	4.0	16.9	3.6
16-19 " . . .	76.5	32.2	67.5	30.3	57.3	30.6
20-24 " . . .	92.4	35.1	92.6	42.4	69.1	41.8
25-34 " . . .	96.2	17.2	97.7	21.7	86.7	24.8
35-64 " . . .	94.4	10.7	95.9	12.0	91.7	13.7
65 years & over .	58.4	6.2	55.7	6.2	47.2	5.5

[3]Source: Occupations and Industries bulletin, No. 0-6, Occupational Trends in Canada, 1901-1941, (Ottawa: Dominion Bureau of Statistics), p. 8.

[4]Not including Yukon and Northwest Territories.

[5]Not including Active Service.

20 and 24 years and between 25 and 34 years of age, who were gainfully occupied in 1951 and in 1941. If servicemen are excluded (as in table IX-1), there is a sizeable drop in the percentage of males gainfully occupied for each individual age group between 1951 and 1941; and also

Table IX-9[6]

Total Per Cent Gainfully Occupied, with Average Earnings and Weeks Employed for Wage-Earners, by Age and Sex, for Canada,[7] 1941.

Age	Total Per Cent Gainfully Occupied[8]		Wage-Earners			
			Average Earnings		Weeks Employed	
	M	F	M	F	M	F
Total.	83.8	20.2	$993	$490	41.31	40.67
14 years.	9.7	1.6	121	74	20.54	18.80
15 "	24.3	5.5	155	99	28.69	21.34
16-17 years . . .	50.6	21.2	271	186	27.93	27.19
18-19 " . . .	77.3	40.0	410	269	33.51	34.11
20-24 " . . .	91.5	41.9	632	419	38.82	40.93
25-34 " . . .	97.7	24.9	966	579	43.34	44.07
35-44 " . . .	97.9	16.2	1,179	697	43.66	44.73
45-54 " . . .	96.2	12.9	1,265	701	43.04	44.12
55-59 " . . .	93.0	11.4	1,203	625	41.47	43.00
60-64 " . . .	85.5	10.2	1,106	525	40.00	42.18
65-69 " . . .	69.5	8.5	895	391	36.59	41.33
70 years & over .	31.5	3.7	886	382	37.82	42.52

between 1921 and 1951 for all age groups except between the middle ages of 20 and 64. On a percentage basis 1941 saw fewer very young girls and women aged 65 and over working, while the total and middle years witnessed increases.

---

[6]Source: Census of Canada, 1941 (Ottawa: Dominion Bureau of Statistics, 1946), Vol. VII, pp. 12-13, and F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 43.

[7]Not including Yukon and Northwest Territories.

[8]Including Active Service.

Age of Wage-Earners. -- Table IX-2 breaks down the mean annual earnings and the number of weeks at work during the year ending June 2, 1941 by age groups and sex. The average Canadian male wage-earner received only $993, while the comparable female earned only $490 during this census year. Average male earnings increased directly with age from $121 at age 14 to a maximum average wage of $1,265 for years 45 to 54, then decreased as age increased to $985 for ages 65 to 69 and $936 over 70 years of age. Average female earnings remained appreciably below the comparable male earnings at all ages, but followed a similar age pattern, from $74 at age 14, increasing as age increased to a maximum wage of $701 at ages 45 to 54, and decreasing thereafter as age increased to $382.

Average male employment (as shown by table IX-2) varied directly with age to a maximum of 43.66 weeks at ages 35 to 44 and varied inversely with age from age 65 to age 70. It is worth noticing that the average elderly male wage-earner 70 years and over had to work more than 10 days longer than the average 65 to 69 year old gentleman, in order to earn one dollar more.

Juvenile Employment.[9] -- A youth's first jobs are usually temporary, "stop-gap" employments. After leaving school, many youngsters accept what may be called "dead-end jobs" suitable only to youth -- such jobs as newsboys, bellhops, telegram delivery, and so on. Table IX-3 lists the occupations which employed the largest number of juveniles (14 to 19 years of age)

---

[9]Cf., Whitworth, op. cit., pp. 61-66.

Table IX-3

Occupations Which Employed the Largest Numbers of Youth from 14-19 years of Age, 1941, Arranged in Descending Order, and the Number 16-24 years for the Same Occupations.[10]

	14-19		16-24	
MALE	number	p.c.	number	p.c.
Farm Labourers	142,978	48.0	215,674	34.9
Labourers (not in agriculture, fishing, mining, or logging)	29,358	9.9	60,861	9.8
Office clerks	18,656	4.2	28,768	4.7
Salespeople in stores	10,640	3.6	24,290	3.9
Messengers	8,538	2.9	7,683	1.2
Lumbermen	7,507	2.5	19,154	3.1
Metal products	5,382	1.8	12,956	2.1
Truck drivers	4,752	1.6	17,397	2.8
Mechanics and repairmen[11]	4,949	1.7	13,713	2.2
Machinists	4,056	1.4	9,799	1.6
Clothing and textile products	3,676	1.2	7,227	1.2
Fishermen	2,983	1.0	6,620	1.1
Shipping Clerks	2,421	0.8	5,730	0.9
Farmers and stock raisers	2,332	0.8	25,022	4.0
Total, All Occupations[12]	297,666	100.0	617,956	100.0
FEMALE				
Domestic servants	49,675	34.4	88,396	25.1
Clothing and textile products	13,389	9.3	27,926	7.9
Stenographers, typists	11,669	8.1	38,505	10.9
Salespeople in stores	10,052	7.0	28,337	8.1
Waitresses	6,145	4.3	14,409	4.1
Packers, wrappers	4,214	2.9	8,095	2.3
Housekeepers, matrons	3,368	2.3	8,740	2.5
Metal Products	2,777	1.9	5,783	1.6
Teachers, school	2,564	1.8	17,736	5.0
Farm labourers	2,354	1.6	2,956	0.8
Leather products	2,207	1.5	4,112	1.2
Spinners, twisters	1,021	0.7	1,985	0.5
Total, All Occupations[12]	144,560	100.0	351,962	100.0

[10]Source: op. cit., pp. 63-64.

[11]Not elsewhere specified.

[12]Gainfully occupied, not including Active Service.

in descending order of magnitude, and also lists opposite these the number aged 16 to 24 years who were employed in the same occupations. Together with these absolute numbers, table IX-5 also lists each as a percentage of all juveniles of that age group in the given occupation. These may be considered to be primarily the occupations of youth. Referring to the choice of juvenile employment, John Buchan[13] once wrote:

> In my lifetime I seem to note a change..... the outlook of youth has been narrowed, doors have been sealed, channels have silted up, there is less choice of routes at the cross-roads.

A great deal of study and research has been given to the occupational problems of youth; particularly the essentially juvenile maladjustments of related industrialism and urbanization. Because puberty usually terminates state-sponsored education, the adolescent is "suddenly thrown into the maelstrom of factory or other industrial life, not only without protection, or experience, or sound advice, but with money to spend and the city to suggest all manner of unwise ways in which to spend it."[14] These problems are economically important and socially necessary, but a further study thereof passes beyond the present occupational survey.

Unemployment by Age. -- From available data it would appear that the risk of unemployment increases with age, that "the youth who get jobs have better than average chances of holding them, but those who once lose jobs find it hardest to get full-time employment thereafter."[15] The differ-

---

[13]John Buchan, Memory Hold-the-Door (Toronto: Musson Book Co., Ltd., 1940), p. 287.

[14]J. Marchant, Youth and the Race (London: Kegan Paul and Co., Ltd., 1923), p. 18.

[15]L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), p. 514.

ential incidence of unemployment is marked among age-groups, but is not the same throughout the occupational scale. The 1931 census correlation between apprentice unemployment and the corresponding occupation classes[16] was found to be 0.85; indicating that over 70 p.c.[17] of the unemployment in the occupation of apprentices was determined by the corresponding master occupation. The incidence of unemployment does not rise as rapidly as might be anticipated as age increases above 50 years.[18] This unexpected fact may be partially explained by ill-health and death, but more by the tendency of older men to consider themselves retired rather than out of work. Unemployment Insurance data by age groups show that a greater percentage of the young and elderly workers lose their jobs (establish benefit years), and these extreme working ages find reemployment more difficult (that is, they terminate their benefits by exhaustion).

Summary. -- This chapter has attempted to verify and illustrate the thesis that age is of vital and undeniable importance in the demographic problems and implications of occupational distribution. The composition of any working force will change gradually with the ageing of the population until the time when birth and death rates become stabilized and age distribution takes on a more permanent pattern. According to Mr. Vance[19];

---

[16]Cf., Census of Canada, 1931, Vol. XIII (Ottawa: Dominion Bureau of Statistics, 1942), p. 314.

[17]Accurately, of course, 0.85 squared would give .7225 or 72.25 p.c.

[18]Cf., Whitworth, op. cit., p. 65.

[19]R. B. Vance, All These People (Chapel Hill: The University of North Carolina Press, 1945), p. 48.

> ....the basic importance of sex and age differences may be sought in their relation to economics and fertility, production and reproduction -- the major economic and biological functions performed by individuals in society.

Although undesireable, space forces this chapter to omit such pertinent topics as: the potentially employable population[20]; optimum working age[21]; age of Canadians in United States working force[22]; adolescent working force in the depression[23]; men past middle age occupationally[24]; American child labour[25]; and so on. Because of the vital and omnipresent importance of age in relation to any occupational research, this chapter on age has been a fitting introduction to our study of Canadian demography occupationally.

---

[20]L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), p. 67.

[21]Ibid., p. 75.

[22]L. E. Truesdell, The Canadian Born in the United States (New Haven: Yale University Press, 1943), p. 119ff.

[23]Canadians In and Out of Work, op. cit., p. 292.

[24]J. D. Durand, The Labour Force in the United States, 1890-1960 (New York: Social-Science Research Council, 1948), p. 104.

[25]Cf., G. F. Zimand, "The Changing Picture of Child Labor", The Annals, Vol. 236 (November 1944), and E. G. Magee, "Impact of War on Child Labor", The Annals, Vol. 236 (November 1944).

"Curse on the man who business first designed,
And by't enthralled a free-born lover's mind!"

John Oldham,
Complaining of Absence.

CHAPTER X

BIRTHPLACE AND ETHNIC ORIGIN OCCUPATIONALLY

"....and God created man ....male and female created He them."[1] Since the creation, as the human race became fruitful, multiplies, and replenished the earth, there have existed many problems directly associated with differences and complexities of birthplace and ethnic origin. "Not only do race and nativity have a bearing upon sex ratios, birth rates, death rates, illness rates, and other vital phenomena, but also they are a source of much social friction between population groups."[2] Before considering the variability of the occupational tendencies of human individuals as related to their birthplace and their ethnic origin, it is necessary to define the concepts we are using.

Definitions. -- As the introductory chapter (I) which was concerned mainly with definitions, pointed out, accurate definitions are requisite to any scientific thesis. "Birthplace", as used in this chapter refers to exactly what its name implies -- the country in which the individual was born. The word "immigrant" commonly refers to all those persons not born in Canada.

---

[1] Genesis, 1:27.

[2] P. H. Landis, Population Problems (New York: American Book Co., 1943), p. 309.

The problem of adequately defining ethnic origin and race is a much more difficult one.[3] Many definitions exist, and a few of them will now be compared. One is:

> In biology a race is defined as a subdivision of a species which inherits physical characteristics distinguishing it from other populations of the species.[4]

Differences between racial or ethnic groups do exist, but:

> An "ethnic group" represents one of a number of populations, which populations together comprise the species Homo sapiens, and which individually maintain their differences, physical and cultural, by means of isolating mechanisms such as geographic and social barriers.[5]

Webster defines "race" as, "A division of mankind possessing constant traits, transmissable by descent, sufficient to characterize it as a distinct human type."[6] Professor Hurd[7] has carefully defined "Racial Origin" for the 1931 Canadian census[8] where he shows that the term "origin" has "a combined biological, cultural, and geographical significance."[9]

---

[3]Cf., E. M. Patterson, An Introduction to World Economics (New York: The MacMillan Co., 1947), pp. 187-190, where Professor Patterson devotes an entire section to definitions and various meanings of racial concepts.

[4]M. F. Ashley-Montagu, Man's Most Dangerous Myth: The Fallacy of Race (New York: Columbia University Press, 1942), p. 8.

[5]O. Dahlberg, Race, Reason and Rubbish (New York: Columbia University Press, 1942), p. 73.

[6]Webster's Collegiate Dictionary, fifth edition.

[7]Cf., W. B. Hurd, "Racial Origins and Nativity of the Canadian People", Census of Canada, 1931 (Ottawa: Dominion Bureau of Statistics, 1942), pp. 567-569 for the accurate census definitions "Racial Origin" and use of the term in the 1931 census.

[8]Note that the 1941 census has changed from the term "Racial Origin" to "Ethnic Origin".

[9]Ibid., p. 568.

Birthplace Occupationally[10] — Having dispensed with the necessary definitional requisites, table X-1 ascends to importance. Attention is first directed to the occupational distribution of the 1941 male population 14 years of age and over in Canada. The "all countries" norm column is the average for all others; the deviations by birthplace from this norm prove most interesting and instructive. An examination of the figures for the Canadian born males gainfully occupied, shows 33.1 p.c. in agriculture, 16.3 p.c. in manufacturing, 8.4 p.c. in service occupations, and so on. These, and the remaining percentages for the Canadian born males, exhibit no unusual tendencies or deviations from the all countries norm, but irregularities arise when the distribution of the immigrants in Canadian occupations is considered. The males from the British Isles tend more toward urban centres and thus show a smaller percentage in agriculture, (17.6 p.c.), but a much larger percentage in manufacturing (32.9 p.c.), and the service occupations (14.5 p.c.) than the Canadian born males. Immigrants from the United States showed the greatest tendency toward agriculture (43.4 p.c.) of any nativity group while those from the British Possessions showed the least (7.6 p.c.). In general, British born males tend to avoid agriculture, and concentrate in manufacturing, construction, transportation, and the service occupations. Usually, very large proportions of Asiatic males are found in the service occupations (44.2 p.c.) and as labourers (12.2 p.c.) Continental European male immigrants are largely agricultural (36.0 p.c.) with relatively large proportions in mining (5.1 p.c.) and unskilled occupations (10.0 p.c.). Thus, there was a preponderance of United States and

---

[10] Cf., W. B. Hurd, "Ethnic Origin and Nativity of the Canadian People" (Ottawa: Dominion Bureau of Statistics), unpublished 1941 Census Monograph.

Table X-1

Gainfully Occupied, by Occupation Group, as Per Cent of All Occupations, Showing Birthplace and Sex, for Canada, 1941.[11]

Occupation Group and Sex		Birthplace						
		All Countries[12]	Canada	British Isles	British Possessions	United States	Europe	Asia
Agriculture	M	31.66	33.11	17.55	7.62	43.38	35.96	15.39
	F	2.28	1.95	2.20	0.89	5.87	9.89	4.52
Fishing, Hunting, Trapping[13]	M	1.52	1.84	0.22	2.21	0.64	0.78	2.63
Logging[13]	M	2.39	2.64	0.43	0.58	1.53	3.13	2.55
Mining, and Quarrying[13]	M	2.14	1.79	1.84	7.57	1.74	5.06	0.69
Manufacturing	M	17.05	16.31	22.94	21.08	14.51	17.58	7.28
	F	15.56	15.41	15.73	10.02	10.73	22.75	14.79
Construction	M	6.02	5.80	6.22	10.56	4.75	5.94	0.91
	F	0.04	0.04	0.05	0.07	0.03	0.04	(13)
Transportation, Communication	M	7.57	7.84	8.37	9.68	6.78	5.47	1.86
	F	1.69	1.72	2.00	1.13	1.75	0.94	0.69
Trade	M	8.12	8.04	8.69	7.40	8.73	7.44	10.00
	F	9.84	9.93	10.14	7.75	8.89	8.26	13.72
Finance	M	0.91	0.95	1.30	1.59	1.07	0.29	0.30
	F	0.10	0.09	0.15	0.26	0.23	0.07	0.23
Service	M	9.41	8.41	14.49	15.42	9.07	7.00	44.19
	F	50.20	50.02	49.66	62.80	55.32	50.26	51.88
Clerical	M	5.44	5.61	8.91	7.93	3.42	1.18	1.45
	F	16.64	19.24	18.86	16.59	16.15	6.66	13.33
Labourers	M	7.49	7.38	6.60	8.14	4.82	9.96	12.16
	F	1.40	1.45	1.03	0.34	0.87	1.56	0.61

[11] Ibid, source.

[12] Includes other countries, and birthplace not stated.

[13] Less than 0.05 p.c. for female proportions.

continental European immigrant males in agriculture, of British in manufacturing, and of Asiatic males in service occupations.

When comparing the female percentages (also table X-1), it must be borne in mind that the proportion of females among immigrants is relatively small as compared with that of Canadian born women. Over half of all gainfully occupied females reported themselves in service occupations. This remains roughly true for all the nativity groupings with a noticeably higher proportion for the British Possessions in service occupations (62.8 p.c.). Most of Canada's gainfully occupied women earn their living in the service group, especially domestic service. There are large proportions in clerical work among those born in Canada (19.8 p.c.) and in the British Isles (18.9 p.c.). Many women are also in manufacturing, especially among the European born (22.8 p.c.). The next largest proportion falls to the trade occupations, especially in the case of Asiatic woman (13.7 p.c.).

Ethnic Origin Occupationally.[14] -- The gainfully occupied in the 1941 census were cross-classified by ethnic origin. Table X-2 breaks down Canada's gainfully occupied as enumerated in 1941 by occupation group and sex, expressing broad ethnic groups as percentages of all races. These groups include not only the immigrants, but the Canadian born of these origins; hence, a relatively long average length of residence in Canada has facilitated readjustment -- both geographical and occupational. The existing occupational distribution might be considered to reflect to some extent underlying occupational preferences and aptitudes.

---

[14] Cf., ibid., for a very complete study thereof; and, also, Nathan Keyfitz, "Ethnic Groups and Their Behaviour", The Annals, Vol. 253 (September 1947), for a brief mention of ethnic occupational distribution.

Table X-2

Gainfully Occupied, by Occupation Group, as Per Cent of All Races, Showing Ethnic Origin and Sex, for Canada, 1941.[15]

Occupation Group	Males			Females		
	British	French	Other	British	French	Other
All Occupations	49.55	28.04	22.40	54.48	29.78	15.74
Agriculture	43.45	26.36	28.19	46.89	21.92	31.19
Fishing, Hunting, Trapping	29.63	21.61	48.77	5.26	11.42	83.33
Logging	25.97	50.34	23.69	(16)	(16)	(16)
Mining, Quarrying	48.93	18.20	32.87	(16)	(16)	(16)
Manufacturing	52.86	27.55	19.59	40.24	42.78	16.99
Construction	49.54	33.76	16.70	67.26	14.45	18.29
Transportation, Communication	56.40	28.05	15.55	72.40	19.96	7.62
Trade	55.77	23.74	20.49	59.76	24.42	15.82
Finance	78.38	12.91	8.71	77.57	12.75	9.68
Service	55.80	25.02	19.18	50.79	32.72	16.49
Clerical	69.49	21.45	9.06	73.79	14.72	11.48
Labourers	40.97	34.34	24.69	40.85	44.43	14.72

[15]Source: Hurd, 1941 Monograph, op. cit.

[16]There were only 2 females in logging occupations, both of whom were British; and 25 in mining, 7 of whom were British and 18 French, (which represent 28 p.c. and 72 p.c. respectively).

A further breakdown of these data, not possible within the limitations of this paper, exhibits many interesting and instructive points. Central and Eastern Europeans show high proportions in agriculture; low in manufacturing, trade, finance, service, and clerical occupations. The proportion of those with Jewish origin in commercial occupations is more than four times larger than that of the whole population of the Dominion. The Italians, of whom only 7 p.c. were in agriculture, and the Jews, with less than 2 p.c. tend more toward urban occupations. Before leaving the male population, the above table shows the general picture of the British tending toward finance (72.4 p.c.) and clerical occupations (69.5 p.c.), but away from logging (26.0 p.c.) and fishing (29.6 p.c.; while the French prefer logging (50.3 p.c.) and unskilled occupations (34.3 p.c.) and construction occupations (33.8 p.c.), and relatively avoid finance (18.9 p.c.) and mining occupations (16.2 p.c.).

British females show a large proportion in finance (77.6 p.c.), in the clerical occupations (73.8 p.c.) and in transportation and communication (72.4 p.c.). The French females show considerably larger percentages than the British in manufacturing and fewer in trade and clerical occupations. It is in order at this point to caution against faulty percentage conclusions based on too small original absolute figures, which necessarily limit the reliability of interpretation.[17] Women of both British and French origin tend to avoid agriculture, fishing, hunting, and trapping occupations.

---

[17]For instance, although 72 p.c. of the females in mining occupations were of French origin this represents only 18 women; hence, no worthwhile conclusions can be drawn from percentages based on such small basic numbers.

Summary. — The present chapter relating Canada's occupations to birthplace and ethnic origin is necessarily condensed, but it is sufficient to present a differentiation of occupations with relation to these two fundamental demographic factors. Professor Hurd[18] has so fully analyzed the relevant Canadian census data in his monograph for the 1941 census that anything further is superficial. This chapter's analysis has been useful and necessary in rounding out this thesis' inclusive panorama of Canada occupationally.

---

[18] Ibid.

"Nihil tam certum est quam otii vicia negotio discuti"

(Nothing is so certain as that the vices of leisure are dispersed by occupation.)

Seneca,
Epistulae ad Lucilium,
Epis. 9, l. vi.

CHAPTER XI

RURAL-URBAN DISTRIBUTION OCCUPATIONALLY

Modern urbanization, which represents a rapid growth of urban population as compared with rural population, is one of the most noticeable and far-reaching of current tendencies, and is basic to many pressing economic problems. The present chapter is concerned primarily with the differentiation of Canada's occupational population into rural and urban groups. It may best be commenced by the following definition of the metropolitan economy:

> The organization of producers and consumers mutually dependent for goods and services within their wants are supplied by a system of exchange concentrated in a large city which is the focus of local trade and the centre through which normal economic relations with the outside are established and maintained.[1]

Historical Urbanization Occupationally. -- Canada was originally colonized mainly by fishermen and fur traders. Gradually agriculture developed, and then manufacturing and trade. As profits grew the inevitable emassment of capital encouraged a gradual, but unavoidable, migration toward urban areas. This trend toward urbanization has been observable in every census enumeration since Confederation. Roughly one-fifth (19.68 p.c.) of the enumerated population in Canada in 1871 were in urban areas, and by 1881 over one-quarter (25.65 p.c.) were urban. The gradual growth of urban areas,

---

[1] N. S. B. Gras, An Introduction to Economic History (New York: Harper, 1922), p. 186.

at the expense of rural, continued through 1891 when the cities and towns claimed 31.8 p.c. of the total population, 1901 with 37.5 p.c., 1911 with 45.4 p.c., 1921 with 49.5 p.c., 1931 with 53.7 p.c., and finally 1941 with 54.3 p.c. of Canada's population. Commenting at this point, Dr. Whitworth[2] notes:

> Implications of this trend towards urbanization are observable in percentages in various occupations. Indirectly it affects production by changing wants due to differences in the ways of living. This in turn affects job opportunities....

Since the 1871 census, the urban population has increased nearly eightfold, while the rural population has not even doubled. The Industrial Revolution transformed large cities into the centres of production, which are the modern cities of today. Cities have increased industrial and occupational specialization, increasing the individual's ability to do one particular job and his dependence upon the work of others at the same time, but decreasing his grasp of his occupation as a whole.

Rural and Urban Occupational Mobility. -- The problem of rural-urban migration has long attracted the attention of demographic experts. Professor Hurd[3] gives four main contributory causes for rural-urban migration. These causes, which vary in importance by place and time (that is, from region to region and from decade to decade, are: (1) the decline of the rural artisan class, which process operated in the early history of eastern Canada, but is now about complete; (2) the high rural birthrates, which are about half again higher than those required to maintain a

---

[2] F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 21.

[3] Cf., W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), pp. 56-66 for a very thorough study of Canadian rural-urban migration.

stationary rural population; (3) technological improvements and mechanisation, which advancements all tend to increase agricultural production, to reduce farm labour requirements, and hence to encourage rural population surpluses; and (4) the increasing size of farms, which continuing trend toward larger farm units is contributing in some measure to the prospective surplus of rural population.

Table XI-1[4]

Per Cent of Population by Years of Residence in Province for Canada, Rural and Urban, 1941.

		Years of Residence in Province[5]							
		Always	Under 2	2-4	5-9	10-14	15-19	20-24	25 +
Rural. .	T	75.9	1.0	1.6	1.9	3.9	2.4	2.0	10.2
	M	74.3	1.0	1.5	1.8	4.2	2.8	2.4	11.2
	F	77.8	1.0	1.6	1.8	3.6	2.6	2.4	9.1
Urban. .	T	69.0	1.9	1.9	2.3	4.7	3.8	3.5	12.5
	M	67.6	1.9	1.8	2.2	5.0	3.9	3.4	13.4
	F	70.4	1.9	2.0	2.3	4.4	3.7	3.6	11.7

A further point in the mobility of the members of the working force is the stability of the population. The 1941 census asked the gainfully occupied to state their occupation ten years ago (in 1931); and this stability is further discussed in chapter XVII. Table XI-1 sets forth in tabular form a detailed substantiation of the fact that rural populations are relatively more stable than urban. Rural females are the most stable group (77.8 p.c.), and urban males are the least stable (67.6 p.c.).

[4]Whitworth, op. cit., p. 50.

[5]Including not stated, 1.10 p.c. for rural and 0.45 p.c. for urban.

This table is subject to enumerates memory bias and to the occurence of multiple moves but it gives the observer some idea of the length of time present residents have lived in any specific province. We may conclude this section with Professor Patterson's[6] timely summarization:

> As numbers increase and as a rapidly advancing technology adds to the complexities of life, there appear a host of internal strains. Under various pressures there are numerous shifts of location and of occupation. Crowded conditions in urban areas create social and economic difficulties that are difficult to meet.

The Occupational Pyramid. -- The present section is based on an important concept in urban sociology. This notion is perhaps best set forth by quoting Mr. Dickinson[7]:

> The majority of the people of a town are engaged in providing goods and services for other communities, for which they get necessary goods and services from other communities in exchange. These are the basic occupations of that community.

It is upon this base that the occupational pyramid's superstructure is constructed. This secondary dependent structure is implied when Mr. Dickinson[8] refers to:

> ....the ubiquitous occupations, both industries and services, that are everywhere proportional to the distribution of population, and serve primarily the immediate needs of those engaged in the basic occupations.

Referring to those two groups, Mr. McCarthy[9] shows that the basic industries of a community form the foundation of that community's "occupational pyramid". The base of this occupational pyramid dictates the pattern of

---

[6]E. E. Patterson, An Introduction to World Economics (New York: The MacMillan Co., 1947), p. 137.

[7]R. E. Dickinson, City Region and Regionalism (London: Kegan Paul & Co., Ltd., 1947), p. 36.

[8]Loc. cit.

[9]Cf., H. H. McCarthy, "A Functional Analysis of Population Distribution", Geographical Review, Vol. XXXII, 1942, pp. 282-293.

the remaining structure. For any given base, it should be possible to construct an hypothetical structure of occupations. Then, a comparison between the actual and the hypothetical structures would offer clues as to local maladjustments in the given community's occupational organization, both economically and socially.

Canadian Metropolises Occupationally. -- At the time of the 1941 census, there were twenty-seven cities of 30,000 population or over.[10] Table XI-2 presents six of these Canadian metropolises with the gainfully occupied in each broken down by occupation group.

In Halifax, manufacturing occupations were relatively less important than transportation and service occupations in terms of percentage gainfully occupied. In Hamilton, manufacturing predominates among the male gainfully occupied. Montreal's males generally follow the expected Canadian norm, exceeding it in manufacturing and falling below in labouring occupations. In Ottawa service and clerical occupations predominate; in Toronto, manufacturing, clerical, trade and finance; and in Vancouver primary occupations exceed the norm. A similar analysis is possible for the female working population in these cities[11] and in all twenty-seven metropolises.

Before leaving these big cities, it is instructive to notice which of them had the largest proportion of gainfully occupied males in each

---

[10] Cf., Occupations and Industries Bulletin, No. 0-6, Occupational Trends in Canada, 1901-1941, (Ottawa: Dominion Bureau of Statistics), for a complete tabular description of these twenty-seven cities for 1931 and 1941 by sex for both numbers employed and percentages; Cf., also, Whitworth, op. cit., pp. 71-78.

[11] Cf., female percentages in table XI-2.

Table XI-2

Gainfully Occupied showing Occupation Group as a Per Cent of All Occupations, by Sex, for selected Cities, for Canada, 1941.[12]

Occupation Group		HALIFAX	HAMILTON	MONTREAL	OTTAWA	TORONTO	VANCOUVER
Primary	M	1.13	1.12	0.73	1.08	1.00	7.39
	F	0.06	0.08	0.02	0.08	0.03	0.08
Manufacturing	M	14.46	40.37	27.41	17.30	29.31	21.15
	F	6.34	31.00	29.65	8.18	19.72	7.83
Construction	M	9.91	7.45	10.38	7.39	7.72	9.11
	F	0.03	0.12	0.03	0.03	0.12	-
Transportation	M	17.93	7.17	11.30	9.77	8.74	11.86
	F	1.61	1.17	1.54	1.39	1.61	3.55
Trade & Finance	M	15.69	11.47	14.04	13.75	16.80	16.06
	F	13.87	11.87	10.01	6.80	11.95	14.92
Service	M	17.13	11.49	15.07	22.84	16.45	16.60
	F	50.90	31.64	37.09	39.80	35.55	48.72
Professional	M	5.72	4.44	5.13	9.86	6.40	4.94
	F	14.19	10.59	10.05	10.98	10.89	14.39
Personal	M	7.68	5.21	7.43	6.94	7.81	9.11
	F	36.64	20.96	26.90	20.05	24.43	33.83
Clerical	M	12.61	6.81	10.74	21.35	12.60	8.45
	F	26.30	21.54	19.90	46.69	29.50	24.22
Labourers	M	10.69	11.77	9.78	6.35	6.78	9.16
	F	0.53	2.84	1.56	0.34	1.28	0.52

[12]Source: Occupational Trends in Canada, 1901-1941, op. cit.

occupation group[13]: in Sudbury, 31.6 p.c. were in primary occupations; in Kingston 10.9 p.c. were in construction; in Kitchener, 47.6 p.c. were in manufacturing; in Saint John, 21.5 p.c. were in transportation; in Ottawa, 22.2 p.c. in service; in Outremont, 33.5 p.c. in trade and finance; and in Hull, 34.1 p.c. of the gainfully occupied males were enumerated in 1941 in labouring occupations.

Earnings Occupationally.[14] -- The mean annual earnings for the urban family in the twelve months preceding June 2, 1941 were $1520.44 and for the rural family were $1100.74. These earnings varied by age of the head of the family, from $880.14 for the rural family whose head was over 65 years of age to $1826.03 for the urban family whose head was between 45 and 64 years of age. Earnings were about one-third higher for heads of urban families of Anglo-Saxon origin than for those of French origin. For rural families, the spread between Anglo-Saxon and French mean earnings is even greater. As a rule, earnings for farm labourers are much lower than for other rural occupations. As noted by Professor Hurd,[15] these differences reflect variation in occupational distribution with which are associated differences in skills, hourly earnings, and steadiness of employment.

Summary. -- A summarized comparison of rural and urban occupations is given by Mr. Woolston[16]:

---

[13]Cf., Whitworth, op. cit., p. 75.

[14]Cf., W. B. Hurd, "Ethnic Origin and Nativity of the Canadian People" (Ottawa: Dominion Bureau of Statistics), unpublished 1941 census monograph, table 69A.

[15]Ibid., p. 80.

[16]W. Woolston, Metropolis (New York: D. Appleton-Century Co., 1938), p. 180.

> Rural occupations are governed primarily by seasonal changes, and by the movement of crops that follow these. Urban employment reflects more rapidly alterations in market conditions and in technical processes that affect industry.

This chapter has followed the past trends of occupational urbanization, noted the importance of occupational mobility, referred to the "occupational pyramid", indicated the occupational characteristics of Canada's metropolies, and touched on the earnings differential between urban and rural occupations. Limitations of space have forced the omission of many other relevant subsections and important topics, such as: the amazing difference in the number of separate occupations found in cities[17]; urban distinctions and the proliferation of class differences in status[18]; the problems of Canada's rural areas[19]; urban juvenile deliquency[20]; Australian urbanization[21]; United States rural-urban shift[22]; and numerous other instructive subjects all in conjunction with, or related directly to the rural-urban distribution of Canada occupationally.

---

[17]Cf., S. A. Queen & L. F. Thomas, The City (New York: McGraw-Hill Book Co., 1939), especially p. 399.

[18]Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 111-116.

[19]Cf., M. C. Good, "Canada's Rural Problem", The Annals, Vol. CVII (May 1923).

[20]Cf., C. R. Shaw and H. D. McKay, Juvenile Delinquency and Urban Areas (Chicago: University of Chicago Press, 1942).

[21]Cf., G. L. Wood, "Occupations and Urbanization", The Annals, Vol. 158, (November 1931).

[22]Cf., J. D. Durand, The Labour Force in the United States, 1890-1960 (New York: Social-Science Research Council, 1948).

CHAPTER XII

SOCIOECONOMIC AND SOCIOCULTURAL DIFFERENTIATIONS OCCUPATIONALLY

Following in logical order after the rural-urban grouping of the last chapter, the present chapter is concerned with the social cultural grouping of Canada's gainfully occupied, and more particularly with the social economic grouping. Mr. Landis[1] has written:

> In any society a delicate balance is maintained between working and nonworking groups and between various occupational groups. The distribution of the various vocations may change rather slowly or it may change rapidly, depending upon the trend of cultural development and the rate of cultural change within a nation..... Obviously the level of development of a culture determines in large part the proportion of people that can be placed in any given type of occupation.

Thus for example, in an agricultural society most people are producing food, shelter, and clothing; while in a highly urbanized culture, few people are engaged in such pursuits.

Culture Occupationally. -- Mr. Malinowski[2] has worked out a cultural list of universal institutional type. In this list his fifth principle of integration is that of occupational ability, training, and preference. He represents this occupational and professional principle as "the organization of human beings by their specialized activities for the purpose of common interest and a fuller achievement of their special abilities."[3]

---

[1] P. H. Landis, Population Problems (New York: American Book Co., 1943), pp. 327-329.

[2] Cf., B. Malinowski, A Scientific Theory of Culture (Chapel Hill: The University of North Carolina Press, 1944).

[3] Ibid., p. 64.

Occupational distinctions vary greatly from culture to culture; and, "as culture advances, the various occupational and specific functional tasks become gradually differentiated and incorporated into specific institutions."[4] Thus, culture may be interpreted as being a vitally important contributory factor in the determination of occupational preferences.

In "Yankee City", Warner and Lunt[5] go to great lengths to illustrate and demonstrate the high degree of correlation between the type of occupation and the class position, but conclude with the caution:

> Class and occupation are closely interrelated, but it is a mistake to classify all professional people at the top of the heap and all workers at the bottom; far too many factors contribute to a person's social status for such arbitrary ranking to be exact and accurate.[6]

A Social Economic Grouping.[7] -- This new grouping tends to follow the lines of demarcation used in sociological and industrial studies. It also coincides with the conversation of "the man in the street" more closely than does the conventional census grouping (of appendix I). This grouping, although somewhat arbitrary, should provide an objective basis and numerical ratios for concepts already in use. The six divisions selected are comparable with a similar classification of workers in the 1930 United States census.[8]

---

[4] Ibid., p. 59.

[5] Cf., W. L. Warner and P. S. Lunt, The Social Life of a Modern Community (New Haven: Yale University Press, 1941).

[6] Ibid., p. 262.

[7] Cf., F. F. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), pp. 79-93. The following section is based very largely on Dr. Whitworth's interpretation and presentation of this new grouping.

[8] Cf., A Social Economic Grouping of the Gainful Workers of the United States (Washington, D. C: Superintendent of Documents, 1938).

Table XII-1 breaks down the 1941 census occupations into six social economic groups. A complete list of all the occupations included in each such group is tabulated in appendix II. This grouping suffers from inescapable limitations; such as, the wide variability within each group (eg., professional wages vary from $174 for nurses-in-training to $5,369 for judges and magistrates), the virtual impossibility of accurately differentiating unskilled from semiskilled from skilled occupations, and the gradual change in the requirements of certain occupations. Notwithstanding such limitations together with the imperfections of possible enumerative or clerical errors, this social economic grouping is one of the most useful of its kind.

The complete analysis of all phases of this grouping would provide more than adequate material for an entire monograph. However, this section will mention superficially a few outstanding features, which have been summarized in tabular form in table XII-1. Historically, rows 1 to 3 of this table set forth the occupational trend for the past three census reports. The most noticeable changes are the percentage decrease in the managerial occupations for both sexes; the professional increase for males, but decrease for females; the increase in percentage of males in skilled occupations, but decrease for females; and the increase in percentage of females in unskilled and service occupations.

The median is statistically defined as that value which divides a distribution so that an equal number of items are on either side of it.[12]

---

[9] Cf., F. E. Croxton and D. J. Cowden; Applied General Statistics (New York: Prentice-Hall, Inc., 1941), pp. 207ff.

Table XII-1

Gainfully Occupied in Canada, Classified in Social-Economic Groups by sex[10]

Social-Economic Group	Row Number	Sex	Professional	Proprietors, Managers, Officials	Clerical and Commercial	Skilled Workers and Foremen	Semi-Skilled Workers	Unskilled and Service Workers
1921[11]	1	M	2.9	33.2	10.7	11.6	11.5	30.1
		F	19.0	5.4	29.8	5.3	22.4	19.1
1931[11]	2	M	3.2	25.8	11.4	13.9	12.4	33.3
		F	17.6	4.5	27.3	2.7	22.5	25.4
1941[11]	3	M	3.7	25.7	11.6	15.8	12.3	30.9
		F	15.2	3.7	27.9	1.5	17.6	34.1
Median Age	4	M	39.5	47.2	34.9	40.6	34.3	31.1
		F	32.1	49.6	26.2	25.5	25.2	25.9
Number of Years at School[12] 0-4	5	M	0.5	15.4	2.1	8.8	8.2	17.0
		F	0.3	12.8	0.4	3.3	3.6	8.0
5-8	6	M	7.6	55.3	28.1	52.0	54.9	61.1
		F	7.2	44.1	15.4	41.8	45.7	55.3
9-12	7	M	27.2	24.8	57.1	35.6	34.1	20.5
		F	55.9	37.2	70.0	50.7	47.7	34.3
13+	8	M	64.9	4.5	12.7	3.7	2.8	1.4
		F	36.6	5.9	14.2	4.2	3.0	2.4
Annual Earnings	9	M	$1,800	$2,200	$1,275	$1,100	$900	$665
		F	850	1,100	770	560	525	266
Weeks Worked	10	M	48.0	51.0	47.0	42.5	43.0	34.25
		F	48.0	49.0	44.5	40.0	39.5	37.4
Single[12]	11	M	35.4	15.3	37.5	25.0	32.9	55.9
		F	92.2	26.5	87.9	77.7	78.8	74.3
Married[12]	12	M	61.9	79.9	59.6	70.4	63.7	40.5
		F	4.7	21.5	7.5	13.3	13.0	12.0

[10] F. E. Whitworth, op. cit., pp. 82-93.

[11] As per cent of total gainfully occupied for the given year.

[12] As per cent of total gainfully occupied in the given social-economic group. Remaining conjugal conditions are widowed and divorced or separated.

Thus the median age, as given in row 4 of table XII-1, divides the workers in each group into two equal groups, with half older and half younger than the tabulated median age. Managerial males are the eldest (47 years of age) with skilled and professional males following. It is worthy of note that, in general, male skill varies directly with the worker's age. Because of the preponderance of younger working girls, more than half of the females in each class are under 30 years of age. There are noticeable exceptions in the cases of professional women (age, 32 years) and particularly managerial women, half of whom are over fifty years of age.

Rows 5 to 8 show the number of years of attendance at school and indicate that, on the average, the female working population has attended school considerably longer than the male workers, for all groups except professional men, (65 p.c. of whom have a college education). All non-professional occupations show less than 15 p.c. with post-high school education. The clerical-commercial groups show the second greatest number of years at school, while the unskilled and service occupations show the least.

The annual earnings of row 9 include only the wage earners in each group since census enumerators do not collect data on earnings of enterprisers. In all cases, the male groups received higher wages than the comparable female groups. With the exception that managers earn more than professional people, the average wages dropped for the groups in the order recorded; and the same is true of weeks employed (row 10). For both professional groups weeks worked are the same, and only in the unskilled and service occupations does the female average exceed that of the males.

Conjugal condition is given for the single and married workers in rows 11 and 12. Since the greater percentage of males in the unskilled and service group are under 20, we would expect to find that over half of that group are single; in no other group are more than half of the male workers single. The highest number and percentage of married male workers are found in the managerial class. More than 70 p.c. of the females in each class were single with the noticeable exception of female managers, where 21.5 p.c. are married, 47.2 are widowed and 4.3 p.c. are divorced.

Summary. -- This chapter's relatively comprehensive demographic study of Canada's gainfully occupied as differentiated into socioeconomic groups has presented an important insight into the general tendencies and average inclinations of these groups. Other relevant occupational topics which offer fields for further analysis are: cultural factors in ethnic groups[13]; socioeconomic fertility[14]; social classes[15]; French-Canadian culture occupationally[16]; Indian culture occupationally[17]; and minority cultures occupationally.[18] These and many other studies, to incorporate

---

[13]Nathan Keyfitz, "Ethnic Groups and Their Behaviour", The Annals, Vol. 253, (September 1947), p. 161.

[14]Enid Charles, "The Changing Size of the Family in Canada", Census of Canada, 1941, Monograph No. 1 (Ottawa: Dominion Bureau of Statistics, 1948), p. 97.

[15]L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 377ff.

[16]B. K. Sandwell, "The French Canadian", The Annals, Vol. 253 (September 1947), pp. 169ff.

[17]T. F. McIlwraith, "The Indians of Canada", The Annals, Vol. 253 (September 1947), pp. 164ff, and
T. R. L. MacInnes, "The History of Indian Administration in Canada", The Canadian Journal of Economics and Political Science, Vol. 12 (August, 1946), pp. 387ff.

[18]Keyfitz, op. cit., pp. 162-163.

such census data regroupings, suggest themselves. The present chapter has both indicated what can be done along this line (by introducing the social-economic grouping), and added socioeconomic and sociocultural differentiation to our demographic study of Canada occupationally.

"Studiorum omnium satietas vitae facit satietatem"

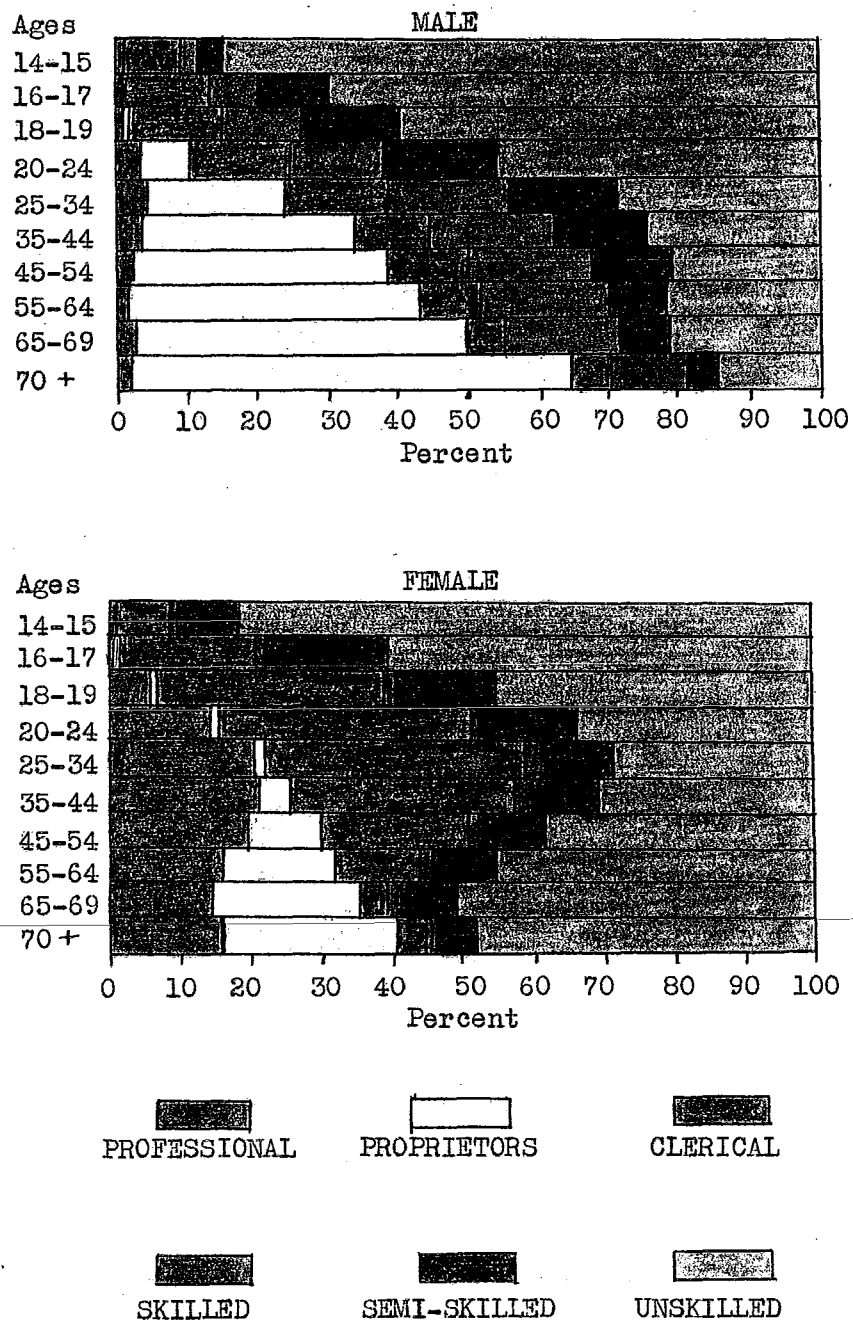
(Satiety of all occupation causes satiety of life)

Cicero,
De Senectute,
Chap. xx, sec. 76.

Chart XII-1

PERCENTAGE DISTRIBUTION OF MALE AND FEMALE

SOCIAL-ECONOMIC GROUPS BY AGE DIVISION, 1941



Source: Whitworth, op. cit., p. 84.

CHAPTER XIII

THE BLIND AND DEAF-MUTES OCCUPATIONALLY[1]

The present chapter deals occupationally with two kinds of the physically defectives in Canada -- the blind and the deaf-mutes. In the 1941 census, as in 1921 and 1931, a supplemental schedule was provided for the purpose of obtaining a special record of each blind and-or deaf-mute person enumerated. The 1941 census defines as blind, any person who cannot read a given group of letters about one-half inch high at a distance of one foot, with glasses on, if worn. 9968 persons in Canada were blind by this definition. The 1941 census enumerators were instructed to include as deaf-mute, any person who was totally deaf from birth; in general, persons who could not hear or talk.[2] This census enumerated 1796 persons in Canada who were deaf-mutes by this definition. There were also enumerated 156 persons who were both blind and deaf-mutes.

---

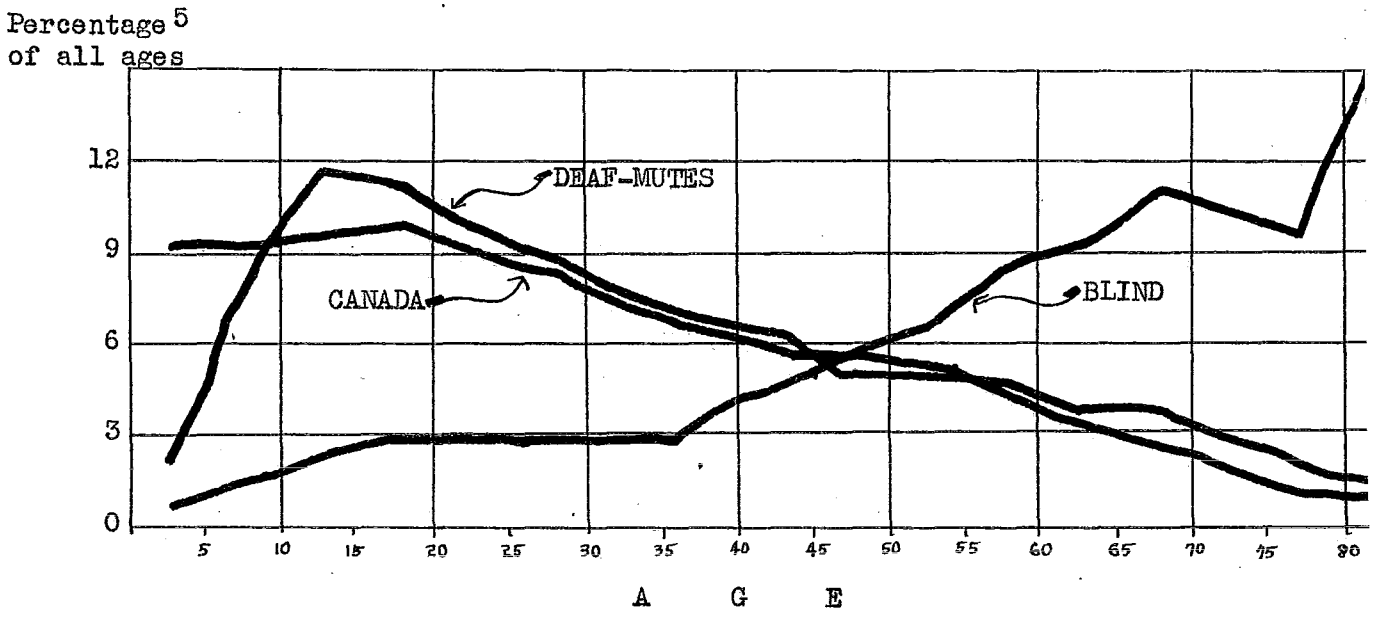
[1]This chapter is entirely based on occupational research carried out last summer (1948) at the Dominion Bureau of Statistics, and the chapter which I was privileged to write at that time, entitled The Blind and Deaf-Mutes, for Volume I of the 1941 census of Canada. The basic figures for all computed measures are taken from the photostats, the work sheets, and-or Volume IV pages 923-975.

[2]These definitions are from Instructions to Commissioners and Enumerators, Census of Canada, 1941 (Ottawa: Dominion Bureau of Statistics, 1941).

The Gainfully Occupied in General[3] -- For every 100,000 gainfully occupied males in 1941 in Canada, 37 were blind and 50 were deaf-mutes;

CHART XIII-1

PERCENTAGE AGE DISTRIBUTIONS[4]



and for every 100,000 gainfully occupied females, 22 were blind and 36 were deaf-mutes. As defined in chapter I, a gainful occupation for the blind or deaf-mutes is one by which the person (14 years and over) who pursues it, earn money, or in which he assists in the production of goods. Employers, own accounts, wage-earners, and no pays are defined for the blind and deaf-mutes in a manner exactly similar to the general population. For every 1000

[3]Gainfully occupied figures are based on the numbers in each specified population over 14 years of age.

[4]Source: Table 6, from census reports and photostats.

[5]Based on totals of 11,506,655 for Canada; 9,932 for blind; and 7,196 for deaf-mutes.

gainfully occupied in Canada, there were 59 employers, 188 own accounts, 671 wage-earners, and 82 no pays; as compared with 92 employers for every 1000 gainfully occupied blind, 404 own accounts, only 430 wage earners, and 74 no pays; and for every 1000 gainfully occupied deaf-mutes enumerated, there were 20 employers, 156 own accounts, 594 wage earners, and 230 no pays.

Age of Infirmed[6] Occupationally. -- The incidence of blindness increases as age increases while deaf-mutism is largely congenital. The remarkable dissimilarities between these populations by five year age groups is clearly exemplified in chart XIII-1. The size of the general population of Canada (by age groups), increases slightly before age 20 but decreases slowly and steadily thereafter as the age increases. The deaf-mute population increases rapidly before 15 years of age, after which it decreases continually as age increases and closely approximates the general trend remaining slightly above it after 55 years of age. The blind population, on the other hand starts at a very low point (only 61 blind or 0.6 p.c. of the total blind are under 5 years of age) and increases as age increases slowly at first but more rapidly after 40 years; the slight decrease between 70 and 80 is compensated by the rapid increase over 80 years. In each five year age group there was a greater percentage of the blind, than of the total population, who were employers and own accounts; and, in each age group, a smaller percentage of the blind who were wage earners. Deaf-mute wage earners were younger than blind, but both were older than the general population of Canada.

---

[6]The word "infirmed" has been used throughout this chapter to mean "the blind, the deaf-mutes, and the blind deaf-mutes".

Sex of the Infirmed Occupationally. -- The 1941 census in Canada enumerated 130 blind males for every 100 blind females, and 110 deaf-mute males for every 100 deaf-mute females, as compared with a masculinity rate of 105 for the general population. 76.7 p.c. of Canada's males and 20.2 p.c. of Canada's females were gainfully occupied in 1941; while only 22.8 p.c. of the blind males and only 4.4 p.c. of the blind females were gainfully occupied; and 55.8 p.c. of the deaf-mute males and 10.9 p.c. of the deaf-mute females were gainfully occupied.

Table XIII-1

The Blind and Deaf-Mute Gainfully Occupied[7]

Population	Canada	Blind		Deaf-Mutes	
	%	%	rate[8]	%	rate[8]
Total 14 and over	100	100	112	100	68
Males	100	100	123	100	69
Females	100	100	101	100	67
Masc. rate[9]	106	130		109	
Gainfully Occupied Total	49.3	14.8	34	34.4	46
Males	76.7	22.8	37	55.8	50
Females	20.2	4.4	22	10.9	36
Masc. rate[9]	404	677		559	

In Which Occupational Groups? -- Of the blind gainfully occupied males 37 p.c. were in agriculture; and, for the blind gainfully occupied females, 29.2 p.c. were in manufacturing and 44.0 p.c. in the service occupations. 59.0 p.c. of the blind in agriculture were own accounts; in manufacturing 73.9 p.c. of the blind were wage-earners. For the gainfully

[7]Source: 1941 census reports and photostats.

[8]Rate per 100,000 population.

[9]Number of males per 100 females.

occupied male deaf-mutes, 40.6 p.c. were in agriculture and 29.5 p.c. in manufacturing; for the gainfully occupied female deaf-mutes, 42.9 p.c. were in manufacturing and 46.2 p.c. in service occupations. 53.4 p.c. of the deaf-mutes in agriculture were own accounts. For every 100,000 Canadian males in manufacturing 41 were blind and 67 deaf-mutes, in construction only 6 were blind, in the occupation of transportation and communication only 4 were blind and only 7 deaf-mutes, in trade and finance 12 were deaf-mutes but 71 were blind; for every 100,000 females in agriculture 64 were blind, in manufacturing 41 were blind and 100 were deaf-mutes, and in clerical occupations only 6 females were blind and 6 were deaf-mutes.

Provincial Distribution. -- For every 1000 blind Canadians enumerated, 316 were in Quebec, 313 in Ontario, 84 in N. S., 72 in N. B., 60 in B. C., 56 in Manitoba, 45 in Saskatchewan, 40 in Alberta, 11 in P. E. I., and 2 in the Territories. For every 1000 deaf-mutes enumerated in 1941 in Canada, 395 were in Quebec, 274 in Ontario, 67 in Saskatchewan, 60 in N. S., 58 in N. B., 48 in Alberta, 56 in B. C., 9 in P. E. I. and less than one (0.5) in the Territories. Canada is split provincially by the Ontario-Quebec border, east of which in each province there are more blind and more deaf-mutes per 100,000 population, while each province west of this boundary exhibits less blind and less deaf-mutes than the Canadian average. The provincial occupational tendencies indicate that the gainfully occupied in the Maritimes had more blind and more deaf-mutes than the general population would lead us to expect, Quebec had more deaf-mutes, the Prairies had less blind, and B. C. less deaf-mutes than would be anticipated from general population estimates.

The Infirmed Wage-Earners. -- For every 100,000 male wage earners 23 were blind and 46 were deaf-mutes, as compared with 96 blind and 64 deaf-mutes for every 100,000 males in the total population; for every 100,000 female wage-earners only 17 were blind and 31 were deaf-mutes, as compared with similar frequencies of 77 and 61 for the total population. Only 6.4 p.c. of the blind and 20.4 p.c. of the deaf-mutes over 14 years of age were wage earners as compared with 33.1 p.c. of the total population of Canada.

For every 1000 blind male wage earners enumerated in 1941 in Canada, 335 gave their occupation as manufacturing, 200 as trade and finance, and 209 as service; for every 1000 blind female wage earners, 438 gave their occupation as manufacturing and 356 as service. For every 1000 deaf-mute male wage earners enumerated, 430 gave manufacturing as their occupation, 145 were labourers, and 144 were in agriculture; for every 1000 deaf-mute female wage-earners, 470 were in manufacturing and 419 in service occupations.

Earnings and Weeks Worked. -- The average earnings of blind wage earners was $594,[10] as compared with $868 for the general population, and the average blind male earnings was $637 and female $417, as compared with $993 for males and $490 for females of the general population, and the average annual earnings for deaf-mute males was $611 and $332 for females. In each occupation individually, the average blind male earned less than the average Canadian male; and the average deaf-mute earned less in each occupation with the one interesting exception in the clerical occupations where the average deaf-mute male earned $1227; that is, ironically, a clerk earns more on the average if he is deaf and mute.

---

[10] All figures on earnings and employment are for the year ending June 2, 1941.

On the average the blind were employed 41.4 weeks in that year[11] which closely approximates comparable employment for all wage earners; but the deaf-mute average was only 37.5 weeks.

Unemployment. -- Looking at the infirmed unemployment picture we see 11.0 p.c. of the blind and 8.6 p.c. of the deaf-mute wage earners unemployed, as compared with 6.8 p.c. of the total wage earners who were not at work on June 2, 1941. Of the 67 blind wage earners unemployed on June 2, 1941, 37.3 p.c. were not at work because of no job and 40.3 p.c. because of illness. Of the 102 deaf-mutes not at work on this census day, 64.7 p.c. were absent because of no job, 18.7 p.c. because of illness, 10.8 p.c. had been laid off temporarily, and 3.9 p.c. were on holiday.

Summary. -- The present chapter has been concerned with the occupational situation of the blind and deaf-mute populations in Canada as based on the 1941 census figures. If the reader feels that an undue preponderance of weight has been given to this chapter, it is because the author and an assistant spent nearly three months last summer (1940) in exhaustive research and investigation into every phase of the social analysis of Canada's blind and deaf-mute populations; and because, within Canada's eleven million in 1941, these smaller infirmed sub-populations, behave remarkably like Canada's general population with certain interesting deviations. We have not space in this chapter to go into many of the absorbingly interesting facts which our study brought to light. In this chapter we have briefly sketched the occupational outline of the blind and deaf-mutes as enumerated by Canada's 1941 census. As shown in table XIII-1

---

[11] Year of 52 weeks ending June 2, 1941.

34.4 p.c. of Canada's deaf-mutes but only 14.8 p.c. of the blind were gainfully occupied, as compared with 49.3 p.c. of the total population of the Dominion. These total figures roughly repeat what this chapter has shown -- that the blind are older and less occupied gainfully; while the deaf-mutes, in spite of their infirmity, more closely approximate the general population in this respect. The crude figures, percentages, and rates throughout this chapter have supported the expected thesis that neither the blind nor the deaf-mutes is able to carry its proportionate share of Canada's occupational load. This study of Canada's blind and deaf-mutes occupationally has been necessary and useful in rounding out our overall picture of Canada occupationally.

"Serious occupation is labour
that has reference to some want."

G. W. F. Hegal,
Philosophy of History.

CHAPTER XIV

SOCIAL FACTORS OCCUPATIONALLY

Since a thorough coverage of all the social factors and implications related to Canada's occupational distribution is virtually impossible, even for the numerous cross-classifications available from census data, the present chapter presents the following factors and their relationship to Canada occupationally.

Education Occupationally

Professor Williamson[1] commences his chapter "What colleges can do for students" by suggesting that the student ask himself two questions simultaneously, "Should I go to college?" and "What vocation should I prepare for?" He then goes on to show to some that:

> ....college training is not possible or desirable for them; to others, ...that some general college education is wise even though they are not ready or qualified for professional training; to others,....that college training is both desirable and wise for them.... Although methods may differ, all educators are agreed that it is the purpose of schooling to help students to live more easily, graciously, effectively and satisfactorily than they could without schooling.[2]

---

[1] E. C. Williamson, Students and Occupations (New York: Henry Holt & Co., Inc., 1937).

[2] Ibid., p. 1.

Canadian Education.[3] -- Largely to protect the rights of the people of Quebec, the British North America Act provides for provincial autonomy in Canadian education. In Quebec, the Protestant and Catholic schools function under separate committees. Mr. Wallace[4] states that there is "no uniformity in education in Canada at the primary and high school levels." However, the universities are less directly related to the provincial authorities. Mr. Truesdell[5] in his study of The Canadian Born in the United States, thoroughly discusses illiteracy in the Canadian stock both in Canada and in the United States.[6] He shows that the percentage of illiteracy among Canadian males is appreciably higher than among females. 10 p.c. of the French-Canadian born were illiterate, but less than 0.7 p.c. of the English-Canadian born were illiterate.

Education of the Gainfully Occupied. -- The last columns of table XIV-1 give the percentage of gainfully occupied in the various occupation groups who have had relatively no formal school training (0 to 4 years of schooling), and those who received the equivalent of a college education (13 years of schooling, and over). These 1941 census figures for the gainfully occupied in Canada substantiate the previously noted fact that, in general, females are more literate than males. Fishermen, hunters, and

---

[3]Cf., R. C. Wallace, "Education in Canada", The Annals, Vol. 253, (September 1947), for a concise and informative summary of education in Canada.

[4]Ibid., p. 176.

[5]L. E. Truesdell, The Canadian Born in the United States (New Haven: Yale University Press, 1943).

[6]Cf., Ibid., pp. 179-190.

Table XIV-1

Percentage of Gainfully Occupied, 14 years of age and over, by Occupation Group by Sex, for Conjugal Condition and years of Schooling.[7]

Occupation Group[8]	Conjugal Condition[9]				Years of schooling[10]			
	Single		Married		0-4		13 +	
	M	F	M	F	M	F	M	F
All Occupations. . .	34.6	79.9	61.5	10.3	11.9	4.1	6.3	11.1
Agriculture.	42.2	31.8	53.9	10.3	15.5	17.1	1.3	2.8
Fishing, Hunting, Trapping	37.1	50.9	57.0	5.2	41.2	71.9	0.6	-
Logging.	50.7	(11)	45.3	(11)	29.4	(11)	0.9	(11)
Mining, Quarrying. .	33.7	(11)	62.4	(11)	17.7	(11)	2.9	(11)
Manufacturing. . . .	29.4	79.1	66.9	13.6	7.8	4.6	4.6	2.5
Construction	22.6	79.4	71.4	11.2	11.0	2.4	3.1	7.7
Transportation, Communication. . . .	28.6	84.3	67.7	9.0	9.5	0.7	3.1	7.2
Trade.	24.9	79.5	71.4	11.6	5.5	1.9	9.9	6.1
Finance.	12.8	53.7	82.9	16.1	1.2	2.6	20.8	22.7
Service.	27.9	78.6	67.6	10.4	7.1	5.5	28.5	13.0
Clerical	39.9	89.7	57.5	6.7	1.1	0.2	15.6	17.9
Labourers[12].	40.7	55.2	55.0	10.1	18.4	4.6	1.5	2.1

[7]Based on census Vol. VII.

[8]Based on totals which include conjugal condition 'not Stated'.

[9]For each occupation percentages of widowed, and of divorced or separated, have been excluded from this table.

[10]The percentage of gainfully occupied in each occupation with 5 to 12 years of schooling have been omited.

[11]Only 5 and 25 females respectively in these occupations.

[12]Not in agriculture, fishing, logging, or mining.

trappers with 41.8 p.c. show the greatest percentage of illiteracy,[13] followed by those males in logging occupations with 29.4 p.c., in labouring with 18.4 p.c., mining with 17.7 p.c., and in agriculture with 15.6 p.c. Of the males in service occupations, more than one-quarter (26.3 p.c.) had college educations; followed by 20.8 p.c. in finance, 15.6 p.c. in clerical, and nearly 10 p.c. of the males in trade who had college educations. A larger percentage of women in each occupation were enumerated as having post-high school education than men except in manufacturing, trade, and service occupations. We have already observed the number of years at school of the gainfully occupied workers as broken down by social-economic groups.

Educational Summary. -- The present section has presented a brief outline of the Canadian educational picture. Many other educational subjects could have been presented, among which exist the following: occupational education of French Canadians[14]; school as a source of labour supply[15]; rural educational standards[16]; urban class differences[17]; dovetailing of employment and education[18]; occupational indecision among

---

[13]This interpretation follows the generally accepted social analysis treatment, where 0-4 years of schooling represent relative illiteracy.

[14]Cf., B. K. Sandwell, "The French Canadians", The Annals, Vol. 253 (September 1947), p. 172.

[15]Cf., L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), pp. 161ff.

[16]Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 238ff.

[17]Cf., Ibid., pp. 248ff.

[18]Cf., Ibid., pp. 438ff.

college students[19]; required education for each occupation[20]; and so on. This section has shown, as anticipated, that female workers attended school longer than male, that those in the primary and labouring occupations showed relatively high degrees of illiteracy, and that the professional and clerical commercial occupations led in college-educated workers.

Conjugal Condition Occupationally

Next to sex and age, conjugal condition is one of the most fundamental aspects of the population. The 1941 census divides the population of the Dominion into single, married, widowed, permanently separated for domestic reasons, and divorced.[21]

Marital status of employed women. — Mr. Durand[22] shows that the proportion of women in the labour force differs appreciably according to their conjugal condition, "hence the relative numbers of single, married, and widowed or divorced women in the population have an influence on the size of the labor force."[23] The Labour Force Bulletin's[24] estimates of

---

[19]Cf., Occupations Journal, (February 1949), p. 331.

[20]Cf., F. M. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 49.

[21]Cf., "Instructions to Commissioners and Enumerators," Census of Canada (Ottawa: Dominion Bureau of Statistics, 1941), section 83.

[22]J. D. Durand, The Labour Force in the United States, 1890-1960 (New York: Social Science Research Council, 1948).

[23]Ibid., p. 74.

[24]Labour Force Bulletin, No. 8 (Ottawa: Dominion Bureau of Statistics, 1948), p. 16.

the marital status of employed women in Canada since 1945, show slight variations from 640,000 single employed females in February, 1946 to 711,000 in August, 1946; and from 217,000 married employed women in March, 1947 to 317,000 in August, 1947. In 1948, about two-thirds of the gainfully occupied women were single and about one-quarter were married.

Conjugal condition of Gainfully Occupied. -- The first columns of table XIV-1 give the percentages of each tabulated occupation group which fall in either the single or the married category. The most striking, although anticipated fact, is that 61.5 p.c. of the total occupied males, but only 10.3 p.c. of the total occupied females are married. This, and the fact that nearly 80 p.c. of the occupied females are single, is partially accounted for by differing age distributions, but more particularly by the obvious fact that married men continue to work in the enumerated occupations, while most married women work as homemakers and housewives.

Each single percentage of occupied males in the primary occupations, exceeds one-third; and similarly, 40.7 p.c. of labourers and nearly 40 p.c. of the males in clerical occupations are single. For each occupation, the percentage of female workers who are single exceeds that for the single male workers, except in agricultural occupations where 54.2 p.c. of the occupied females were widowed.

The largest proportions of occupied men who are married occur in finance with 82.9 p.c., in construction and in trade occupations, with 71.4 p.c. each. The proportion of occupied females who are married, in each occupation is considerably less than the comparable proportion of occupied males. Of the occupied females, 3 p.c. are divorced or permanently separated for domestic reasons, while the comparable proportion for males is 1 p.c.

Summary. -- The importance of conjugal condition in any demographic study cannot be underestimated, and its significance is particularly evident in an occupational study. This conjugal problem is closely related with the fertility factor discussed later in this chapter. This section could have also studied marital status for the social economic groups previously defined[25]; the size of the family as related to occupational distribution[26]; and many other questions which arise in the relationship between conjugal condition and occupational distribution.

Vital Statistics Occupationally

The Birth Rate Occupationally. -- In most countries of Europe and North America, there has been a general trend toward lower birth rates. Mr. Thompson[27] says that "The most significant trend shown by these data is the steady decline in the birth rate in most European nations and in those lands peopled by the descendants of Europeans." Canada's birth rates are higher than most civilized countries because of expanding frontiers and the potential of continuing urbanization. Since the question of immigration still looms large, Mr. Whitworth[28] writes, "The entrance into Canada of many young men from Europe anxious to make homes for themselves could

---

[25]Cf., Whitworth, op. cit., pp. 92-93 for a concise summary of this point.

[26]Loc. cit.

[27]W. S. Thompson, Population Problems (New York: McGraw-Hill Book Co., Inc., 1942), pp. 153-154.

[28]Op. cit., p. 22.

influence the birth rate favourably for some time." On the average, rural Canadian birth rates[29] are nearly half again higher than those required to maintain a stationary population. In the United States, high birthrates on farms have produced more than twice the number of boys required for farm replacements. Canada's relatively high, although declining birthrate has an important effect on the occupational distribution. Professor Hurd[30] has ably summarized the occupational implications:

> The excess has already been born, and in the nineteen twenties when birthrates though declining, were still high. These surplus young people are now coming of working age and will continue to do so year by year for the next decade.

Morbidity Occupationally.[31] — Specific diseases are generally recognized to be aetiologically connected with certain occupations. Defining occupational morbidity:

> Specific occupational diseases may....be defined as diseases found and classified as inherent in certain occupations and acknowledged to be a consequence of some special characteristic feature of the occupation..... It will be seen that the statistical notion of occupational morbidity is a purely relative one, for the only means of determining the occupational risk is by comparing the degree of morbidity in one occupation with that found in other occupations or in the general population.[32]

Obviously, occupational morbidity is an entire subject in itself; and this thesis' occupational research has covered such topics as: measures of

---

[29]Cf., W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1945), pp. 58-59 for an excellent discussion of Canada's high rural birthrates.

[30]Ibid., p. 59.

[31]Cf., Statistical Methods for Measuring Occupational Morbidity and Mortality (Geneva: International Labour Office, 1930), for a thorough international discussion of occupational morbidity. The present section is based on this work.

[32]Ibid., pp. 10-11.

morbidity[33]; international comparisons of morbidity statistics[34]; unhealthy industries and processes[35]; occupational risks[36]; occupational health factors[37]; and numerous other relevant subjects.

Mortality Occupationally. -- Due to advancements in medical science, the death rates, in general, in most civilized countries have been falling. However, Mr. Landis[38] states:

> The gradual shift from farming to urban-industrial employment has shortened the length of life, since agricultural workers have a lower death rate than any other occupational group, with the exception of clerical workers..... Occupations are so important, in fact, that states with widely differing occupational characteristics show marked differences in death rates.

Closely bound up with this problem of the death rate as related to the occupational distribution is the question of length of life, to which we now turn.

Longevity Occupationally.[39] -- There exists no definite or simple relationship of cause and effect between occupation and the length of life. Longevity also depends on many conditions in addition to occupations. A

---

[33]Cf., Ibid., pp. 109ff.

[34]Cf., Ibid., pp. 125ff.

[35]Cf., Encyclopaedia of Industrial Hygiene, Two volumes, (Geneva: International Labour Office).

[36]Equitable Life Insurance Rate Book (Waterloo, 1947).

[37]R. E. Riegel, An Introduction to the Social Sciences, Vols. I and II (New York: D. Appleton-Century Co., 1941), pp. 511ff.

[38]P. H. Landis, Population Problems (New York: American Book Co., 1943), p. 184.

[39]Cf., L. I. Dublin and A. J. Lotka, Length of Life (New York: The Ronalf Press Co., 1936). This section is based on their chapter 10, "Longevity in Relation to Occupation."

clergyman enjoys the best chance of a long and healthy life; long life can also be expected by other professional and white-collar workers. Miners and sandstone grinders have a relatively short expectation of life. Going down the social economic scale, there appears to be a constant increase in the rate of mortality. Summarizing:

> In general, the mortality from nearly all of the principal causes of death was higher among the economically less favoured classes. This was found to be particularly the case as regards tuberculosis and other diseases of the respiratory system.[40]

It might even be said, that a man's occupation is one of the determining factors in fixing his length of life.

Fertility Occupationally.[41] -- The term "fertility" may be broadly defined as the number of children born alive, and is frequently used interchangeably with family size.[42] It has been statistically shown that average fertility varies inversely as the level of social economic classes.

Dr. Charles wrote:

> As a rule, farmers, coal miners, and others engaged in primary industry have larger families than the average, while the families of those engaged in trade and service occupations are particularly small. The typical size of family associated with a given occupation reflects the average earnings and standard of living, as well as the type of work involved. In Canada also the proportional representation of different types of social heritage can vary from occupation to occupation.[43]

---

[40] Ibid., p. 223.

[41] Cf., Enid Charles, "The Changing Size of the Family in Canada", Census of Canada, 1941, Monograph No. 1. (Ottawa: Dominion Bureau of Statistics, 1946). This section is based on chapter V, ("Occupational Differences in Fertility") of this very interesting statistical study of Canada's population in 1941.

[42] "Fertility", the number of children, should not be confused with the statistical term "fecundity", which denotes the reproductive capacity to bear children.

[43] Ibid., p. 93.

With reference to the occupational influence on family size, it was found that primary occupations and unskilled labouring occupations had the largest families, while professional, clerical, trade, and financial occupations had the smallest families. In substantiation of this observation and summarizing family size occupationally, Dr. Charles concludes:

> When the effects of ethnic group, educational status, earnings and urbanization were equalized, the largest families were found among those employed in primary occupations and the smallest in trade, finance, service, and clerical work.[44]

Occupational fertility is an entire subject in itself, and this present section has hardly even scratched the surface of what could be done in this field; in topics such as infant mortality[45]; human reproduction[46]; urban vs. rural occupational fertility[47]; childless marriages[48]; fertility of Canadians gainfully occupied in the United States[49]; and so on.

Summary. -- In each of the above sections under vital statistics, a distinct occupational influence was observed. Any appreciable shift in the country's occupational pattern eventuates in some change of relationship between births and deaths. As it is impossible to completely analyze the full occupational implications of these "vital"[50] topics, the last part

---

[44] Ibid., p.136.

[45] Cf., Health, Welfare and Labour: Reference book for Dominion-Provincial Conference on Reconstruction, p. 55.

[46] Cf., E. L. Potter, Fundamentals of Human Reproduction (New York: McGraw-Hill Book Co., Inc., 1948).

[47] Cf., Charles, op. cit., pp. 137ff.

[48] Ibid., p. 128.

[49] Truesdell, op. cit., p. 244.

[50] "Vital" is used advisedly to refer to the birth, death, and related subjects.

of this chapter has attempted to summarize much of the work that has been done in relating occupations to vital statistics, together with such original research as has proven necessary.

Such social factors as have been dealt with in the present chapter are not the only ones influencing and being influenced by Canada's pattern of occupations, but they are considered to be the most important, and are certainly necessary, useful, and instructive in perfecting the present critical study of Canada occupationally.

"There is a restlessness in inactivity;
we must find occupation for kings."

W. S. Landon,
Imaginary Conversation:
Diogenes and Plato.

CHAPTER XV

PROVINCIAL REGIONS OCCUPATIONALLY

Last but definitely not least, this demographic survey of occupations presents the positional problem of place, provincially. "Where?" is the question asked by this chapter in its analysis of the regional distribution of Canada's occupations.

Interprovincial migration. -- The question of migration of the population and particularly the gainfully occupied between provinces is a problem which is also covered by chapter XVII's occupational mobility, and the reader is referred thereto for a more complete discussion of inter-regional movements. Between the 1941 census and the 1944 population estimates[1] there was a shift between provinces of approximately 50,000 persons per year, and each year the armed forces absorbed about 150,000 persons.[2] In summary:

> An analysis of these major changes presents substantial variations between provinces..... Ontario and British Columbia, with low rates of natural increase, have been the main recipients of interprovincial migration. Quebec, with its high rate of natural increase, has contributed slightly to this migration, while Saskatchewan, with a moderately low rate of natural increase, has been the chief contrib-

---

[1] Estimated by Dominion Bureau of Statistics from the count of ration cards issued April 1944.

[2] Cf., Health, Welfare, and Labour: Reference book for Dominion-Provincial Conference on Reconstruction, pp. 99ff.

> utor of migrants. Four-fifths of the interprovincial drift has been from the Prairie Provinces, and over half from Saskatchewan. The provinces which have received migrants have in general been the heaviest contributors to the armed forces.[3]

It is very improbable that these wartime population shifts will be substantially reversed now that peace has again altered the labour force picture of demand and supply.

Employment and Earnings Provincially.[4] -- Average weekly salaries and wages as reported by the leading employers across Canada are collected and presented annually by the Dominion Bureau of Statistics as broken down provincially.[5] In all the provinces, the wage trend was upward in 1947. The 1947 increases in per capita weekly salaries over 1946 ranged from less than 6 p.c. in Nova Scotia to 13.6 p.c. in Ontario. As pointed out by Miss Roughsedge[6]:

> Although the changes in the year varied within rather narrow limits, the provincial index numbers of average weekly earnings, (measuring the changes since June 1941, when the payroll record commenced), showed more pronounced variations.

For 1947, these indices varied from 136.6 in Manitoba and 136.8 in Prince Edward Island, to 149.0 in Nova Scotia and 152.8 in New Brunswick. Employment index numbers based on June 1941 as 100 p.c. present a thumbnail picture for 1947; indices were 113.7 for the Maritimes, 122.2 for Quebec, 120.4 for Ontario, 127.4 for the Prairies, 143.6 for British Columbia,

---

[3] Ibid., p. 99.

[4] Cf., also, chapter VI.

[5] For 1947, cf., M. E. K. Roughsedge, Annual Review of Employment and Payrolls in Canada, 1947 (Ottawa: Dominion Bureau of Statistics, 1948).

[6] Ibid., p. 73; also, cf., ibid., table I, p. 8.

and 123.0 for the Dominion of Canada as a whole. Labour-management disputes, to varying degrees in the different provinces, account for much of the annual variation in employment.

The express purpose of this chapter is to break down, by provincial regions, the occupational demography of our great Dominion. The remainder of this chapter is subdivided into provincial regions, and will summarize the variable occupational tendencies in each provincial district.

The Maritime Provinces Occupationally. -- A thorough research has brought to light more occupational information on these important and older provinces than any other provincial region. Occupational economists have exhibited intense interest in these relatively small and isolated eastern provinces. Mr. Saunders[7] refers to:

> The economy of the Maritime Provinces rests upon four cornerstones: agriculture, mining, fishing, and lumbering. Supported by these cornerstones is a light structure of manufacturing industries.

Or, as Miss Beehler[8] comments in her general survey of production:

> Although the Maritime Provinces have about 10 p.c. of the total population of the Dominion, their share of total production is only around 5 p.c. It is greatest in the case of fisheries which comprise, normally, around 37 p.c. or the Dominion total and, under the war stimulus, rose to 45 p.c. in 1944. The Maritimes' share of forestry production is, normally, around 11 p.c. of the Dominion total; mining, around 6 p.c.; agriculture, around 6 p.c.; and manufactures around 4 p.c.

---

[7] S. A. Saunders, The Economic History of the Maritime Provinces (Ottawa: Study prepared for Royal Commission on Dominion-Provincial Relations, 1939), p. 59.

[8] L. J. Beehler, The Maritime Provinces in their Relation to the National Economy of Canada (Ottawa: Dominion Bureau of Statistics, 1948), p. 40.

Employment in the Maritimes, as a percentage of June 1941, had risen to 134.4 p.c. in Prince Edward Island, 103.4 p.c. in Nova Scotia, and 129.5 p.c. in New Brunswick; and aggregate weekly payrolls to 161.5 p.c. in Prince Edward Island, 149.1 p.c. in Nova Scotia, and 206.9 p.c. in New Brunswick. In February 1948, the estimated[9] employment in the Maritime labour force was 400,000, and unemployment, 25,000.

The 1941 census occupational distribution by provinces[10] shows 62.7 p.c. of Prince Edward Island's gainfully occupied males in agriculture, and for the females, 68.8 p.c. in the service occupations; for Nova Scotia's gainfully occupied, 24.0 p.c. of the males were in agriculture and 11.8 p.c. in manufacturing occupations, while 62.8 p.c. of the females were in service occupations, and 13.5 p.c. were clerks; and for New Brunswick, 34.5 p.c. of the gainfully occupied males were in agriculture, 62.1 p.c. of the females in service occupations, and 13.8 p.c. of the women in clerical occupations. For all Canada in 1941, Nova Scotia exhibited the smallest proportion (64.6 p.c.) of the male population, 14 years of age and over, gainfully occupied.

Quebec Occupationally. -- Essentially an agricultural province, Quebec is the stronghold of Roman Catholicism in Canada and is predominantly French-Canadian. Summarizing Quebec's occupational opportunity,

---

[9]All labour force estimates in this chapter are taken from Labour Force Bulletin No. 8 (Ottawa: Dominion Bureau of Statistics, 1948).

[10]All 1941 census occupational figures are based on the tabulated data in Vol. VII of the Census of Canada, 1941 (Ottawa: Dominion Bureau of Statistics, 1946).

Mr. Dauphinee[11] wrote:

> Quebec is one of the oldest-settled parts of Canada and one of the densest populated, at least along the St. Lawrence River, but like the remainder of the Dominion, great possibilities exist for development. The North particularly can be opened up to provide thousands of jobs in the basic industries and in the supporting activities which mining, forestry and agricultural populations always attract. Both in the well-developed sections and in the North there is plenty of scope for more intensive cultivation of land.

The employment index[12] for Quebec was 116.4 in 1945, down to 113.0 in 1946, and back up to 122.2 in 1947; while the 1947 aggregate payrolls were 176.7 p.c. of those in June 1941. Quebec's estimated labour force for February 1948 was 1,548,000, including 48,000 unemployed.

The gainfully occupied males in Quebec were mainly enumerated in 1941 in agricultural occupations (27.1 p.c.) and in manufacturing (18.7 p.c.); while nearly half (48.6 p.c.) of the females were in service occupations, over one-quarter (26.2 p.c.) in manufacturing and 14.4 p.c. in clerical occupations. Just over one-third (35.68 p.c.) of Quebec's total population was gainfully occupied at the 1941 census date.

Ontario Occupationally. -- Ontario[13] is Canada's richest province, with one-third of the buying power of the Dominion concentrated in a hundred-mile semi-circle centred at Toronto. For every two goods manufactured in Canada, one was made in Ontario. Ontario offers the prospective immigrant thousands of jobs in its undeveloped North, employment for untrained agricultural males, tremendous opportunities for the skilled trades and technical

---

[11] J. Dauphinee, Opportunity in Canada (London: Rockliff, Salisbury Square, 1948), p. 105.

[12] All employment indices herein are based on June 1941 as 100 p.c.

[13] Cf., Dauphinee, op. cit., pp. 107-114.

workers, and unlimited chances for the new entrepreneur. Ontario's employment index rose from 110.2 in 1946 to 120.4 in 1947; and aggregate weekly payrolls index from 138.7 in 1946 to 164.9 in 1947. From 71cts. in 1945 and 72 cts. in 1946, the average hourly earnings rose to over 84 cts. in 1947.

The 1941 census distribution of the gainfully occupied in Ontario placed 23.2 p.c. of the men in agriculture, 22.7 p.c. in manufacturing, and 10.1 p.c. in service occupations; with 42.9 p.c. of the women in service occupations, 23.5 p.c. in clerical jobs, and 20.1 p.c. in manufacturing occupations. Ontario set the Canadian record for employed females with one woman in every five (14 years and over) gainfully occupied.

The Prairie Provinces Occupationally.[14] -- The geographical centre of North America is encountered just outside Winnipeg, as this dominion-wide occupational survey proceeds westward. By 1947, total employment in the Prairies, as a percentage of June 1941, had risen to 123.7 p.c. in Manitoba, 123.3 p.c. in Saskatchewan, and 133.0 p.c. in Alberta; and aggregate weekly payrolls to 176.6 p.c. for all prairie provinces. The labour force estimate for the Prairies stood at 928,000[15] in February 1948.

The 1941 census distribution of the gainfully occupied gave to Prairie agriculture 42.1 p.c. of the males in Manitoba, 67.5 p.c. in Saskatchewan, and 56.1 p.c. in Alberta. No other occupational group in the Prairies claimed more than one-tenth of the gainfully occupied males except

---

[14]Cf., W. A. MacKintosh, Economic Problems of the Prairie Provinces (Toronto: The MacMillan Co., 1935).

[15]Including 23,000 unemployed.

[16]14 years of age and over.

manufacturing in Manitoba (11.3 p.c.); as presented graphically with the other occupations in chart V-1. Prairie women centred in the service and clerical occupations. Considering the employable[16] population of Canada by provinces, Saskatchewan had the smallest proportion of women gainfully occupied (18.8 p.c.), while Alberta had the largest percentage of men gainfully occupied (70.7 p.c.).

British Columbia Occupationally. -- Describing the opportunities of British Columbia, Mr. McAdam[17] once said:

> It is immensely rich in timber, minerals, fisheries, has vast agricultural spaces suitable for mixed farming, fruit-growing and cattle raising, and has a wealth of water power destined when fully developed to raise it from its present position as the third industrial Province in Canada to still greater prominence. Add to all this the best climate in Canada, and a geographical position which in fifty years has made Vancouver the largest winter-shipping grain port in the world, and it will, I think, be seen that there are here openings and opportunities without limit.

Occupational information for this province is excellently presented every month in British Columbia Employment Trends,[18] which supply monthly information through the co-operation of the Regional Office of the National Employment Service. The volume of industrial employment in British Columbia was greater in 1947 than in any earlier year for which data are available; the 1947 employment index of 143.6 is considerably higher than that of any other province.

---

[16] 14 years of age and over.

[17] W. A. McAdam, Agent-General for British Columbia, in London.

[18] Director of Education and Vocational Guidance, British Columbia Employment Trends (British Columbia: Monthly bulletin).

In the 1941 census, British Columbia's gainfully occupied males were fairly evenly distributed among the occupational group of manufacturing (16.6 p.c.), agriculture (15.5 p.c.), service (11.9 p.c.), and transportation occupations (10.6 p.c.). More than half the gainfully occupied women (53.7 p.c.) were grouped in the service occupations.

The Far North Occupationally. -- The pioneering frontier in modern Canada is this "Land of the Midnight Sun". Concerning Canada's great North, Mr. Dauphinee[19] wrote:

> Down North! It is Canada's New Land. It is her treasure box, frozen by ice and geography. It holds incalculable wealth in minerals -- uranium, gold, silver, iron, coal, the list is endless. It is where men win fortunes and where more men cast away everything they possess. It will never support a large settled population, but men will dare its vastness and its harshness as long as it promises them a key to comforts in the big cities. It is a man's land, but some of its happiest, most successful residents are women.

The 1941 census classified 2,301 males and 157 females in the Yukon as gainfully occupied; of whom, 407 of the males were hunters, trappers, and guides, 516 were miners and millmen, 165 were mining labourers, and 101 were stationary engineers.

In the Northwest Territories there were 4,291 males and 293 females listed as gainfully occupied; more than half of all the males (2,305) were hunters, trappers, or guides, 317 were miners and millmen, and 123 were carpenters. These figures substantiate the anticipated occupational distribution of Canada's far north. And so terminates our occupational tour of the Dominion.

---

[19] Op. cit., p. 84.

Summary. -- Interprovincial occupational movements have been mentioned and will be further discussed in chapter XVII on occupational mobility. Employment and earnings are summarized by Miss Roughsedge[20]:

> Except in Nova Scotia, there were increases in the general index numbers of employment in all provinces in 1947 as compared with 1946. The gains ranged from 4.5 p.c. in Manitoba and 5.3 p.c. in Saskatchewan, to 9.2 p.c. in Ontario and 16.3 p.c. in British Columbia..... The annual averages of per capita weekly earnings of employees reported by leading firms in the major industrial provinces reached new all-time high levels in 1947.

In comparison with 1946 there were advances ranging from 5.8 p.c. in Nova Scotia to 13.6 p.c. in Ontario. For an excellent graphic picture of the relative importance of each occupational group within each of Canada's nine provinces individually, the reader is referred to chart V-1. In which chart, each province is given its proper occupational weight by varying the area of its pie-diagram; within which the various occupational groups are shown with their relative importance for that province.

Prince Edward Island is predominantly agricultural with nearly two-thirds of the gainfully occupied males in that occupation. In Nova Scotia, less than one-quarter of the gainfully occupied males are in agriculture, but manufacturing is relatively important. In New Brunswick, over one-third of the gainfully occupied males are found in agricultural occupations. Maritime females concentrate in the service occupations. Agriculture and manufacturing are the most important occupations for men in Quebec, with service occupations and manufacturing, most important for women. For every four gainfully occupied males in Ontario, one was in agriculture and another was in manufacturing. Ontario's females were distributed primarily among

---

[20] Op. cit., p. 36-37.

the service, clerical, and manufacturing occupations. Agriculture is, by all odds, the dominant occupation for men in the Prairie; service and clerical occupations are most important for women. British Columbia males were distributed almost evenly among the manufacturing, agricultural, service and transportation occupations[21], while over half the women were in service occupations. In the far north hunting, trapping, guiding, and mining predominate.

Book three has analyzed Canada's occupational tendencies from the viewpoint of demography -- the statistical study of populations. The point of departure for the commencement of this demographic survey was a critical analysis of Canada's age structure, as related to occupations.[22] The study continued with birthplace and ethnic origin by occupations; and then the rural-urban occupational split. Chapter XII regrouped the occupations to indicate social, economic, and cultural tendencies and implications. Chapter XIII dealt with the only sub-population in Canada which was considered important enough to be tested and enumerated separately -- the blind and deaf-mutes. Education and occupations have been correlated; marital status has been shown to be an important factor in occupational distributions; and many of the problems of vital statistics

---

[21]Which occupations are listed in descending order of magnitude.

[22]The demographic problems of sex distribution have already been considered in chapter VIII, as a connecting link between book two's economy and book three's demography.

were shown to be causal and caused by occupational differences. The present analysis of the occupational picture in the various provincial districts across Canada has rounded out and drawn to a fitting close the study of Canadian demography occupationally. These many demographic factors and their implied associates all combine to synchronize and synthesize our critical study of Canada occupationally.

"Absence of occupation is not rest,
A mind quite vacant is a mind distress'd."

Cowper,
Retirement, l. 623.

BOOK FOUR

INTERPRETATION OF CANADA OCCUPATIONALLY

Chapter	
XVI	Immigration Occupationally
XVII	Occupational Mobility
XVIII	Occupational Trends
XIX	Integration Occupationally

"Let thine occupations be few," saith the sage,
"if thou wouldst lead a tranquil life."

Marcus Aurelius,
Meditations,
Bk. iv, sec. 24.

CHAPTER XVI

IMMIGRATION OCCUPATIONALLY

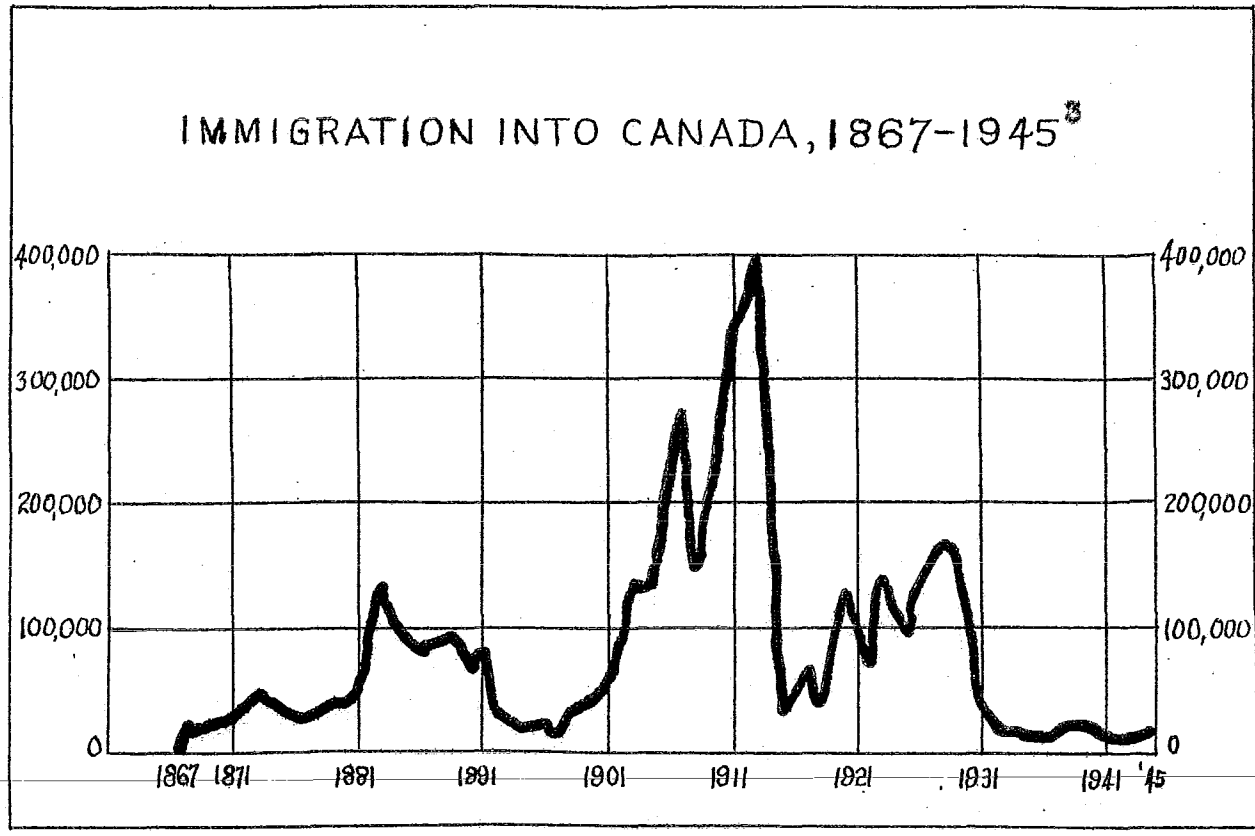
An indispensable prerequisite to a scientific interpretation of Canada occupationally is an analysis and discussion of one of the country's vital sources of new labour supply -- immigration. Chart XVI-1 presents graphically the varying annual volume of immigration into the Dominion since confederation. Although primarily and disproportionately concerned with immigrant occupational tendencies, this chapter will also add to our survey's occupational interpretation of Canada three associate factors which cannot be divorced from immigration -- emigration, economic assimilation, and migration policy. Which four topics together with chapter XVII's occupational mobility, interprovincial and interregional mobility, and dynamic demand and supply, combine to compose migration's contribution to a more comprehensive interpretation of Canada occupationally.

The following numerous subsections summarize a few of the many important and inseparable tangencies connecting migration and occupations.

Migration Definitions. -- The entrance into a foreign country of a person with the intention of participating in that country's life and of residing therein, is called immigration. And, the alien so entering is

referred to as an immigrant.[1] Or, as previously defined herein,[2] the general demographic usage of the word "immigrant" appertains to all those persons not born in Canada. If of employable age, each such immigrant will

Chart XVI-1



probably, and will be expected to, undertake some gainful occupation in his newly adopted country. This chapter discusses the occupations of immigrants into Canada, and of emigrants out of the Dominion.

---

[1]Cf., C. F. Wage, "Immigration", Encyclopaedia of Social Sciences, Vol. VII, pp. 567ff. for a more complete definitional statement.

[2]Supra, chapter X.

[3]Source: F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 17.

There exist many different yet related migration definitions. In some measure, all follow the central idea that migration is a movement from one country or region to another, with a view to domiciliation. Dr. Isaac's[4] definition:

> Migration may be defined as the movement of free individuals with the intention of effecting a lasting change in residence..... An emigrant is a person who leaves his abode with a view to giving up his old residence; the immigrant takes up a new residence with a view to becoming settled there.

Migratory Occupations.[5] -- "A factor of fundamental importance is the occupation of the migrants."[6] It is the occupational factor, being discussed herein, which is ever increasing in its importance in modern immigration and emigration. Immigrant countries usually show a marked preference for agricultural immigrants -- whether own account farmers, or farm labourers. Unattached wage earning farm help will often drift toward urban centres to seek industrial employment. Such action tends to overcrowd the urban industrial labour market; and, hence, is generally resented by trade unions and sometimes even opposed by the immigrant governments.

Industrially desirable immigration consists of workers whose occupations supplement, not compete, with native labour. A general statement about the United States, but true for immigration to all of North America:

---

[4]J. Isaac, Economics of Migration (London: Kegan Paul & Co., Ltd., 1947), pp. 3-4.

[5]Cf., The Migration of Workers (Geneva: International Labour Office, 1936), for a statistically documented survey of migratory occupations.

[6]Ibid., p. 15.

> It is evident that the great majority of immigrants belong in general to the unskilled labor class. This is the class of labor for which there is a special demand in this country, and for which the immigrants are desired.[7]

It is seen that, in general, those occupations which could be filled to best advantage by immigrants are those in the unskilled group.

Dynamic Data. -- Before delving into the occupational problems of immigration, it is advisable to inject the timely warning, with regard to any current or dynamic data, which is set forth by a recent Canada Year Book.[8] Statistically, Canada's immigrants are classified as follows: farm labour, mechanics, trading and clerical, mining, female domestics, and others. In the data for recent years, the last class "others" has accounted for about 60 p.c. of the total. Which disporportionately large percentage has been caused both by the curtailment of immigration and by the coming to Canada of large numbers of wives and children of earlier immigrants. "Under these circumstances the statistics of occupations are meaningless and will be discontinued until circumstances warrant the reappearance of the data."[9]

Occupational Restrictive Measures. -- An immigrant cannot nor should he expect to be allowed unrestricted occupational choice and mobility immediately upon his arrival in the country of his adoption. Although the constitutions of many countries recognize the right of aliens to undertake any lawful occupation, de facto this right is frequently subjected to occupationally restrictive measures. Mr. Taft[10] shows further:

---

[7]H. P. Fairchild, Immigration (New York: The MacMillan Co., 1913), p. 206.

[8]The Canada Year Book, 1946 (Ottawa: Dominion Bureau of Statistics, 1946), p. 186.

[9]Loc. cit.

[10]D. R. Taft, Human Migration (New York: The Ronald Press Co.), p. 301.

> Admission to some occupations may be granted only if there is reciprocal treatment of nationals in the country in question..... In addition to such general restrictions on admission of aliens to occupations, we have the special regulations of the employment of immigrant workers. These are designed to give governments control over the labour market in the interest of the needs of employers, the protection of native labour, or other national concerns.

In various countries certain occupational privileges may be denied temporarily or permanently to immigrants; these include coastal fishing, medical or legal professions, ecclesiastical occupations, teaching professions, commercial and industrial occupations to varying degrees, management of employment agencies, some mining occupations, printing and publishing, and so on.[11] All of which occupationally restrictive measures have been considered necessary to protect the native labour market from cheap immigrant labour. A thorough investigation of Canada's (as for any other country's) restrictions on the occupations of her immigrants requires an examination of more than the statutory orders. Orders in council, case histories, and multiple exceptions are necessary to complete the totality of occupationally restrictive measures imposed upon immigrants.[12]

Period of Immigration Occupationally. -- The 1941 census enumerators asked each gainfully occupied person who was born outside Canada to state the period during which he first came to reside in this country. These data are cross-classified for the gainfully occupied by occupation group,[13] and presented in table XVI-1, where the proportionate numerical weight is

---

[11] Cf., loc. cit., for substantiation and elaboration.

[12] The author knows of a central European lawyer, Dr. M--, whose permission to migrate to Canada was conditioned by requiring him to spend certain time as a farmer.

[13] For the occupational groups of chapter V and appendix I.

expressed for each occupation as a percentage of all occupations for each specific period of immigration. To facilitate comparison, the total figures for all gainfully occupied immigrants are presented, along with the all Canada norm for the gainfully occupied, of the total population, each as a percentage of all occupations in its respective population classification.

Table XVI-1 reveals many informative facts relevant to immigration occupationally. Of Canada's gainfully occupied, 28.4 p.c. of the males and 16.7 p.c. of the females were immigrant workers. The last two rows in the table, which expresses the gainfully occupied immigrants for each period as a percent of the total for all periods, suggests that immigration in the 1920's was particularly high, -- nearly one-third of the male immigrant workers arrived in Canada during that decade. In Canada's 1941 population, less than one in every sixty-two gainfully occupied men had migrated to the Dominion since the Great Depression (1931).

Canada's immigrant workers over all periods[14] generally followed the occupational pattern of the whole country, with a few slight but noticeable exceptions. Immigrant workers were more than proportionately represented in the manufacturing and service occupations, and less in clerical occupations. Relatively, immigrant males avoided the primary occupations, except mining; while more immigrant females preferred agricultural occupations. It is gratifying to notice that nearly one-third (32.5 p.c.) of the male immigrants who came to Canada before 1911 are still in agricultural occupations; while of those who have arrived since that date, each decade has shown only about one-quarter still in agriculture. The more recent

---

[14] As shown in column 2 of table XVI-1.

Table XVI-1

Gainfully Occupied by Occupation Group as Per Cent of all Occupations, showing Period of Immigration and Sex.[15]

Occupation Group[16]	SEX	All Canada Norm	PERIOD OF IMMIGRATION			
			All Periods	Before 1911	1911-1920	1921-1930	1931-1941
Agriculture. . . .	M	31.7	27.6	32.8	24.4	25.6	24.9
	F	2.3	4.5	9.9	4.4	2.4	2.0
Fishing, Hunting, Trapping[17].	M	1.5	0.7	0.7	0.5	0.7	0.9
Logging[17].	M	2.4	1.7	1.0	1.2	2.8	1.6
Mining and Quarrying[17]. . . .	M	2.1	3.0	1.9	2.3	4.9	2.3
Manufacturing. . .	M	17.1	19.1	16.9	19.8	21.7	20.1
	F	15.6	16.0	11.0	14.8	20.1	15.2
Construction[17]. . .	M	6.0	6.3	7.4	6.6	6.6	6.1
Transportation, Communication. . .	M	7.6	6.8	7.1	7.6	6.0	5.4
	F	1.7	1.5	2.1	2.1	1.0	0.8
Trade.	M	8.1	8.4	9.3	9.3	6.6	8.6
	F	9.8	9.3	8.9	10.4	9.5	7.0
Finance.	M	0.9	0.9	1.1	0.9	0.8	1.3
	F	0.1	0.2	0.3	0.2	0.1	0.1
Service.	M	9.4	12.2	12.1	13.5	10.5	16.4
	F	50.2	52.0	53.9	48.3	50.5	61.1
Clerical	M	5.4	4.9	4.6	5.3	4.2	4.6
	F	13.6	13.2	13.2	13.7	14.7	12.3
Labourers.	M	7.5	7.6	6.0	7.4	9.7	6.9
	F	1.4	1.1	0.5	0.9	1.5	1.2
Per Cent of Total Gainfully Occupied. .	M	100	28.4	9.9	7.9	9.0	1.6
	F	100	16.7	3.6	4.5	6.4	2.0
Per Cent of Total Gainfully Occupied Immigrants.	M	---	100	34.8	27.7	31.7	5.6
	F	---	100	21.8	27.1	38.5	12.2

[15]Source: basic figures from Census Vol. VII, table 12. Based on 954,863 gainfully occupied male immigrants and 136,743 gainfully occupied female immigrants.

[16]Totals include not stated.

[17]Less than .05 p.c. for all female proportions.

immigrant males are avoiding agriculture and are drifting to urban centres and increasing the relative proportions in the manufacturing and service occupations. Although the pre-1941 decade saw fewer immigrants, 61.1 p.c. of the females who did come entered service occupations. About one woman worker in every ten who migrated to Canada before 1911 was found in agricultural occupations in 1941; as the date of arrival became more recent this relatively high proportion fell to only one in every fifty by the last pre-censal decade.

In summary, it may be remarked that the immigrants who have been in Canada the longest tend more toward agricultural occupations, and those who arrived more recently are gravitating more to manufacturing and service occupations. In later decades the proportion of gainfully occupied (especially males) who are immigrants decreases notably. This is because the rate of immigration into Canada has substantially declined since about 1900.

Nativity of the Immigrant Occupationally. -- The period-of-immigration analysis (table XVI-1) has lumped all origins together. Table X-1 presents the gainfully occupied immigrants with the numbers in each occupation group expressed as a percentage of the total population with that birthplace and sex. These data have been analyzed in chapter X; but a few further points are relevant to the immediate problems of immigrants occupationally.

Agricultural occupations claimed 43.4 p.c. of the gainfully occupied male immigrants from the United States, but only 7.6 p.c. from the British possessions. Further irregularities also depart from the all-countries norm. Nearly 33 p.c. of the gainfully occupied males from the British Isles were in manufacturing occupations, but less than 18 p.c. in agricultural occupa-

tions. Service occupations claimed a disproportionately large number of colonial British females (62.8 p.c.), and Asiatic males (44.2 p.c.); 53.0 p.c. of these Asiatic males in service occupations were cooks or laundry men.

In summary, we reobserve the preponderance of United States and continental European workers in agricultural occupations, of British males in manufacturing, construction, transportation and communication occupations, of European females in manufacturing, and of Asiatic males in service and labouring occupations.

The Immigrant from Great Britain Occupationally. -- As was shown by table X-1, for every hundred gainfully occupied male immigrants from the British Isles, 18 were enumerated in agricultural occupations, 23 in manufacturing, 14 in service, 9 in each of trade and clerical, 6 in each of transportation and construction, and 7 in labouring occupations. Half of the women were in service occupations, 19 p.c. in clerical, 16 p.c. in manufacturing, and 10 p.c. in trade occupations.

The relatively small number of British agricultural immigrants has been partially due to the lessening of Irish immigration. "Ireland had been drained by the tremendous emigration of the previous half century."[18] The preponderance of skilled over unskilled occupations in the British immigrant flow is explained by Mr. Reynolds[19]:

---

[18] L. G. Reynolds, The British Immigrant (Toronto: Oxford University Press), p. 45.

[19] Ibid., p. 46.

> There is good reason to believe that the British labourer, accustomed in many cases to indoor factory work, finds it difficult to compete with the European or French-Canadian labourer in rough outdoor work of the pick-and-shovel type.

In many instances the British immigrant does not seek to compete in the unskilled occupations, where unfavourable working conditions and lower wages eventuate in reduction of his standard of life.

The British immigrants concentrate in the iron and steel, the construction, and the service industries. Herein the British tradition of mechanized skill has assisted Canadian industrial expansion. The Britisher generally tends to gravitate toward the urban centres and away from agricultural occupations. The British immigrant has been most successful in both commencing and maintaining employment in skilled and clerical occupations. Because the British standard of life closely approximates our own, the British immigrant seldom undersells to any appreciable extent.[20]

Assisted British Immigrant.[21] -- Closely following and immediately related to the last section, this topic commenced in the nineteenth century when assisted emigration from the British Isles first began. In his general statement concerning assisted emigration from the United Kingdom, Mr. Culliton[22] wrote:

> Distress among agriculturalists and unemployment were the chief causes which initiated the movement. Some of the schemes were designed merely to afford assisted passage, whilst others provided for after-care and settlement upon land. The Government, as well as various philanthropic persons and charitable organizations, financed these undertakings.

---

[20] Cf., S. C. Johnson, A History of Emigration (London: G.Routledge & Sons, Ltd., 1913), pp. 318-319, for elaboration and illustrations.

[21] Cf., J. T. Culliton, Assisted Emigration and Land Settlement (Montreal: The Federated Press, Ltd., 1930), pp. 40-51.

[22] Ibid., p. 40.

Assistance was advocated for employable persons in such occupations as farm labour, domestic servants, mechanics, and also healthy young men willing to do rough work.

The Immigrant from the United States Occupationally.[23] — Many nativities are represented among Canada's immigrant working population, but this survey has chosen the two most important separable elements for more detailed study — the British and American[24] immigrants. Another glance at table K-1's distribution, indicates that for every hundred United States born gainfully occupied male immigrants in Canada in 1941, 43 were in agricultural occupations, nearly 15 were in manufacturing, 9 in service, and nearly 9 in trade occupations; for every hundred comparable American women workers, more than half (55) were in service occupations, 16 in clerical, and nearly 11 in manufacturing occupations.

If the various crafts, industries, trades, professions, and occupations of the Canadian census are considered, the all-Canada proportions are approached in greater degree by those immigrants born in the United States than by the immigrants from any other country. As Messrs. Coats and Maclean[25] wrote:

> The great mass of the American-born [in Canada] do not segregate themselves in groups that stand out relatively to the rest of the population. This points at once.... to the invalidity of stressing any one occupational characteristic among the American-born as immigrants.

---

[23] Cf., R. H. Coats and M. C. Maclean, The American-Born in Canada (Toronto: The Ryerson Press, 1943), for a complete statistical interpretation of this important topic.

[24] The adjective "American" is used herein in its more restricted sense to refer only to persons born in the United States.

[25] Ibid., p. 11.

Their thesis of extraordinary evenness in United States immigrant occupations is further substantiated by showing that the American born are more evenly distributed by occupations than the British born, and still more evenly distributed than all continental Europeans taken together, "notwithstanding the latter's greater multiplicity of social and occupational characteristics."[26]

A later mention admits the possibility that while American born and Canadian born were found in the same industries and services in Canada, they might conceivably be of different occupational status. The American-Canadian ratio was about 1 to 15 for the total populations, but 1 to less than 11 for those in responsible positions. In conclusion:

> It would seem safe to say that the American-born are of definitely higher status than the Canadian-born. No doubt other considerations, such as age, enter into the situation, but not to the extent of total explanation.[27]

Many interesting and intriguing fields of adventure and investigation unfold in the examination and comparison of occupational distributions of the American born and the Canadian born in Canada. A further comparison of these data with occupational figures for these two populations in the United States would also prove instructive.[28] Our present analysis of the American immigrant to Canada has indicated a high degree of similarity between American born and Canadian born in gainful occupations in Canada. However, the American born are disproportionately prominent in agricultural

---

[26] Ibid., p. 12.

[27] Ibid., p. 161.

[28] Cf., L. E. Truesdell, The Canadian Born in the United States (New Haven: Yale University Press, 1943), for a thorough statistical analysis thereof.

occupations, and a difference has been seen to exist in occupational status of the two nativity groups.

The Immigrant Worker. -- The first years of employment of the immigrant worker are formative ones which affect the rest of his occupational life. The "immigrant worker" is an important and indispensable member of Canada's occupational structure. He is here considered briefly in hypothetical abstraction. Further references are also alluded to in the next section (Immigrant Miscellany).

Effective placement service is a necessary requisite to occupational adjustment of the incoming alien.[29] The immigrant labour supply should have a national placement service; which field reenters that of immigrant vocational guidance. The management of this immigrant employee is another problem, and training him presents further complexities.[30] The Canadianization of the immigrant worker[31] as related to citizenship is a source of investigation within itself. The problems of the immigrant worker are the problems of Canadian industry. His occupational adjustment is as important to the Dominion as to himself.

Immigration Miscellany. -- If it has been difficult to draw to a close other occupational topics, it is doubly so for this section on immigration occupationally. Avoiding obvious omission apologies, let us mention

---

[29]Cf., W. M. Leiserson, Adjusting Immigrant and Industry (New York: Harper and Bros. Publishers, 1924), pp. 49-64 for an excellent discussion on occupational placing of the immigrant.

[30]Cf., Ibid., pp. 80-125 for thorough discussion of these two related problems.

[31]Cf., "From Immigrant to Citizen", Report of the National Conference on the Citizenship Problems of the New Immigrant (Ottawa: Canadian Citizenship Council, 1948), and, also J. H. Haslam, "The Canadianization of the Immigrant Settler", The Annals, Vol. CVII (May 1923).

a few of the many further relevant topics, and where investigation of them may commence.

The immigrant and his relation to Canadian organized labour is discussed by various authors with different colourings.[32] Equality of treatment of immigrant and native workers is generally recognized as a just and humane desire, but numerous practical difficulties arise.[33] Child immigrants into Canada are often taken under the auspices of a philanthropic society and placed in homes.[34] "The conscientious supply of reliable information is the first duty of the community towards workers considering migration from one country to another."[35] The provision of information services to migrant workers and the prohibition of misleading information is another serious problem.[36] A section of our chapter VIII has been devoted to the female immigrant worker.[37] Agricultural immigration [38] is another occupational subject which should be investigated for a thorough grasp of our topic.

---

[32]Cf., Leiserson, op. cit., pp. 169-184; and E. M. Patterson, An Introduction to World Economics (New York: The MacMillan Co., 1947), p.40; and C. S. Golden, "Labor-Bulwark of Democracy and Peace", The Annals, Vol. 234, (July 1944), pp.70-75.

[33]Cf., Recruiting, Placing and Conditions of Labour of Migrant Workers (Geneva: International Labour Office, 1936), pp. 74-79, 150.

[34]Cf., ibid., p. 91, 98; where protection of juvenile immigrants is also discussed.

[35]Ibid., p. 142.

[36]Cf., also, ibid., pp. 4, 13.

[37]Cf., also, Leiserson, op. cit., pp. 297-329.

[38]Cf., W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), pp. 16, 71ff.

In 1872 the MacDonald Ministry introduced the United States homestead system of land disposal into Western Canada for the purpose of attracting agricultural immigrants to this unpopulated area of Canada.[39]

The sources of immigrant information occupationally seem endless. The deeper one's investigation into this absorbing field of study, the larger the number of pertinent topics which are turned up. To mention only a few more, this thesis' research has investigated the following: International migration occupationally[40]; the post-War II displacement of European workers as an occupational source of supplementary labour for Canada[41]; occupational optimum population[42]; industrialization and urbanization in relation to immigration[43]; non-British immigration occupationally[44]; selective migration of different occupational groups[45]; immigrant repatriation occupationally[46]; and so on ad infinitum. The brief mention

---

[39]Cf., J. T. Culliton, Assisted Emigration and Land Settlement (Montreal: The Federated Press, Ltd., 1930), pp. 17ff.

[40]Cf., The Migration of Workers, op. cit.

[41]Cf., I. B. Taeuber, "Population Displacements in Europe", The Annals, Vol. 234 (July 1944).

[42]Cf., A. S. Whiteley, "Canada's Optimum of Population", Essays on Canadian Economic Problems (Montreal, 1928), and, also, W. J. Eohmann, "Canada's Optimum of Population and How it May be Obtained", Essays on Canadian Economic Problems (Montreal 1948).

[43]Cf., W. S. Thompson, Population Problems (New York: McGraw-Hill Book Co., Inc., 1942), pp. 381-382.

[44]L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), pp. 156ff.

[45]Cf., E. F. Penrose, Population Theories and Their Application (Stanford University: Food Research Institute, 1934), pp. 179-210.

[46]Cf., Recruiting, Placing and Conditions of Labour of Migrant Workers, op. cit., pp. 103-119.

of such important topics as here alluded to must serve merely as an introduction to this vital field of occupational inquiry.

From the above discussion of strictly immigration topics, this chapter turns to three subjects which, as originally conceived, were to have been written up with the weight of a full chapter each -- emigration occupationally, occupational assimilation, and migration policy occupationally.

Emigration Occupationally

The relatively obscure and enigmatic problem of emigration is confronted in every field of occupational investigation. Emigration is usually the result of social, economic, or occupational maladjustment initiated by unfavourable conditions in the alien's home land.

Because Canada and the United States are relatively "new" countries, they have tended to be less concerned with emigration than with immigration. Until recent years Canada has kept no record of emigratory movements from the Dominion, however we know beyond a doubt that Canadian emigration has been primarily concerned with population movements to the United States, secondarily to other parts of the British Commonwealth.

The departure from one's place of abode for life and residence elsewhere is called emigration. As emigrants are frequently young men of working age, emigration tends to immediately reduce the size of the homeland's potential working force, and decrease the labour supply in each

occupation. Mr. Landis[47] adds:

> It is because emigration takes a high proportion of those in the most economically productive and most fecund period of life that nations in need of man power often prohibit emigration, and that nations needing men encourage immigration.

Is Emigration Economically Beneficial? — Both affirmative and negative arguments are presented by Mr. Thompson[48] with considerable plausibility. The negative argument points to the fact that a fairly large proportion of emigrants are young adults, who have been raised to maturity at the expense of their homeland. "Their labor power and their purchasing ability are lost when they migrate."[49] This obvious occupational loss is countered in the instance of overpopulated countries by the positive argument:

> To offset the economic harm suffered by the migration of vigorous young adults we should notice that, if emigration does reduce population growth, it removes some of the danger of unemployment, or of underemployment, and strengthens rather than weakens the economic life of the country, for it increases the average productiveness of workers left behind.[50]

Occupational Emigration to the United States. — Perhaps the most important aspect in the problem of Canadian occupational emigration is that of our neighbour to the south. In this connection, Professor Hurd[51] says

---

[47] P. H. Landis, Population Problems (New York: American Book Co., 1943), p. 405.

[48] Op. cit., pp. 386-388.

[49] Ibid., p. 387.

[50] Loc. cit.

[51] Op. cit., p. 87.

that in the past, the United States has served as "a safety valve, drawing off excess population as conditions required."

To offset the large migration of Middle Western Americans to Canada at the turn of the century, Dr. MacLean[52] notes the offseting emigration of Eastern Canadians to the United States. Now, as then, Canada occupies the unique position of being both an immigrant and an emigrant nation. In another work, Dr. MacLean[53] remarks:

> With the exception of the French, the exodus from Canada is not entirely from the unskilled labor class; it is also from those who seek the wider opportunities of business and professional life afforded in the Great Republic..... Many Canadian farm hands have been transferring themselves to American automobile factories. This is an unfortunate situation for Canada.

The loss of gainfully occupied from Canada's working force has been deplored by many authors. In particular and especially recently, the problem referred to as "The Export of Brains"[54] has come to the fore. The following question was put to Professor Smith[55] by a teacher in Holland, "Why is it that while Canada is offering inducements to settlers, there are two million Canadians living in the United States?" Such a question might

---

[52]A. M. MacLean, "The Canadian Immigration", American Journal of Sociology (May 1905).

[53]A. M. MacLean, Modern Immigration (Philadelphia: Lippincott, J.B., Co., 1925), pp. 93-94.

[54]Which emigration is of specific and dynamic importance to those of us who have received tempting offers from the United States, and are forced to choose between national patriotism and lucrative occupations. Why cannot our great Dominion offer equal positions or even jobs which approach equality in opportunity?

[55]W. C. Smith, A Study in Canadian Immigration (Winnipeg: University of Manitoba, 1920).

well pass through the minds of many who have examined Canadian emigration to the United States, which Professor Smith has called "the leakage to the Great Republic."[56]

The pre-1921 problem is treated by Professor Jackson in his concise article Emigration of Canadians to the United States.[57] One of the best modern books entirely devoted to this question is Mr. Truesdell's The Canadian Born in the United States,[58] which is an analysis of the statistics of the Canadian element in the population of the United States between 1850 and 1930. He therein devotes an entire chapter[59] to the occupational distribution of the Canadian born workers in the United States. He summarizes his most important findings:

> A comparison of the occupational classification of the Canadian born with that of the population of the 16 Northern and Western States in which most of the Canadian born are found indicates that appreciably larger proportions of the Canadian born are found in skilled and semi-skilled occupations than of the total number of gainful workers in the 16 States, with correspondingly smaller proportions in unskilled occupations and domestic service.[60]

Emigration Summary. -- This section has shown the other side of the migration picture -- Canadian occupations are not only supplemented by the immigrant additions of gainfully occupied aliens, but also depleted by the emigrant subtractions of Canadian workers who leave their native land.

---

[56] Ibid., p. 371.

[57] C. E. Jackson, "The Emigration of Canadians to the United States", The Annals, Vol. CVII (May 1923).

[58] Op. cit.

[59] Ibid., chapter XII, pp. 200-215.

[60] Ibid., p. 6.

Every serious occupational student must consider Canada's "export of brains" to the United States. The United States is the country whose occupational structure receives the benefit of the largest proportion of Canadian emigrant workers.

Economic Assimilation Occupationally

The subject and purpose of the present section is to briefly examine Canada's absorptive capacity in the light of occupational and industrial requirements. The importance of this question of economic assimilation is emphasized by Mr. Wright[61]:

> It is, in fact, on the rock of assimilation that the project of a mass migration must founder.... If, then, the ultimate aim of international organization is to eliminate the sources of international friction, it would seem to follow that, in present circumstances, wise statesmanship must strive to limit international migratory movements.

Canada's Absorptive Capacity.[62] -- Canada has always received more immigrant (on the average twice as many) and native born additions to her population than she could retain. As pointed out by Mr. Hurd[63] the United States has served as "a safety valve drawing off excess population as circumstances required."

---

[61] Q. C. Wright, Population and Peace (New York: Columbia University Press, 1939), pp. 239-240.

[62] Cf., W. B. Hurd, "Demographic Trends in Canada", The Annals, Vol. 253 (September 1947), pp. 11-12, and Hurd, Contemporary Demographic Movements, op. cit., pp. 7-8.

[63] Ibid.

At this point, an analogy to the cyclical "bathtub theorem" is suggested. Conceive of Canada's employment potential as the bathtub and the size of her labour force as the variable water level in the tub.

Table XVI-2

Mean Annual Increase[64] in Population of Canada by Decades, 1851-1941.[65]

Decade	Average net Yearly Increase
1851-1861[66]	79,700
1861-1871[66]	46,000
1871-1881	63,600
1881-1891	50,800
1891-1901	53,800
1901-1911	183,500
1911-1921	158,100
1921-1931	158,900
1931-1941	115,000

Consider a safety valve or outlet for the removal of excess workers; and two incoming faucets -- one of immigration, and the other of native born Canadians (as they come of working age). Although this conception is capable of many refinements, it serves to illustrate the varying occupational absorptive capacity of Canada which is here represented as the volume of water in the tub plus inflows less outflows.

---

[64]Due to both immigration and natural increase.

[65]Source: "Demographic Trends in Canada," The Annals, op. cit., p.11.

[66]Manitoba, British Columbia and the Northwest Territories are covered only partially in 1851 and 1861. It is probably that these areas contained 100,000 persons including Indians who are not represented in the basic figures from which the increases of these decades were derived. See 1931 Census, Vol. I, p. 132.

The intercensal changes in population size serve as a simple but satisfactory measure of population absorptive capacity. The mean annual increase in population, as compounded from births, deaths, immigration, and emigration would seem to be a fair measure of Canada's population absorptive capacity under existing conditions.[67] Table XVI-2 shows these average net yearly increases in the population of Canada by census decades since 1851. The largest absolute increase occurred in the 1901-1911 decade. The 1931-1941 depression decade showed an increase which was slightly less than natural increase of the population.

General and Future Capacity Occupationally. -- The number of persons per unit of area is an interesting arithmetic calculation, and may present some informative facts with regard to a country's population density. However, low population density does not necessarily infer a huge potential absorptive capacity. Professor Patterson[68] refers to Canada as an excellent illustration of the fallacy of using population per square mile or kilometer as an evidence of underpopulation. This argument is set forth by Mr. Hurd[69]:

> Low population density per square mile is often taken as *prima facie* evidence of great absorptive capacity. Such is far from being the case. Surface area is only one, and a decreasingly important aspect of the natural physical environment..... Great open spaces *per se* are no criterion of population absorptive capacity. Nor, in themselves, are great unused natural resources. It is only when a natural agent can be made to yield adequate returns on the capital and labour employed that it has any current economic significance or can be counted upon to support increased population.

---

[67] Cf., *Ibid.*, where Professor Hurd so measures absorptive capacity.

[68] Cf., *op. cit.*, p. 51.

[69] Hurd, *Contemporary Demographic Movements*, *op. cit.*, p. 7.

Canada's absorptive capacity for population is a function of the occupational openings in her economy. It is a question of the numbers of employable workers who can be absorbed into Canada's existing and expanding occupational structure and the economic assimilation of these workers into this pattern. For the next few decades, future prospects anticipate a continuing increase in the absolute numbers of gainfully occupied, but this may be tempered by a stationary to decreasing rate of annual growth for the total population, tending to limit the numbers of occupational openings.[70]

An interesting side light refers to the American absorption of alien workers. A United States report recently received in McMaster's library[71] reports:

> The majority of our newcomers were at first absorbed into industry as unskilled workers. 'America at first has nothing for us but the shovel', is a common saying among immigrant groups.

United States occupational migration data show a considerable concentration in the unskilled occupations for immigrants, but also show that these foreign workers are by no means restricted to the lowest unskilled occupations. This report goes on to point out that all available United States and Canadian data on all ethnic groups, show higher rates of intermarriage in the second and succeeding generations, thus indicating a definite trend toward intermingling and cultural assimilation.[72]

---

[70]Plotting the curve of the gainfully occupied graphically, a decreasing rate of annual increase means, of course, that on arithmetic grid the curve is absolutely increasing, while on geometric paper, the rate of increase is decreasing.

[71]Report of the Committee on Population Problems, The Problems of a Changing Population (Washington: United States Government Printing Office, 1938), p. 227.

[72]Cf., ibid., p. 228 for verification and numerous bibliographic references.

Occupational Assimilation. -- The numerical absorption of the gainfully occupied poses a difficult statistical problem, but the cultural, social, and technological assimilation of the immigrant worker adds further complexities to the picture. Many other relevant subjects (such as absorptive capacity by industry as well as by occupation) are also of interest, and include: Canada's maximum annual absorptive capacity[73]; geographic movement and assimilation of peoples[74]; Australian absorptive capacity[75] (and that of other comparable economies); admissibility of immigrants[76]; absorbing new immigrants occupationally[77]; admissibility by occupations[78]; and so on. It has been shown that Canada's population absorptive capacity varies with her occupational assimilation.

---

[73]Hurd, Contemporary Demographic Movements, op. cit. p. 87.

[74]E. C. Semple, Influences of Geographic Environment (New York: Henry Holt & Co., 1911), pp. 74ff.

[75]G. L. Wood, "Growth of Population and Immigration Policy", The Annals, Vol. 158 (November 1931), p. 11.

[76]M. L. Hornby, Canada's Steps Toward Immigration (Vancouver: Sun Publishing Co., Ltd., 1947), pp. 10ff.

[77]Ibid., pp. 16ff.

[78]Leiserson, op. cit., pp. 228ff.

Migration Policy Occupationally

"To the extent that occupation is correlated with ability, occupational selection of migrants would undoubtedly have an effect on the level of ability of the receiving nation."[79] To which might be added that while the advantage may accrue to the receiving nation, if the migrating individuals come in the "skill and brains" category, the emigration of such persons is bound to cost the homeland heavily in relative ability. The inference here of Canada's heavy "ability" loss to the United States, is not concealed. Can we plug this occupational leak to the sough?

Canadian Immigration and Immigration Policy. --- The present occupational survey has no desire to enter the politically debatable field of foreign policy, except to briefly relate existing migration policy to Canada's occupational structure. The Canadian need for an overall immigration policy has been discussed and argued by many writers.

The immigration problem is an important one because everyone in Canada is an immigrant or the descendant of an immigrant, except for a few Indians and Eskimos. Mr. Dauphinee[80] devotes an entire chapter to "The Government Immigration Policy" (for Canada). He quotes the Senate's Standing Committee on Immigration and Labour as deciding:

> There was unanimous accord that immigrants should be admitted, subject to the qualifications that immigrants should be carefully selected and that admissions should not exceed the number which can be absorbed from time to time without creating conditions of unemployment,

---

[79]Cf., H. F. Angus, "Need for an Immigration Policy", The Annals, Vol. 253 (September 1947), for an example of such discussion.

[80]J. Dauphinee, Opportunity in Canada (London: Rockliff, Salisbury Square, 1948), for an example of such discussion.

> reducing the standard of living or otherwise endangering the Canadian economy..... We know that there is a definite shortage of farm labour. .....Our greatest need is for entrepreneurs..... Industrial opportunities are here but to be accepted they must be offered in a practical and businesslike way, backed by a generous and consistent immigration policy. A settled immigration policy and a sustained effort is necessary if any real success is to be achieved in attracting immigrants of the type indicated.[81]

Canada's occupational attitude toward immigration and existing migration policy is presented as one feature of this committee's well documented report.

A highly selective immigration policy for Canada based directly on occupational considerations is set forth by Mr. Reynolds.[82] This policy would welcome to Canada "domestic servants, high-grade clerks, professional workers, artisans from certain selected trades, and others only if careful investigation proved the need of their residence and service in the Dominion."[83] Although this policy was set forth in 1935, it emphasizes the recognized need in Canada for an immigration policy based on occupational selection. Mr. Reynolds concludes[84]:

> The immigration policy here suggested is more restrictive and more highly selective than any in the previous history of Canada..... Canada has reached the end of the "high immigration" era. From now on selection as to occupational type must be the goal of immigration policy, as part of the wider problem of economic planning for the existing population.

Occupational Formula for Immigration. -- While entirely original this suggested formula is based on ideas and suggestions received from Mr. Andoff and his research for the Department of Veterans Affairs.[85]

---

[81]Cited in ibid., pp. 43-43. [82]Op. cit., pp. 279-289.

[83]Ibid., p. 289. [84]Loc. cit.

[85]Cf., J. E. Andoff, Report on the Survey of Occupational Trends and Vocational Training Requirements (Ottawa: Department of Veterans Affairs, 1947).

Let N_o be defined as the number of immigrants who will be placed in occupation X in a given period p; let N_t be the total number of immigrants who will be admitted to Canada in the period p; let T_o represent the total number of persons in occupation X; and let T_t be the total number of gainfully occupied. Then, $\frac{N_o}{N_t} = \frac{T_o}{T_t}$, where the N_o is the only unknown quantity, and hence we will have that, $N_o = \frac{T_o}{T_t}$. The values for T should be taken from the most recent data and may be altered for demographic factors. Computing the ratio $\frac{T_o}{T_t}$ from the 1941 immigration data for males we obtained a ratio of .276 for agricultural occupations, .191 for manufacturing occupations, .265 for trade, finance, service, and clerical occupations, .137 for construction and transportation, .131 for primary and labouring occupations (other than agriculture); which ratios total 1.[86] Now if a certain number of immigrants, say N_t, are to be admitted annually then they may be allocated to Canada's occupations by this formula. Which formula assumes that the existing occupational distribution of past immigrants is the best one; if it is not, then these ratios for each occupation and occupational group may be readjusted to suit the new or proposed occupational demand pattern.

Migration Summarization. -- It has been seen that it may be considered advisable, under certain conditions, for Canada to adjust her inflow of immigrants by occupational selection. A depression Order in Council (August 14, 1930) laid down the policy of restricting immigration to British or American citizens, wives and children of resident occupied family heads, or agriculturalists with sufficient money to begin farming in Canada.[87]

---

[86] Note that no matter how many occupations the gainfully occupied are divided into, the sum of their ratios will always be 1; so that we will always use up all the N_t immigrants who come to Canada in period p.

[87] Cf., F. V. Field, Economic Handbook of the Pacific Area (New York: Doubleday, Doran & Co., Inc., 1934), pp. 21-22.

A few other relevant immigration policy topics include: the policy of adjusting immigration and occupation[88]; Canada's pre-1923 immigration policy[89]; Australian immigration policy[90] (and the policy of other commonwealth Dominions); public opinion and government policy related to immigration[91]; arguments for a full-time Minister of immigration[92]; the extent of future immigration to Canada and related occupational implications[93]; and numerous other immigration policy subjects all of which centre in or refer to occupational distribution.

One of the original purposes of writing a thesis on this topic was to relate Canada's occupational picture to immigration problems -- the present chapter gives relatively more weight to this subject than any other throughout our occupational survey. In general, migration questions are directly connected with the overall population problem. Recent migration flows have consisted to a large extent of European immigrants into Canada and the United States, and also the flow of migrants across the Canadian-American political boundary. While immigration has been the first concern of this chapter, it has also related Canada's occupational structure to her emigration, economic assimilation, and migration policy, in its concerted integration of immigration into our interpretation of Canada occupationally.

---

[88]Cf., Leiserson, op. cit., pp. 332ff; and also Reynolds, op. cit., pp. 279ff.

[89]Cf., R. J. C. Stead, "Canada's Immigration Policy", The Annals, Vol. CVII (May 1923).

[90]Wood, op. cit., p. 14.

[91]Cf., Hornby, op. cit., pp. 7-9.

[92]Ibid., pp. 21-23.

[93]Cf., Whitworth, op. cit., p. 23.

CHAPTER XVII

OCCUPATIONAL MOBILITY

A critical interpretation of Canada occupationally requires investigation and study of the international migration of workers to and from the Dominion's labour force, and of the internal mobility of workers between occupations and within occupations. From the preceding chapter's migration investigations, the present interpretation turns to problems of occupational mobility.

As broadly conceived, occupational mobility refers to two different types of movement -- (1) that of workers from one occupation to another, which may be called <u>interoccupational mobility</u>; and (2) that of the gainfully occupied in a given occupation from one district (or industry) to another as labour demand within that occupation varies regionally, which may be called <u>interregional mobility</u> of labour.

As civilization and technology advance, the occupational relationship between primary, secondary, and tertiary occupations varies continually. Each is kept in balance by its demand and supply ratio as related to the demand and supply of workers in the other two broad groups. All members of the labour force may be segregated into one of these three occupational categories; and a given economy's state of the arts roughly ascertained at any given time by the relative proportion of the workers in each. To which

Professor Patterson[1] adds:

> With a decline in the percentage of the total population engaged in "primary" occupations and a shift to "secondary" and "tertiary" occupations, there has been a "drift to the cities" or at least to more densely populated regions, rather than a continuation of the former movement to overseas areas or even to other countries on the same continent.

Labour Mobility.[2] -- To an ever increasing extent, the correlative of modern labour migration is becoming a question of the existence of occupational opportunities. Active industrial regions offering high wages to attract migrants with a minimum of delay and expense from those countries or districts where industry is inactive and labour cheap. Labour mobility is a comparatively recent factor in population growth. As Mr. Dublin puts it:

> This mobility of labor.... increases with improvement in means of communication and transportation, and with education, individualization, and the loosening of tribal bonds. As the democratization of the world goes on, immigration and emigration become more and more movements of men governed by industrial demands.[3]

Thus future labour mobility may be determined less by governmental aberrations and more by industrial requirements.

The actual movement of the gainfully occupied from one place to another is dependent on transportation. The complete lack of transportation obviates labour mobility, and restricted transportation confines movement. However, while unlimited transportation facilitates labour mobility, human factors make unrestricted movements of the gainfully occupied virtually impossible.

---

[1] E. M. Patterson, An Introduction to World Economics (New York: The MacMillan Co., 1947), p. 32.

[2] Cf., L. I. Dublin, Population Problems (Boston: Houghton Mifflin Co., 1926), pp. 30-32.

[3] Ibid., p. 31.

Wages constitute an important incentive to move. Expounding the merits and importance of transportation, Economist Meyers[4] wrote:

> Low-cost transportation facilities also increase the mobility of labor, allowing workers to move from regions where they are poorly paid to those where better wages prevail. All of the advantages of interregional and international trade arise only because transportation of goods and people makes such trade possible.

The restrictions limiting labour mobility are many and varied. As a seller, the labourer is unique, because his commodity is himself whom he must deliver to effectively bargain for employment. If labour mobility necessitates considerable geographical transfer, the worker's change may involve a removal of his home and family to the new location of employment. Concerning the restrictions to such movement, Dr. Furness[5] wrote:

> The cost involved in this change -- money expenses of travel, the disrupting of neighborhood ties and of sentimental attachments to the old environment -- operate to reduce the mobility of the workingman and, hence, to impair his effectiveness as a bargainer.

This author goes on to show that labour immobility, to varying degree, is the condition of all propertyless wage-earners.[6]

Labour Immobility has been given as a cause of unemployment[7]. Chapter VII defined frictional unemployment as the delay necessitated by changeover from one employment to another. To which Miss Robinson[8] adds:

---

[4]A. L. Meyers, Modern Economics (New York: Prentice-Hall, Inc., 1946), p. 293.

[5]E. S. Furness and L. R. Guild, Labor Problems (Boston: Houghton Mifflin Co., 1925), p. 40.

[6]Cf., Ibid., pp. 40-41.

[7]Cf., J. Robinson, Introduction to the Theory of Employment (London: MacMillan & Co., Ltd., 1947), pp. 40-44 for a discussion thereof in her chapter on the supposed remedies for unemployment.

[8]Ibid., pp. 42-43.

> It is usual to attribute a large amount of unemployment to "frictions" which prevent workers from moving readily from one occupation or locality to another.... Lack of mobility can be called a cause of unemployment only when there are unfilled vacancies in some places and idle men in others.... Schemes to promote mobility are all to the good, but there is no remedy for immobility so effective as the development of boom conditions.

Schemes for reducing labour immobility constitute a remedy for unemployment at a high level of activity by reducing the minimum of unemployment, but are of little use in the depths of a depression.

The mobility of the labour force varies inversely with age.[9] Other things being equal, labour mobility appears to be greatest in the worker's twenties and early thirties. As his age increases his family and home responsibilities increase, thus diminishing his mobility. The youghful adventurous spirit may give place to disillusionment as the worker becomes older. As the proportion of married men increases, labour mobility decreases.

Interregional Mobility. -- Where there exist no barriers or obstructions to the free movement of the gainfully occupied, there is a general tendency for workers to go where work is to be found. A general picture of Canadian population mobility may be obtained from table XI-1. 72.2 p.c. of Canada's population have always resided in the province in which they were enumerated by the 1941 census. Urban males show the greatest degree of interprovincial mobility and rural females the least.[10] Between the 1941 census and the 1944 ration card population estimates, there was an interprovincial movement of fifty thousand annually. This interprovincial

---

[9]Cf., F. E. Whitworth, Canadian Census Occupational Data for Counsellors (Ottawa: Dominion Bureau of Statistics, 1947), p. 47.

[10]67.63 p.c. and 77.83 p.c. respectively have always resided in the province of present residence.

migration has been primarily from Quebec and the Prairies (especially Saskatchewan) to Ontario and British Columbia.

Modern urbanization and industrialization tend to cause workers to drift cityward. Relating Canada's geographical shifts of population to wartime accelerated industrialization, it has been written:

> The mobilization of workers for the war effort has necessitated substantial shifts in the geographical distribution of the whole population. The non-industrial regions of the country have lost population to the industrialized regions, and within regions there has been a drift from rural to urban types of areas.[11]

Although not solely attributable to the effects of war, these movements were speeded up by the national emergency.

Recent Canadian interprovincial labour mobility has been marked by substantial movements, appreciably exceeding the immigration of workers from abroad or the emigration of Canada's gainfully occupied to foreign countries.

Interoccupational Mobility. -- Not only do workers move from one district to another to obtain jobs within their chosen occupation, but they may leave one occupation for employment in another. This mobility of the members of the labour force from one occupation and occupational group to another is referred to herein as interoccupational mobility.

Canada's 1941 census enumerators inquired of every person 25 years of age and over, what his or her occupation was in 1931, and entered that 1931 occupation in a special column (#35) by the same rules observed for recording the 1941 occupation. These comparable data showing the percentage of such persons remaining in the same occupational groups over this 10-year

---

[11] Health, Welfare and Labour: Reference book for Dominion-Provincial Conference on Reconstruction, p. 99.

Table XVII-1

Gainfully Occupied Males, 25 years of Age and Over, by 1941 Occupation Group as a Per Cent of the occupation group in which employed in 1931, for Canada, 1941[12]

1941 Occupation[13] ↓ / 1931 Occupation[13] →	All Occupations	Agriculture	Other Primary	Manufacturing	Construction	Transportation	Trade and Finance	Service	Clerical	Labourers[14]
Agriculture.	31.0	84.2	7.4	2.0	2.7	2.7	1.7	1.7	1.0	6.6
Fishing, Hunting, Trapping	1.5	.2	24.0	.1	.1	.2	.1	.1	(15)	.3
Logging.	2.3	1.3	25.1	.3	.3	.5	.1	.2	.1	2.8
Mining, Quarrying. .	2.2	.9	25.5	.5	.6	.8	.3	.4	.4	2.0
Manufacturing. . . .	16.9	3.4	4.7	84.4	5.2	7.0	5.2	3.5	5.6	11.6
Construction	6.9	1.5	2.1	1.5	82.0	1.8	1.2	1.0	.9	3.9
Transportation, Communication. . . .	7.7	2.0	2.9	1.9	1.5	75.1	2.0	1.2	2.5	5.8
Trade.	8.5	1.5	1.1	2.9	1.6	2.7	70.8	2.5	7.4	2.3
Finance.	1.1	.1	.1	.2	.1	.2	9.9	.3	2.1	.1
Service.	9.9	1.6	2.4	2.9	3.1	3.3	4.2	86.0	5.1	5.2
Clerical	4.7	.3	.4	1.0	. 7	1.6	3.0	1.4	73.3	1.3
Labourers[14].	7.0	3.1	4.0	2.4	2.0	3.9	1.4	1.6	1.3	57.9

[12]Source: Census of Canada, 1941, Vol. VII, table 15, pp. 486-493.

[13]Includes occupations not stated

[14]Not in agriculture, fishing, logging, or mining.

[15]Less than .05 p.c.

period or moving during the decade to other occupational groups are presented in table XVII-1 where the numbers of workers in each 1941 occupational group are given as percentages of the total number who were employed in the tabulated 1931 occupational groups. This table shows the percentages of the gainfully occupied who were in the same occupational group for the two censuses and the groups into which the remainder became distributed by 1941.[16] It is worth noticing that some gainfully occupied males in Canada transferred from each 1931 occupational group to every 1941 category tabulated.

From table XVII-1, it is obvious that agricultural and service occupations exhibited the least degree of interoccupational mobility, with 82.2 p.c. and 86.0 p.c. respectively, remaining in the same occupational group for the ten-year period under consideration. At the other end of the scale, men in the labouring occupations were the most mobile occupationally (only 57.9 p.c. of 1931's labourers were still in labouring occupations in 1941). Of the gainfully occupied males who left their 1931 occupational group, more went into manufacturing occupations than into any other group; and in every case manufacturing occupations gave to other groups considerably smaller proportions than were received by that group.

Dr. Whitworth[17] points to four distinct trends in this interoccupational mobility picture. The first trend is that many service, trade, finance, transportation, construction, manufacturing, and clerical personnel became "owners, managers, or dealers" in retail trade; thus leaving

---

[16] Cf., Whitworth, op. cit., pp. 53-58 for a somewhat similar table, together with a comparable one for Canada's females, and a brief analysis thereof.

[17] Loc. cit.

the wage-earning class to become their own boss. The second trend was from other groups to the labouring occupations, often caused by age of workers or technological shifts in demand. Aggressive men with ability to forge ahead form the third trend up the occupational ladder.[18] The fourth group consist of those who transferred from one occupational group to another in which the skills learned in the first were useful in the second.

Comparable female figures exhibit less interoccupational mobility than for the males. Of the females in construction in 1931, all were still employed therein at the time of the 1941 census. The other three least mobile groups are service occupations with 93.1 p.c., manufacturing occupations with 91.2 p.c., and clerical occupations with 90.2 p.c. of the female gainfully occupied remaining in each for the ten-year intercensal period. Of 1931's female labourers, 16 p.c. went to service occupations and 18 p.c. to manufacturing occupations, while only 57.3 p.c. remained as labourers. This interoccupational mobility picture for women is more limited in scope because the numbers employed are much smaller. "Expansion in the field of woman's endeavour accounts for many transfers."[19] Women also moved in considerable numbers from all groups to become domestic servants.

---

[18]Two 1931 labourers were grouped under "professors and college principals" in 1941, three under "physicians and surgeons", and 100 more became "owners, managers, and dealers -- wholesale" by 1941. Those putting themselves through college can account for only a limited number of these radical improvement advances.

[19]Ibid., p. 58.

Interoccupational Drifting of Immigrants.[20] -- Many discrepancies exist between the data concerning the intended occupation of immigrants, as obtained from the immigration returns and the actual occupations of the immigrants in the census year. These significant discrepancies are an indication of the interoccupational drifting of immigrants after their arrival in Canada. Many immigrants who gave agriculture as their intended occupation later abandoned the farm for some urban employment. Many more British born immigrants were enumerated in clerical occupations than gave this as their intended occupation. A further immigrant movement terminates Mr. Reynold's[21] analysis of this mobility:

> The labouring group has been enlarged by the interoccupational drift in two distinct ways: the dislodged craftsmen have slipped downward into it, and at the same time the drift of agricultural labourers from the farm to the city has swelled the ranks of the unskilled.

Wartime Labour Mobility.[22] -- The data reveal three general wartime labour shifts: the first from other industries to war industry, the second constituted a movement between occupations and between industries, and the third was a flow of emergency labour from the fringe of the non-gainfully occupied and the unemployed into Canada's labour force. As soon as the war industries had absorbed the surplus of unemployed labour, they began to compete for the labour of other industries by paying higher wages, thus initiating an upgrading trend in wages. With this upward wage movement came an upward movement of occupations, which was aided by the establishment of the War Emergency Training Program.

---

[20] Cf., L. G. Reynolds, The British Immigrant, (Toronto: Oxford University Press, 1935), pp. 80-83; upon which this paragraph is based.

[21] Ibid., p. 83.

[22] Cf., Supplement to the Labour Gazette, December, 1945, (Ottawa: Department of Labour, 1945), for numerical data to substantiate the conclusions of this subsection.

There existed the general tendency to move from one group to a higher occupational classification. Workers from service and agricultural occupations swelled skilled and semi-skilled ranks. Some few shifted down in occupational status for higher wages elsewhere. Vacancies thus left in the lower occupations were filled by unskilled labour groups having had no previous industrial rank. Incoming groups were students, unemployed, housewives, and own accounts. In all cases the net wartime labour shifts were upward.

Vertical versus Horizontal Occupational Shifts. -- Canada's entire occupational structure may be considered as rungs on a ladder, metaphorically. This initiates the concept of an "occupational scale of success". If a purely objective measure of this ladder is requested, one might be tempted to suggest economic remuneration as being roughly indicative of a worker's position on the "ladder of success"; although security, prestige, social position, and personal idiosyncrasies must also be considered.

With such a scale established, all elements of occupational mobility may be classified into either vertical or horizontal shifts. By analogy with the conventional economic concept of vertical versus horizontal industrial combinations and similar concepts, shifts up or down the occupational scale constitute vertical mobility while interoccupational and-or interregional shifts which do not alter the worker's relative position on the hypothetical occupational scale are defined as horizontal mobility. Thus a farm labourer who moved to another farm as a labourer has transferred horizontally, while a farm labourer who has saved his earnings and bought a small holding of his own, thus becoming an own account farmer, is an example of vertical mobility.

Occupational Demand and Supply. — Occupational mobility is conditioned by many factors, the most fundamental of which is the dynamic balance between the supply of workers in a given occupation and in all occupations, and the existing or potential demand for such. In general, the supply of labour is dependent upon the size of the population and the proportion thereof who are in the working ages. Many other factors condition the supply of qualified workers in each occupation[23]: (1) distastefulness or danger of job, (2) social attitudes toward the occupation, (3) regularity of employment in that occupation, (4) time and expense of training or education required, (5) the scarcity of persons with natural qualification for that occupation. The problem of the demand for labour[24] is concerned with both the modes of industrial recruitment and the stability of industrial operations.

The recent occupational and regional labour demand and supply picture is well documented by National Employment Service Data.[25] Where unfilled vacancies are defined as unfilled jobs on file in employment offices as at the date indicated, and unplaced applicants are persons registered for employment who have not been placed in jobs at the date indicated, the former exceeded the latter early in 1945, approximated equality in the summer of 1946 and reversed thereafter. The most recent figures available for November 1949, show 17,841 unfilled vacancies and 92,144 unplaced applicants by these definitions.

---

[23]Cf., R. A. Lester, Economics of Labor (New York: The MacMillan Co., 1948), p. 207, for this aspect of occupational supply.

[24]Cf., L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), pp. 219-244.

[25]Cf., H. A. Logan, "The Canadian Labour Market and Postwar Employment", The Annals, Vol. 253,(September 1947); for a report on past trends in varying balance between labour demand and supply.

Mobility Summary. -- Occupational mobility has been defined as the ease of transfer to related occupations. This movement interoccupationally and interregionally has brought to light many further important topics and relevant concepts, which include: world occupational mobility[26]; occupational movements and the expansion of population[27]; world supply of labour[28]; employment mobility and rigidity[29]; optimum mobility age occupationally[30]; sources of labour supply[31]; the demand for labour[32]; American demand for labour[33]; Pacific occupational migration[34]; demand and supply in Canada's professions[35]; migratory workers[36] who exhibit both interoccupational and interregional mobility; recent occupational shifts[37]; and so on. We have mentioned but a few of the many relevant mobility subjects and fields of

---

[26]A. M. Carr-Saunders, World Population (Oxford: Clarendon Press, 1936), pp. 46ff.

[27]A. J. and F. D. Herbertson, Man and His Work (London: A. & C. Black, Ltd., 1940), pp. 132f.

[28]Ibid., p. 105.

[29]Cf., Census of Canada, 1931, Vol. XIII (Ottawa: Dominion Bureau of Statistics, 1942), p. 245.

[30]Cf., Marsh, op. cit., pp. 73ff.

[31]Ibid., pp. 183ff. [32]Ibid., pp. 219ff.

[33]Cf., J. D. Durand, The Labor Force in the United States, 1890-1960 (New York: Social-Science Research Council, 1948), p. 109.

[34]Cf., F. V. Field, Economic Handbook of the Pacific Area (New York: Doubleday, Doran & Co., Inc., 1934), pp. 11ff.

[35]Cf., S. A. Feeley, Supply and Demand in the Professions in Canada (Ottawa: Dominion Bureau of Statistics, 1945).

[36]Cf., R. E. Riegel, An Introduction to the Social Sciences (New York: D. Appleton-Century Co., 1941), pp. 616-619.

[37]Cf., Health, Welfare, and Labour: Reference book for Dominion-Provincial Conference on Reconstruction.

An intelligent interpretation of the vicissitudes of Canada's occupational structure has led us through the broad and comprehensive field of occupational mobility -- from the generalities of labour mobility, through interregional and interoccupational movements, to the underlying complexities of demand and supply. The occupational movements of the last chapter internationally, of this chapter interoccupationally and interregionally, and of the next chapter historically combine to interpret Canada occupationally.

"Nothing is achieved before
it be thoroughly attempted."

Sir Philip Sidney,
Arcadia:
Bk. ii.

CHAPTER XVIII

OCCUPATIONAL TRENDS

Indispensable and vital to the occupational interpretation of Canada is a review of occupational trends, a discussion of Canadian occupational history, and a careful look at future projections. The relative brevity of this trend chapter is not a minimization of its importance, because the historical references to occupational trends have continued to reappear at numerous intervals throughout our whole survey. The significance of these occupational trends is distinguished by the growing modern tendency toward interdependence:

> The number of occupations is constantly increasing and becoming more and more dependent the one upon the other..... Compare.... the modern automotive industry with its dependence upon hundreds of allied industries, so that workers in one factory may find themselves out of a job because of a dispute in some other plant hundreds of miles away.[1]

Evolution and change varying in rapidity and intensity, have characterized the historical pattern of Canada's occupational structure. Pointing up his section on occupational trends, in a monograph prepared for the 1931 Census, Professor Hurd[2] wrote:

---

[1] E. G. Williamson, Students and Occupations (New York: Henry Holt & Co., Inc., 1937), p. 66.

[2] W. B. Hurd, "Demographic Trends in Canada", The Annals, Vol. 253, (September 1947), p. 13.

> The Canadian Census of Occupations and Canadian Employment Indices provide additional evidence of the trend away from agriculture (and other extractive industries) and toward urban occupations, particularly in the distributive and service fields. For Canada as a whole, persons gainfully occupied in agriculture decreased from 46 per cent of the total gainfully occupied population in 1861 to 29 per cent in 1931 (both sexes).

Limitations of Comparative Occupational Data.[3] -- Perhaps no occupational topic in Canada has been socially analyzed more than occupational trends; and, yet perhaps no occupational topic presents such difficulties in collection, assimilation, and tabulation of comparable data.

A comparison of occupational data for the census years is confronted by its chief obstacle -- the absence of a uniform scheme of classification. Even an historically unaltered classification scheme would be inconsistent because of the ever-changing characteristics of the occupations themselves, and the continual mortality and creation of occupations. Furthermore, as Mr. LeNeveu[4] adds:

> Due to changes in the duties and skills required in many occupations with the extension of machine processes of production, it is frequently the case that though the occupation class title has not changed materially from one census to the next its meaning has altered considerably.

The impossibility of compiling comparable figures for detailed occupations necessitates the broad occupational groups which are compared by table XVIII-1. This tabulation has rearranged the occupations for 1901 to 1921 inclusive and 1941, on the basis of the 1931 classification, though

---

[3] Cf., Canada Year Book, 1943-44 (Ottawa: Dominion Bureau of Statistics, 1944), pp. 1064-1065; and, Occupations and Industries bulletin, No. 0-6, Occupational Trends in Canada, 1901-1941 (Ottawa: Dominion Bureau of Statistics); for governmental statements.

[4] Ibid., p. 1.

some adjustment of the 1931 grouping was necessary. Subject to these limitations of comparability, this table presents a concise and broad picture of the varying composition of Canada's occupational structure.

The Nineteenth Century Occupationally.[5] -- An analysis of Canada's population occupationally by decades and time periods is one of the best methods of presenting an historical review of occupational trends. From 17 in 1611, Canada's white population increased to 22,000 in 1711, to 517,000 in 1811, to over 7,000,000 by 1911.

During the nineteenth century Canada worked and struggled, grew and progressed, matured and became a nation. During this formative century, the Dominion's occupational structure evolved gradually into a pattern which enabled her to become one of the world's more important trading countries. From the century's beginning, the gainfully occupied together with the total population passed from a high rate of increase through varying and complex stages to a lower rate of increase by the turn of the century (1900).

The First Decade Occupationally (1901-1911). -- During the first decade of the twentieth century, Canada's population increased by 1,838,328 -- the greatest absolute increase in Canada's history. This decade exhibited a noticeable decrease in the proportion of gainfully occupied males in agriculture and manufacturing occupations, a strong increase in the relative

---

[5] Cf., Census of Canada, 1931, Vol. I (Ottawa: Dominion Bureau of Statistics, 1936), chapter I for the government statement on the growth of population in Canada, up to 1931;
Cf., also, W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), pp. 1-12 for a thorough historical perspective of population trends.

number in labouring occupations, and an increase in all others except fishing and service occupations. The proportionate mining increase is re-emphasized by the figures for individual counties; in northern Ontario, Thunder Bay county increased 252.1 p.c. and Timiskaming county increased 2,024.0 p.c. during this decade. As shown in table V-1, the proportion of gainfully occupied males in agricultural occupations decreased over this decade not only for Canada as a whole, but also for each provincial region.[6] A glance at the female figures shows a drop in the proportion of gainfully occupied women in manufacturing and service occupations, but an increase in all other occupations except construction and labouring occupations. This decade is well analyzed by Professor Hurd's[7] epitome:

> The turn of the century ushered in an era of phenomenal railway expansion, stimulated immigration, tremendous extension of agricultural settlement in the Prairie provinces, and of extractive industries generally in British Columbia. Canada as a whole was prosperous. Trade expanded..... The trend of movement continued predominantly westward and cityward.

The War I Decade Occupationally (1911-1921). -- The requirements of World War I necessitated and initiated an increase in the need for food, feverish industrial activity, and a rising of prices. The centre of population moved 19 miles north and 71 miles west to Algoma county.[8] This decade distributed the inflow of workers from the previous decade's immigration, as well as the large number of pre-war workers in this decade. The "males" section of table XVIII-1 shows that while the relative number

---

[7] Ibid., p. 4.

[8] Cf., Census of Canada, 1931, Vol. I., op. cit., p. 125, for the interesting way in which this happened.

Table XVIII-1

Gainfully Occupied[10] by Occupation Group as Per Cent of all Occupations for Canada, 1901-1941 Censuses.[9]

Occupation Group	1901	1911	1921	1931	1941
	M	A	L	E	S
Agriculture	45.82	38.91	38.15	33.97	31.66
Fishing, trapping	1.76	1.46	1.09	1.45	1.52
Logging	1.04	1.81	1.44	1.35	2.39
Mining	1.83	2.65	1.79	1.80	2.14
Manufacturing	14.82	11.68	11.82	12.11	16.68
Construction	5.77	6.38	6.05	6.22	6.32
Transportation[11]	5.25	6.51	6.90	6.32	6.77
Trade and Finance	5.94	8.19	9.16	9.08	8.82
Service	6.51	6.90	7.23	8.30	9.17
Clerical	2.99	3.08	4.75	4.33	4.75
Labourers[12]	8.20	13.44	11.41	13.04	7.49
	F	E	M	A	L	E	S
Agriculture	3.76	4.35	3.65	3.62	2.28
Fishing, trapping	.01	.07	.01	.07	.04
Manufacturing	29.63	26.53	16.35	15.18	17.79
Construction	.03	.01	.02	.01	.09
Transportation[11]	.56	1.46	3.03	2.70	2.02
Trade and Finance	3.36	7.86	9.74	8.48	8.89
Service	56.98	50.39	46.30	52.10	50.06
Clerical	5.29	9.25	18.49	17.65	18.52
Labourers[12]	.48	.07	.09	.15	.10

[9]Source: Census of Canada, 1941, Vol. VII (Ottawa: Dominion Bureau of Statistics, table 2, pp. 6-7; cf., also, the remainder of table 2 which gives a similar breakdown for each of the provinces.

[10]10 years of age and over for 1901-1931; 14 years and over for 1941.

[11]Includes communication.

[12]Not included elsewhere.

of agriculturalists continued to fall, the decline was less marked than that of any other tabulated decade (the primary causal factor, war). Table V-1 shows that this slight proportionate agricultural decrease was tempered by an increase in the western provinces. Although the male occupational distribution exhibited few important changes, the female occupational structure altered appreciably during this unsettled decade. The proportion of gainfully occupied women in manufacturing and service occupations continued to drop appreciably, but increased in transportation and trade occupations. Probably partially attributable to wartime requirements, female clerks showed the largest increase -- in Ontario there were 5 females in clerical occupations in 1921 for every 2 in 1911 (accurately, 250.6 p.c. of 1911).

The Twenties Occupationally (1921-1931). -- This decade is taken by Mr. Marsh[13] as illustrative of "occupational change in the boom". As shown by table XII-1, the percentage of males in each social-economic group increased, entirely at the cost of a drastic drop (from one-third to one-quarter) in the male proportion of the gainfully occupied who were proprietors and managers. The reverse situation obtained for the women, where a sharp rise in the proportion in unskilled and service occupations left a decrease in each of the other social-economic groupings (except semi-skilled workers whose distribution remained stable). The mean annual earnings of male wage earners[14] decreased from $1,057 in 1921 to $927 in 1931; and this decrease was maintained in each occupational group, except trade, finance, and service occupations.

---

[13]Cf., L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 255-279.

[14]Cf., table VI-2 supra.

The proportion of men who were gainfully occupied decreased over this decade from 86.6 p.c. in 1921 to 85.4 p.c. in 1931; while the percentage of women enumerated in gainful occupations increased from 17.2 p.c. to 19.1 p.c. As also shown in table IX-1, the general occupational age tendency was that both the gainfully occupied males and females were older in 1931 than in 1921. Reference to table XVIII-1 for this decade, substantiates the continuing decline in the proportionate distribution of males in agriculture, and shows noticeable increases in manufacturing, transportation, and labouring occupations. After noting that the male workers increased by 21 p.c. during this decade, Mr. Marsh[15] points out for the 1921-1931 decade:

> The declines in the number of farmers, and in the proprietary and managerial class, are the first features which attract attention.... The long-run tendency for agriculture to absorb a smaller part of the national labour-force thus continued in spite of business fluctuations. This did not mean a decrease in agricultural output, but in fact the reverse. It did not mean, either, that all farming declined.

The relative number of women for every man in gainful occupations increased in Canada as a whole and for each individual province, except Nova Scotia.[16] The female occupational distribution of table XVIII-1 remained much the same throughout the decade, except for relative decreases in manufacturing, transportation, trade, and clerical occupations and a compensatory increase in the service occupations.

The Thirties Occupationally (1931-1941). -- Our historical survey of Canada's occupational structure, now leads through the depths of the "depression decade" up to the accelerated employment activity of wartime.

---

[15] Ibid., p. 267.

[16] Nova Scotia's femininity rate dropped from 183 in 1921 to 182 females for every 1,000 males in 1931.
Cf., table VIII-1 for remaining rates.

Chart VII-1 graphically portrays Canada's unemployment picture for this decade, and compares it, month for month, with the previous decade. The relatively low level of unemployment in the twenties gives place at the turn of the decade (1930) to a continuing high level of unemployment.

The proportion of gainfully occupied males (and also females) in agricultural occupations continued to fall, as shown in table XVIII-1. The most drastic percentage decline during this decade occurred in the labouring occupations. With the exception of trade and finance occupations, all other groups exhibited a percentage increase, especially the manufacturing occupations. The female gainfully occupied showed little tendency to change over the decade, except for a smaller proportion in service and a larger proportion in manufacturing occupations. The social-economic regrouping of table XII-1, shows no drastic proportionate alterations. The relative number of males increased in skilled occupations but decreased in unskilled and service occupations; while the females decreased in all socioeconomic groups, except clerical occupations where they increased slightly, and in unskilled occupations where they increased appreciably.

Although very low in 1931, the mean annual earnings[17] of male wage earners had risen only slightly by 1941 to $993. The working status of the gainfully occupied males showed a decrease in the proportion of employers compensated by an increase in own accounts[18] -- a reflection of the large number of farmers and small shop-keepers who were unable to find employees

---

[17]Cf., table VI-8 supra.

[18]Respective percentages for 1931 and 1941 are 11.89 and 7.05 for employers, with 16.86 and 21.71 for own accounts (as defined in chapter I).

and had to carry on by themselves. In summary, Mr. Hurd[19] concludes:

> The decade just completed (1931-41) was one of depression, unemployment and restricted export trade. Canada's absorptive capacity fell drastically.... Until well towards its close, unemployment in the Dominion ran into the hundreds of thousands, and in most of the years heavy relief grants had to be paid to farmers in the West.

The Forties Occupationally (1941-1949). -- The last census of Canada (1941) found this country engaged in World War II. Wartime and postwar occupational trends have appreciably altered the occupational structure of the Dominion. In his chapter on wartime expansion and postwar contraction of the American labour force, Mr. Durand[20] covered both the United States and Canada when he wrote:

> During the seven years 1940-47 the American labor force has undergone changes which are in all probability the most spectacular in the history of the nation and which have most important implications for future trends.

Wartime Occupational Shifts are obtained by comparing the 1940 occupational data on National Registration cards and the 1941 census data with similar occupational information contained on employee registration forms issued in 1944 for use by the Unemployment Insurance Commission. During the course of the war, 1940's unemployed were "drawn into industry, directly into the armed forces, or [went] there via a temporary wartime job."[21] Approximately 160,000 of the gainfully occupied in 1944 were unemployed in 1940.

---

[19] Op. cit., p. 8.

[20] J. D. Durand, The Labor Force in the United States, 1890-1960 (New York: Social Science Research Council, 1948), p. 137.

[21] Health, Welfare, and Labour: Reference book for Dominion-Provincial Conference on Reconstruction, p. 108.

The distinct occupational trends during the early part of the present decade enable postwar forecasting with some assurance.[22] It is to be expected that the proportion of Canada's population which is gainfully occupied will remain greater than in the pre-war period. This greater proportion of a numerically larger population means a substantial absolute increase. Urban occupations are claiming a disproportionately greater percentage of this increase. There exists no basis for assuming that the wartime population and occupational shifts are being or will be reversed to any appreciable extent.

Probable Future Trends. -- In general, the last paragraph's postwar trends may be expected to continue. The gainfully occupied population is following the general trend in its increasing concentration in metropolitan areas. The trend of the last fifty years away from agricultural occupations will likely continue. The agricultural decrease in gainfully occupied promises to be compensated by technological advancements and further increases in per capita agricultural production.

Past occupational changes, interpreted in the light of present and future conditions, indicate something as to probable future trends. In his section on probable future trends, Dr. Edwards[23] projects the social-economic occupational distribution (of appendix II) for the United States in a manner which is likely to be closely paralleled in Canada. He indicates that the professional class may grow in relative importance. As shown above, farmers

---

[22]Cf., ibid., p. 114.

[23]Cf., A. M. Edwards, Comparative Occupational Statistics for the United States, 1870 to 1940 (Washington: United States Government Printing Office, 1943), pp. 184-186.

may be expected to decrease,[24] while other proprietors increase in relative importance. Clerical workers may continue to increase relatively, while unskilled workers and skilled workers and skilled workers continue to decrease. Semi-skilled workers are forecast to become a much larger group. Present indications point to a continuation of the upward trend in the social-economic status of our gainfully occupied.

Summary. -- The decennial occupational trends for the first half of the twentieth century are tabulated relatively in table XVIII-1. The proportion of the gainfully occupied males in agricultural occupations has continued to decline with each census enumeration to less than one-third (31.66 p.c.) in 1941. This percentage drop in agriculture has been taken up by the continued increase in the relative number of males in manufacturing and in service occupations since 1911 and in transportation occupation since 1901. The other male occupations present no recognizable trend. The female trend in agriculture has been declining since 1911, and also falling in manufacturing occupations until 1941. Service occupations persist in claiming about half of the female gainfully occupied.

All of which has been complicated by the multiplicity of occupations and incomparability of historical data, which constitutes a limiting factor in any such analysis. Educationalist Whitworth[25] commented:

---

[24]Cf., S. A. Queen and L. F. Thomas, The City (New York: McGraw-Hill Book Co., 1939), p. 41. The tabulated percentages show that there were 52.8 p.c. of all gainfully occupied persons in agricultural occupations in the United States in 1870, while only 21.3 p.c. were found there by 1930.

[25]Op. cit., p. 29.

> Since 1881.... the list of gainful occupations has greatly lengthened. This has resulted from the subdivision of primary industries, specialization and the rise of new occupations as a result of progress in science and technology. The division of labour in the older occupations together with expansion in the newer ones has rendered much of the occupational data incomparable for the period.

Canada's occupational trends have been shown to exhibit certain long-run general characteristics and many varying fluctuations in the short-run. Canadian occupational history and future occupational prospects combine to interpret Canada occupationally.

"God gives all things to industry"

George Herbert,
Outmologia.

CHAPTER XIX

INTEGRATION OCCUPATIONALLY

Adequate Canadian occupational interpretation necessitates critical study of international, internal, and historical movements. This involves the analysis of international migration related to Canada's labour force and occupational structure, of labour mobility interoccupationally and interregionally, and of occupational trends showing changing proportions of workers engaged in the various occupations. It entails an integration of these occupational movements with economic theory, and their reconciliation into the framework of modern comparative economies; together with certain other pertinent occupational subjects discussed in this interpretive and terminative chapter.

The title for our closing chapter has been chosen advisedly to indicate its sole purpose in bringing together the previously differentiated elements of Canada's occupational structure -- a fitting together of the pieces in our occupational design. A "conclusion", as such, to the dynamic subject of occupations is impossible; and the word "conclusion" in its implications of having "said the last word" is presumptuous. However, the present integration not only cannot conclude our broad occupational study, but its forced omission or superficial treatment of many relative and pertinent occupational topics, which could not all conceivably be fully

and exhaustively covered in a thesis of this length, suggests that a great deal more thought should be given to the subject before anything more than a tentative interpretation would be justified.

Occupational Considerations Integrated. -- As it is necessary to distinguish and differentiate the multiplicity of complexities and interrelations of Canada's occupational structure, so is it essential to reunite and integrate these occupational considerations. As in mathematics, an initial differentiation usually infers the reciprocal existence of integration. An exactly complementary integration for every differentiation discussed or alluded to throughout our survey is not only unnecessary but undesirable. However, certain significant facts stand out in protrusion above the others as requiring special consideration.

One numerical figure, such as 49.3,[1] may be useful in a very broad sense as an all-inclusive summary of occupational significance in the economy, but adequate interpretation demands detailed deliberation of component factors. The factor of age conditions to a large extent the relative position of each worker within an occupation. Since the Canadian population appears to be gradually ageing, the working age classes (ages 20 to 65 years) are tending to increase but will thereafter decrease, while the average working age progressively increases. Sex classification of the gainfully occupied exhibits a wide variance from predominately female occupations (such as, nurses, librarians, teachers, social workers, and so on), to the prevailing male occupations (such as, accountants, physicians, lawyers, pharmacists, architects, and many others). These extremes together with

[1] The 1941 census enumerated 49.3 p.c. of Canada's population as gainfully occupied.

the intervening occupations whose proportionate sex compositions vary appreciably, are all requisite to an integrated occupational picture. Regional segregation of occupations enables the whole to be studied and analyzed more intelligibly and exhibits instructive variations. Canada's occupational structure is divided into two distinct parts by the rural-urban distribution of the gainfully occupied. Industrial differentiation reclassifies the gainfully occupied according to the industry in which they are employed. These represent only a few of the many significant factors requiring consideration for inclusive occupational integration. Two further distributions[2] have not been previously referred to herein. Branch distribution divides broad occupational categories into dependent parts; and is illustrated by the example of "engineering", which has many branches such as civil engineering, mechanical, chemical, aeronotical, and so on. Functional distribution represents the wide (or narrow) range of potential employments for those of a given occupation; as an example, graduates in engineering may go into teaching, research, administration, sales, or numerous other lines requiring engineers.

Comparative Economies Occupationally. -- As originally conceived the comparison of the occupational structures of other economies with that of Canada was to have constituted an entire chapter -- the concluding chapter of book two's Canadian economy. The author's relevant research has covered the occupational patterns of the world's more important civilizations. For

---

[2]Cf., J. E. Andoff, speech entitled, "Relationship of Counselling and Training to Professional Opportunities in Canada".

example, Russia's communistic setup[3] deserves more than mere mention, because of its uniqueness and value in contrasting it with other occupational patterns.

The occupational pattern of the United States is so similar to our own, and so much statistical research has been spent upon investigation of their particularized trend variations, that the American occupational structure has been referred to and compared with our own many times throughout this survey. The National Resources Committee's The Problems of a Changing Population,[4] gives special attention to the mutations of occupational distribution. To promote conceptual and terminological clarity regarding recent labour force experience in the United States, Analysists Ducoff and Hagood have prepared their Labor Force Definition and Measurement.[5] The best modern work on the American occupational structure, turned up by this thesis' research on comparative economies, is Mr. Durand's monograph, The Labor Force in the United States, 1890-1960.[6] A comparison of the 1930 and the 1940 American census occupation and industry classifications and statistics, a comparable series of occupation statistics, 1870 to 1930, and a social-economic grouping of the labour force, 1910-1940 are presented statistically

---

[3]Cf., A. Baykov, Soviet Economic System (Cambridge: University Press, 1946), and, also,
F. Lorimer, The Population of the Soviet Union (Geneva: League of Nations, 1946).

[4]National Resources Committee, The Problems of a Changing Population (Washington: United States Printing Office, 1938).

[5]L. J. Ducoff and M. J. Hagood, Labor Force Definition and Measurement (New York: Social Science Research Council, 1947).

[6]J. D. Durand, The Labor Force in the United States, 1890-1960 (New York: Social Science Research Council, 1948), Mr. Durand's appendix E lists all reports of the United States federal censuses from 1890-1948 which contain labour force statistics.

by Dr. Edwards' Comparative Occupation Statistics.[7] Professor Hurd[8] succinctly summarizes occupational trends in the United States, and refers to the most recent American findings which are incorporated in the hearings before the House of Representatives Committee on Interstate Migration.[9] These and numerous other American occupational studies supplement our interpretation of Canada occupationally.

To integrate all available occupational data and studies of comparative economies with Canadian occupations passes beyond the scope of this thesis, but a few references may serve to set the stage for some future study of the integration of other civilized occupational statistics with those of our Dominion. Russian and American references have already been given or alluded to in this section. Great Britain occupationally could form the core of a comprehensive study. Mr. Marsh[10] compares the occupational structures of England and the United States with that of Canada. The 1930-1931 proportionate distribution of gainfully occupied in these three economies[11] showed male farmers as constituting 20.3 p.c. in Canada, 15.3 p.c. in the United States, but only 2.3 p.c. in England, while skilled workers tended

---

[7]A. M. Edwards, Comparative Occupational Statistics for the United States, 1870 to 1940 (Washington: United States Government Printing Office, 1943).

[8]W. B. Hurd, Contemporary Demographic Movements Underlying Canadian Agricultural Development (Hamilton: Advisory Committee on Reconstruction, 1943), pp. 51-54.

[9]Inter-state Migration, Report of the Select Committee to investigate the interstate migration of destitute citizens. House of Representatives. Union Calendar No. 114 (Washington: United States Government Printing Office, 1941).

[10]L. C. Marsh, Canadians In and Out of Work (Toronto: Oxford University Press, 1940), pp. 48-55.

[11]Cf., ibid., p. 457, table I.

to reverse this ratio.[12]

Consider also a comparative study of "The British Commonwealth Dominions Occupationally". Beginning with the homeland as indicated above, such a comparison and contrast could carry on to "South Africa Occupationally"; "Australia Occupationally"[13]; "India Occupationally"[14]; and so on, around the Empire on which the sun never sets. Nations boardering on the Pacific are compared by occupation in Mr. Field's Economic Handbook of the Pacific Area.[15] The list of potential study is endless in an integration of Canadian and comparative economies occupationally.

---

[12]With 11.7 p.c. in Canada, 14.6 p.c. in the United States, and 21.3 p.c. in England.

[13]Cf., G. L. Wood, "Occupations and Urbanization", The Annals, Vol. 158 (November 1931).

[14]Cf., B. Narain, Population of India (Toronto: McAinsh & Co., 1925); and, also,
H. H. Mann, "The Agriculture of India"; and
L. Samaldas, "Industry and Commerce (in India)"; and
A. G. Clow, "Unemployment in India"; in The Annals, Vol. CXLV (September 1929).

[15]F. V. Field, Economic Handbook of the Pacific Area (New York: Doubleday, Doran & Co., Inc., 1934).

Some Theoretical Implications Occupationally.[16] -- Occupational interpretation obviously degenerates to economic inadequacy without some theoretical foundation. That economic specialization and the division of labour necessitate and are the correlatives of occupational differentiation, has been the underlying theoretical thesis of our demographic survey. This causal factor of occupations which conditions and is basic to their development, was recognized two centuries ago by Adam Smith[17]:

> The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is any where directed, or applied, seem to have been the effects of the division of labour.

Over the broad field of occupations, the degree of specialization varies considerably; from the highly skilled specialist who will find few avenues for his talents outside the narrow confines of his chosen occupation, to the unskilled "jack-of-all-trades" who can and will do any job, for anyone, anywhere. Interoccupational dependence increases as individual occupations become more specialized.

---

[16]This thesis' evolution has reduced this section from the original book five (entitled "Economic Theory"), to a chapter with subsections paralleling the original book's chapters, to the present subsection. The third and fourth chapters of this book (five) -- "Socialism Occupationally" and "Business Cycle Theory Occupationally" -- are already written but it has been considered advisable to omit these from the present survey, because a balancing equality of all economic theory related to occupations is more than adequate scope for an entire thesis in itself (even the author's own research has netted almost sufficient material), and cannot therefore be sufficiently subordinated to be even superficially contained herein, beyond these paragraphs. Some future thesis might attempt to correlate economic theory and Canada's occupational structure.

[17]Adam Smith, The Wealth of Nations (New York: The Modern Library, 1937), p. 3. (italics mine).

From specialization theory, we turn to employment theory to discover even more fields of occupational adventure and research. The utter impossibility of even superficial coverage of all employment theory occupationally precludes anything but an enumeration of a few possible channels of entry. These might commence with: employment definitions[18]; the economic problem of employment generalized[19]; seasonal variation in employment[20]; the relation of employment to progress[21]; technocratic employment[22]; multilaterism and full employment[23]; obstacles to full employment[24]; indices of employment[25]; the employment multiplier[26]; trade union policy under full employment[27]; labour organization occupationally[28]; general

---

[18]Cf., S. C. Pigou, The Theory of Unemployment (London: MacMillan & Co., Ltd., 1933), pp. 3ff.

[19]Cf., L. C. Marsh, Employment Research (Toronto: Oxford University Press, 1935), pp. 10-11.

[20]Cf., Ibid., pp. 177ff.

[21]Cf., O. Lange, "Economic progress and Full Employment", The Annals, Vol. 246, (July 1946).

[22]Cf., C. C. Atteberry, J. L. Auble, and E. F. Hunt, Introduction to the Social Sciences (New York: MacMillan Co., 1947), p. 296; and A. Raymond, What is Technocracy? (New York: Whittlesey House, 1933).

[23]Cf., M. Kalecki, "Multilateralism and Full Employment", The Canadian Journal of Economics and Political Science, Vol. 12, (August 1946).

[24]Cf., H. A. Logan, "The Canadian Labour Market and Postwar Employment", The Annals, Vol. 253 (September 1947), p. 96.

[25]Cf., Census of Canada, 1931, Vol. XIII, (Ottawa: D. B. S., 1942).

[26]Cf., J. Robinson, Introduction to the Theory of Employment (London: MacMillan & Co., Ltd., 1947), pp. 15-22.

[27]E. Forsey, "Trade Union Policy under Full Employment", The Canadian Journal of Economics and Political Science, Vol. 12, (August 1946).

[28]Cf., I. Wilson, "Labour Organization in Canada", The Annals, Vol. 253, (September 1947); and Atteberry, op. cit., p. 480; and J. Dauphinee, Opportunity in Canada (London: Rockliff, Salisbury Square, 1948), pp. 162-166; and
Health, Welfare and Labour: Reference book for the Dominion-Provincial Conference on Reconstruction, pp. 69-89.

summary of Canadian employment[29]; and so on. Even as a beginning, this list is not complete, but merely suggestive of what could be done along this line. Similar occupational relationships could be built up and studied in the correlation of Canadian occupational structure with unemployment theory, labour theory, wage theory.

The theory of socialism may be viewed as involving the abolition of private property, the administration of the means of production on a collective basis, and the control of economic activities by public authority.[30] The author's chapter on Socialism Occupationally[31] observes the occupational structures of utopian socialism, Marxian socialism, evolutionary socialism, syndicalism, guild socialism, communism, and capitalism in contrast. The allocation of labour between occupations is discussed by Mr. Dickinson[32] where he shows that socialism's equal payment system deprives the community of the very useful method of regulating the supply of labour to different occupations by means of changes in the remuneration offered. In capitalism the wage and salary scale serves to differentiate the labour supply by occupations, directing the workers into the occupations where they are most needed on an economic basis; the socialistic and communistic economies must substitute beaurocracy and arbitrary occupational allocation.

---

[29]Cf., M. E. K. Roughsedge, Annual Review of Employment and Payrolls in Canada, 1947 (Ottawa: Dominion Bureau of Statistics, 1948). Similar employment reviews are issued annually by the Bureau.

[30]Cf., R. S. Ford, Visual Outline of Economics (New York: Longmans, Green & Co., 1933), p. 108.

[31]As written the body of such chapter was based on the form of chapter XXXI (Socialism) in F. B. Garver and A. H. Hansen, Principles of Economics (Boston: Ginn & Co., 1937), pp. 562-578.

[32]Cf., H. D. Dickinson, Economics of Socialism (London: Oxford University Press, 1939), pp. 118-124.

"The business world is characterized by alternating waves of prosperity and depression.... commonly called business cycles."[33] The economy's entire occupational structure can be, and is, thrown into maladjustment by this recurring phenomenon -- the business cycle. The author's chapter on The Business Cycle Occupationally has studied the occupational effects of cyclical change; and is divided into four main sections which observe the effects on our occupational structure of prosperity, crisis and recession, depression, revival.

Occupational Dynamics. -- Canada's occupational structure is not to be compared with an edifice of brick and stone; the structure of occupations is fluid and dynamic; it is ever changing and rapidly shifting. Both the absolute and relative relationships of each individual occupation to all others continually alters. Historical dynamics have shown that the agricultural and extractive occupations have declined in proportionate representation of Canada's gainfully occupied, secondary occupations have varied around a more constant level, while tertiary occupations have been increasing in importance. These long-run trends are so dynamic per se that inherent fluctuations cause generalized comparisons between them to degenerate in relative importance

"Perhaps the most characteristic feature of contemporary occupational life is the instability of employment opportunity."[34] Within the present generation's lifetime, trades and occupations which originated before the Industrial Revolution have degenerated to minor importance or entirely

---

[33] R. T. Bye, Principles of Economics (New York: F. S. Crofts & Co., 1945), p. 259.

[34] The Problems of a Changing Population, op. cit., p. 213; and, cf., also, p. 214.

disappeared. Other modern occupations previously unheard of have ascended to prominence. The wheelwright has been replaced by the automobile mechanic; the glass blower by the machine-operating factory worker.

Thus, the integrated structure of Canadian occupations is highly dynamic, technologically fluid, constantly changing.

Conclusion.[35] -- Although arduous to organize and commence, a thesis like this one becomes progressively easier and more pleasant to write as interest is aroused upon deeper investigation, but this enjoyment increases the difficulties of ultimate termination, particularly when so much more material is so immediately available. The reader may argue that some aspects of Canada occupationally have been gone into too fully, while others have been skimmed too superficially or entirely neglected; but he will agree that any allocation of subject-matter weight in such a broad and dynamic field as occupations is subject to justifiable criticism from some school of thought.

Notwithstanding that occupational lines shift continually, that the personnel of any specific occupation is highly fluid, and that numerous other mobility factors exist, the last section's occupational dynamics have only tempered the remarkable and striking observation in modern civilized countries, that, in general, the occupational structure as a whole remains relatively stable in the long-run. Modern occupation is not a rigidly

---

[35]As previously mentioned, the title of this final subsection does not, and cannot conceivably be taken to, mean that the writer is inferring that he has said the last word in a "conclusive" manner. It indicates only the termination of an extremely interesting adventure onto the fringe of the field of Canada's occupational structure.

limited sphere of hereditary activity; occupations tend to merge and subdivide; changes in occupation occur frequently.

Assisting our occupational survey to terminate on the highest note possible, is the quotation:

> Occupation is a fact which distinguishes one man from another, giving every individual a feeling of independence, and at the same time unites as equals men of different origin and background. Occupation leaves its impress upon the inner being of individuals, affects vitally their external life histories, serves as a link binding them to society and thereby gives a specific form to the social structure.[36]

This thesis has introduced and dealt with the more important differentiable segments and aspects of the Canadian occupational structure. Within existing space limitations, our survey has reviewed and presented in an integrated whole as complete as possible a critical study of Canada occupationally.

---

[36] A. Salz, "Occupation", Encyclopaedia of the Social Sciences, Vol. XI, p. 424.

Finis

APPENDIX I

CENSUS OF CANADA, 1941

CLASSIFICATION OF OCCUPATIONS

Agriculture

Farmers and stockraisers; foremen -- farm; farm labourers.

Fishing, Hunting, and Trapping

Fishermen; hunters, trappers, guides.

Logging

Owners and managers; foremen; foresters and timber cruisers; lumbermen.

Mining and Quarrying

Owners and managers; foremen; labourers -- mines and quarries; miners and millmen; oil well drillers; quarriers and rock drillers.

Manufacturing

Owners and managers; foremen; inspectors, testers -- chemicals; inspectors and gaugers -- metal; inspectors, graders, scalers -- wood; bakers; blacksmiths, hammermen, forgemen; bleachers and dyers -- textiles; boiler firemen; boilermakers, platers, riveters; bookbinders; boot and shoe repairers; butchers and meat cutters; cabinet and furniture makers; coopers; dressmakers and sewers (not in factory); electrical appliance repairmen; engravers and lithographers; filers and grinders; fitters and assemblers --

Manufacturing -- Con.

metal; furnacemen, heaters -- metal; furriers; heat treaters and annealers; jewellers and watchmakers; loom fixers and card grinders; machinists -- metal; mechanics and repairmen (not elsewhere specified); millers -- flour and grain; milliners (not in factory); millwrights; moulders, coremakers, casters; paper makers; patternmakers; photographers; polishers and buffers -- metal; power station operators; printers; rolling mill operators (not elsewhere specified); sawyers -- wood; sheet metal workers and tinsmiths; spinners and twisters -- textiles; stationary enginemen; stone cutters and dressers; tailors and tailoresses; tool makers, die cutters and setters; upholsterers; weavers -- textiles; welders and flame cutters; wood machinists -- turners, planers.

Other occupations in the manufacture of: chemical products; clothing and textile products; food products; leather products; liquors and beverages; metal products; non-metallic mineral products; printing and photography; rubber products; tobacco products; wood and paper products; other products.

Construction

Owners and managers; foremen; inspectors; brick and stone masons; carpenters; electricians and wiremen; painters, decorators, glaziers; plasterers and lathers; plumbers and pipe fitters; structural iron workers; other construction occupations.

Transportation and Communication

Owners, officials, managers; foremen; inspectors; agents -- ticket, station; aviators -- not in armer forces; baggagemen and expressmen; brakemen -- railway; bus drivers; captains, mates, pilots; chauffeurs and taxi drivers; conductors -- steam railway; deliverymen and drivers (not elsewhere specified); dispatchers -- train; engineering officers -- on ships; firemen and trimmers -- on ships; linemen and cablemen; lockkeepers, canalmen, boatmen; locomotive engineers; locomotive firemen; longshoremen and stevedores; messengers; operators -- electric railway; radio announcers, broadcasters; radio station operators; seamen, (not elsewhere specified); sectionmen and trackmen; switchmen, signalmen, flagmen; teamsters and carriage drivers; telegraph operators; telephone operators; truck drivers; yardmen (railway), (not elsewhere specified); other transportation occupations.

Finance

Owners, managers, officials; insurance agents; real estate agents and dealers; stock and bond brokers; other finance occupations.

Trade

Owners, managers, dealers -- retail; owners, managers, dealers -- wholesale; floorwalkers and foremen; advertising agents; auctioneers and appraisers; brokers and agents (not elsewhere specified); canvassers and demonstrators; collectors, bill; commercial travellers; credit men; hawkers and pedlars; inspectors, graders, samplers; newsboys; packers, wrappers, labellers; purchasing agents and buyers; salespersons in stores; window decorators and dressers; other trade occupations.

Service

PROFESSIONAL: architects; artists and art teachers; authors, editors, journalists; chemists and metallurgists; clergymen and priests; dentists; draughtsmen and designers; engineers, civil; engineers, electrical; engineers, mechanical; engineers, mining; judges and magistrates; lawyers and notaries; librarians; musicians and music teachers; nuns and brothers (not elsewhere specified); nurses -- graduate; nurses -- in training; osteopaths and chiropractors; physicians and surgeons; professors and college principals; religious workers, (not elsewhere specified); social welfare workers (not elsewhere specified); teachers -- school; veterinary surgeons; other professional occupations.

PUBLIC: firemen -- fire department; government inspectors; policemen and detectives; postmasters; postmen and mail carriers; public service officials (not elsewhere specified); other public service occupations.

RECREATIONAL: owners and managers; actors, showmen, sportsmen; motion picture projectionists; ushers; other recreational occupations.

PERSONAL: owners and managers -- hotels; owners and managers -- laundries; owners and managers -- restaurants; barbers, hairdressers, manicurists; bootblacks; charworkers and cleaners; cleaners and dyers -- clothing; cooks; domestic servants (not elsewhere specified); elevator tenders; guards and caretakers (not elsewhere specified); housekeepers, matrons, stewards; janitors and sextons; laundrymen and laundresses; lodging and boarding house keepers; nurses -- practical; porters; undertakers; waiters and waitresses; other personal service occupations.

Clerical

Accountants and auditors; bookkeepers and cashiers; office appliance operators; office clerks; shipping clerks; stenographers and typists.

APPENDIX II

OCCUPATIONS INCLUDED IN THE SOCIAL-ECONOMIC GROUPS

Professional

Architects; artists, art teachers; authors, editors, journalists; chemists and metallurgists; clergymen and priests; dentists; draftsmen and designers; engineers, civil, electrical, mechanical and mining; judges and magistrates; lawyers and notaries; librarians; musicians and music teachers; brothers, nuns; graduate nurses, nurses-in-training; osteopaths and chiropractors; physicians and surgeons; professors and college principals; religious workers; social welfare workers; school teachers; veterinary surgeons; actors and sportsmen and "other professional occupations".

Proprietors, Managers, and Officials

Farmers and stockraisers; logging owners and managers, foresters and timber cruisers; owners and managers in mining and quarrying, manufacturing, construction, transportation, retail and wholesale, finance, hotels, laundries, restaurants, etc. Train conductors and dispatchers, brokers and agents, stock and bond brokers, postmasters, public service officials, and undertakers.

Clerical, and Commercial

Inspectors, chemical, metal, wood, and manufacturing; construction and transportation inspectors; gaugers, ticket agents, baggagemen and expressmen; messengers; telegraph and telephone operators; advertising agents, bill collectors, commercial travellers, credit men, hawkers and peddlers; newsboys; packing agents; canvassers and demonstrators; sales people in stores; insurance agents, real estate agents and dealers; postmen and mail carriers; other trade, finance and public occupations; accountants and auditors, bookkeepers and cashiers, office appliance operators, office clerks, shipping clerks, stenographers and typists.

Skilled Workers and Foremen

Foremen, farm, log and timber camp, mining and quarrying, manufacturing, construction; blacksmiths and forgemen; boilermakers, platers and riveters; bookbinders; shoe repairers; cabinet and furniture makers; loom fixers; machinists; mechanics and repairmen; millers; milliners; millwrights; molders, coremakers and casters; sheet metal workers; stationary enginemen; stone cutters; wood sawyers; tailoresses and tailors; tool makers and die cutters; welders; brick and stone masons; carpenters; electricians and wiremen; painters, decorators and glaziers; plasterers and lathers; plumbers; and structural iron workers.

Semi-skilled Workers

Oil well drillers; bakers; bleachers and dyers; boiler firemen; butchers and meat cutters; sewers (dressmakers); filers and grinders; fitters and assemblers in metal; polishers and buffers in metal; power station operators; upholsterers; spinners and twisters; weavers; wood turners; selected construction operators; brakemen; chauffeurs and taxi drivers; deliverymen and drivers; firemen and trimmers on ships; linemen and cablemen; lock keepers, canalmen and boatmen; seamen; electric railway operators; switchmen and signalmen; truck drivers; yardmen; packers and wrappers; firemen; motion picture projectionists; barbers, hairdressers; cleaners and dyers; practical nurses; policemen and detectives and other transportation workers.

Unskilled and Service Workers

Farm labourers; fishermen; hunters, trappers and guides; lumbermen; labourers in mines and quarries; miners and millmen; quarriers and rock drillers; furnacemen, heat treaters and annealers; longshoremen and stevedores; sectionmen and trackmen; teamsters and carriage drivers; selected recreation occupations; bootblacks; charworkers and cleaners; cooks; domestic servants; elevator tenders; guards, caretakers, housekeepers, matrons and stewards; janitors and sextons; laundry workers; lodging housekeepers; porters; waiters and waitresses; other personal occupations; ushers; labourers, not given elsewhere.

SELECTED BIBLIOGRAPHY

on

CANADA OCCUPATIONALLY

The following list includes only the more important works used in the research and preparation of this thesis. The writer has compiled and used a much more complete bibliography, from which the following books and articles have been selected. In the author's opinion, the references marked by an asterisk (*) are the most valuable works pertaining to Canada occupationally.

Allen, F. J., A Guide to the Study of Occupations, Cambridge, Mass.: Harvard University Press, 1925.

Anderson, C., "Unemployment and Its Amelioration", The Annals, Vol. 158, November 1931.

Andoff, J. E., "Relationship of Counselling and Training to Professional Opportunities in Canada, address delivered at Quebec City, June 1947.

-------, Report on the Survey of Occupational Trends, Ottawa: Department of Veterans Affairs, 1947.

Angus, H. F., "Future of Immigration into Canada", Canadian Journal of Economics and Political Science, Vol. 12, August 1946.

-------, "Need for an Immigration Policy", The Annals, Vol. 253, September 1947.

Baker, J. C., Directors and their Functions, Boston: Harvard University Press, 1945.

Beehler, L. J., The Maritime Provinces in their Relation to the National Economy of Canada, Ottawa: Dominion Bureau of Statistics, 1948.

Bennett, H. M., Women and Work, New York: D. Appleton & Co., 1917.

Beveridge, W. H., Unemployment, London: Longmans, Green & Co., 1930.

Brewer, J., Occupations, New York: Ginn & Co., 1937.

------, and E. Lundy, Occupations Today, Boston: Ginn & Co., 1943.

Brunhes, Jean, Human Geography, Chicago: Rand McNally & Co., 1920.

Buehler, E. C., Compulsory Unemployment Insurance, New York: H. W. Wilson & Co., 1931.

Bye, R. T., Principles of Economics, Boston: Ginn & Co., 1928.

*Canada, Census of Canada, 1941, Vol. VII, Occupations and Industries, Ottawa: King's Printers, 1945.

------, Census of Canada, 1941, Instructions to Commissioners and Enumerators, Ottawa: King's Printers, 1941.

------, Census of Prairie Provinces, 1936, Vol. II, Occupations, Earnings, etc., Ottawa: King's Printers, 1940.

------, Census of Canada, 1931, Vol. I, Population Summary, Ottawa: King's Printers, 1935.

------, Census of Canada, 1931, Vol. VII, Occupations and Industries, Ottawa: King's Printers, 1936.

------, Census of Canada, 1921, Vol. IV, Occupations, Ottawa: King's Printers, 1926.

------, Census of Canada, 1911, Vol. VI, Occupations, Ottawa: King's Printers, 1916.

------, Department of Labour, "The Effect of Immigration in Relieving Labour Shortages during 1947", Labour Gazette, Vol. XLVIII, March 1948.

------, ------, Research and Statistics Branch, Changes in Population and in the Labour Force, Ottawa: King's Printers, 1946.

------, ------, ------, Occupational Outline Series, Ottawa.

------, ------, ------, Occupational Wage Reporting Schedules, Ottawa: King's Printers, 1948.

------, Department of Veterans Affairs, Occupational Outlook Bulletins, Vocational Survey Series, Ottawa: King's Printers, 1947.

------, Dominion Bureau of Statistics, Canada Year Books, 1943-44, 1945, 1946, 1947, (also previous year books), Ottawa: King's Printers.

------, ------, Households, Occupations, and Earnings, bulletins Nos. 4, 5, 6.

*------, ------, Labour Force bulletins (especially No. 8, 1948).

------, ------, Occupations and Earnings bulletins Nos. 2, 3.

------, ------, Occupations and Industries bulletin, No. 0-5.

------, ------, Occupations bulletins, Nos. 0-1, 0-2, 0-3j, 0-4.

------, ------, Occupations, Earnings, and Employment bulletins, Nos. 7-602-6, 7-606-7, 7-606-8.

*------, ------, Occupational Trends in Canada, 1901-1941.

------, ------, Special Tabulation of Unemployment Insurance Benefit Statistics, 1948 (also, annual reports for years 1942-1946).

*------, Health, Welfare and Labour, Reference Book for Dominion-Provincial Conference on Reconstruction.

Carr-Saunders, Population, London: Oxford University Press, 1925.

------, World Population, Oxford: Clarendon Press, 1936.

Chapman, P. W., Occupational Guidance, Atlanta: The Turner E. Smith Co., 1937.

Clark, Colin, Conditions of Economic Progress, London: MacMillan & Co., 1940.

Clark, H. F., Life Earnings, New York: Harper and Bros. Publishers, 1937.

Charles, E., The Changing Size of the Family in Canada, 1941 census monograph, Ottawa: Dominion Bureau of Statistics, 1948.

*Coates, R. H., and M. C. MacLean, The American Born in Canada, Toronto: The Ryerson Press, 1943.

Cole, G. D. H., "Industrialism", Encyclopaedia of the Social Sciences, Vol. VIII.

Croxton, F. E., and D. J.Cowden, Applied General Statistics, New York: Prentice-Hall, Inc., 1941.

Culliton, J. T., Assisted Emigration and Land Settlement, Montreal: The Federated Press Ltd., 1930.

*Dauphinee, J., Opportunity in Canada, London: Rockliff, Salisbury Square, 1948.

Davey, M. A., E. M. Smith, and T. R. Myers, Everyday Occupations, Chicago: D. C. Heath & Co., 1941.

Douglas, P. H., and A. Director, The Problem of Unemployment, New York: The MacMillan Co., 1931.

Dublin, L. I., Population Problems in the United States and Canada, Boston: Houghton Mifflin Co., 1926.

-------, and A. J. Lotka, Length of Life, New York: The Ronald Press Co., 1935.

Ducoff, L. J., and M. J. Hagood, Labor Force Definition and Measurement, New York: Social Science Research Council, 1947.

*Durand, J. D., The Labor Force in the United States, 1890-1960, New York: New York: Social Science Research Council, 1948.

Edwards, A. M., Comparative Occupational Statistics for the United States, 1870-1940, Washington: United States Government Printing Office, 1943.

Estey, J. A., Business Cycles, New York: Prentice-Hall, Inc., 1941.

Feeley, G. A., Supply and Demand in the Professions in Canada, Ottawa: Dominion Bureau of Statistics, 1945.

Field, F. V., Economic Handbook of the Pacific Area, New York: Doubleday, Doran & Co., Inc., 1934.

Forrester, G., Giving Information about Occupations, Chicago: Science Research Associates, 1940.

Fowke, V. C., "Canadian Agriculture in the Postwar World", The Annals, Vol. 253, September 1947.

Furniss, E. S., and L. R. Guild, Labor Problems, Boston: Houghton Mifflin Co., 1925.

Garver, F. B., and A. H. Hansen, Principles of Economics, Boston: Ginn & Co., 1937.

Golden, C. S., "Labor -- Bulwark of Democracy and Peace", The Annals, Vol. 234, July 1944.

Gore, C., How to Get a Job, Chicago: The John C. Winston Co., 1939.

Greenleaf, W. J., Guide to Occupational Choice and Training, Washington: Federal Security Agency, 1947.

Guest, L. H., Is Labour Leaving Socialism? London: John Murray, 1929.

*Herbertson, A. J. and F. D., Man and His Work, London: A. & C. Black, Ltd., 1940.

Hornby, M. L., Canada's Steps Toward Immigration, Vancouver: Sun Publishing Co., Ltd., 1947.

Huntington, E., and S. W. Cushing, Principles of Human Geography, New York: John Wiley & Sons, 1920.

*Hurd, W. B., Contemporary Demographic Movements Underlying Canadian Agricultural Development, Hamilton: Advisory Committee on Reconstruction, 1943.

------, "Demographic Trends in Canada", The Annals, Vol. 253, September 1947.

*------, "Ethnic Origins and Nativity of the Canadian People", Ottawa: Dominion Bureau of Statistics, monograph under preparation for the 1941 census of Canada.

------, "Racial Origins and Nativity of the Canadian People", Census of Canada, 1931, Ottawa: Dominion Bureau of Statistics, 1942.

------, "Some Implications of Prospective Population Changes in Canada", Journal of Farm Economics, Spring 1945.

International Labour Office, "Employment Situation in Canada", International Labour Review, Vol. 55, March 1946.

------, The Migration of Workers, Geneva: 1936.

------, "Occupation and Health", Encyclopaedia of Industrial Hygiene, Geneva: 1930.

------, Recruiting, Placing, and Conditions of Labour of Migrant Workers, Geneva: 1939.

------, Statistical Methods for Measuring Occupational Morbidity and Mortality, Geneva: 1930.

------, Systems of Classification of Industries and Occupations, Resolutions of British Empire Statistical Conference, Geneva: 1923.

Isaac, J., Economics of Migration, London: Kegan Paul & Co., Ltd., 1947.

Jackson, G. E., "The Emigration of Canadians to the United States", The Annals, Vol. CVII, May 1923.

Jones, A. J., Principles of Guidance, New York: McGraw-Hill Book Co., Inc., 1934.

Kehiher, L. E., Medical Occupations for Girls, New York: E. P. Dutton & Co., 1939.

Keyfitz, N., "Ethnic Groups and Their Behaviour", The Annals, Vol. 253, September 1947.

Keynes, J. M., The General Theory of Employment, London: Macmillan & Co., 1935.

Kyrk, H., "Who Works and Why", The Annals, Vol. 251, May 1947.

Landis, P. H., Population Problems, New York: American Book Co., 1943.

Landy, E., and others, Occupational Adjustment and the School, New York: National Association of Secondary School Principals, 1940.

Law, F. H., He got the Job, Chicago: Charles Scribner's Sons, 1941.

*Leiserson, W. M., Adjusting Immigrant and Industry, New York: Harper & Bros. Publishers, 1924.

LeNoveu, A. H., Distribution of Occupations by Industry, Ottawa: Dominion Bureau of Statistics, 1938.

-------, "Evolution and Present-Day Significance of the Canadian Occupational Structure", Ottawa: Dominion Bureau of Statistics, unpublished 1931 monograph.

Lescohier, D. D., The Labor Market, New York: The Macmillan Co.

Lester, R. A., Economics of Labor, New York: The Macmillan Co., 1948.

Logan, H. A., "The Canadian Labour Market and Postwar Employment", The Annals, Vol. 253, September 1947.

Lorimer, F., The Population of the Soviet Union, Geneva: League of Nations, 1946.

MacKintosh, W. A., Economic Problems of the Prairie Provinces, Toronto: The Macmillan Co., 1935.

Mackintosh, M., "War Labor Policy in Canada", The Annals, Vol. 224, November 1942.

Malinowski, B., A Scientific Theory of Culture, Chapel Hill: The University of North Carolina Press, 1944.

*Marsh, L. C., Canadians In and Out of Work, Toronto: Oxford University Press, 1940.

*-------, Employment Research, Toronto: Oxford University Press, 1935.

Marshall, A., Principles of Economics, London: Macmillan & Co., 1891.

Massey, A. V., Occupations for Trained Women in Canada, Toronto: J. M. Dent & Sons, Ltd., 1920.

McCarty, H. H., "A Functional Analysis of Population Distribution", Geographical Review, Vol. XXXII, 1942.

Meyers, A. L., Modern Economics, New York: Prentice-Hall, Inc., 1946.

Meyers, G. E., Principles and Techniques of Vocational Guidance, New York: McGraw-Hill Book Co., Inc., 1941.

Miller, F. S., "Women in the Labor Force", The Annals, Vol. 251, May 1947.

Nall, T. O., New Occupations for Youth, New York: Association Press, 1941.

Ontario College of Education, Occupational Information Monographs Toronto: Vocational Guidance Centre, 1947.

Ojemann, R. H., The Constant and Variable Occupations, Urbana: University Of Illinois, 1927.

*Patterson, E. M., World Economics, New York: The Macmillan Co., 1947.

Pearl, R., The Natural History of Population, London: Oxford University Press, 1939.

Pennsylvania University, Four Years of Labor Mobility, The Industrial Research Department, 1925.

Pigou, A. C., The Theory of Unemployment, London: Macmillan & Co., Ltd., 1933.

Platt, R., The Book of Opportunities -- a dictionary of jobs, New York: G. P. Putman's Sons, 1933.

*Reynolds, L. G., The British Immigrant, Toronto: Oxford University Press, 1935.

Reid, M. G., "The Economic Contribution of Homemakers", The Annals, Vol. 251, May 1947.

Riegel, R. E., An Introduction to the Social Sciences, Vols. I and II, New York: D. Appleton-Century Co., 1941.

Robinson, J., Introduction to the Theory or Employment, London: Macmillan & Co., Ltd., 1947.

*Roughsedge, M. E. K., Annual Review of Employment and Payrolls in Canada, 1947 (see also other years), Ottawa: Dominion Bureau of Statistics, 1948.

-------, Average Weekly Salaries and Wages, Ottawa: Dominion Bureau of Statistics, 1948.

*Salz, A., "Occupation", Encyclopaedia of the Social Sciences, Vol. XI.

Saunders, S. A., The Economic Welfare of the Maritime Provinces, Wolfville, N. S.: Acadia University, 1932.

Science Research Associates, Occupational Outlines of America's Major Occupations, Chicago: 1940.

Seamster, F. C., A Handbook on Occupational Information and Guidance, Jefferson City: Mid-State Printing Co., 1941.

*Shartle, C. L., Occupational Information, New York: Prentice-Hall, Inc., 1946.

Sheffield, E. F. and M. M., Educational and Vocational Guidance Materials, (a Canadian bibliography), Ottawa: Canadian Council of Education and citizenship, 1946.

Smith, M., "Trends in the Ages of Gainful Workers, by Occupation, 1910-1930", Journal of the American Statistical Association, Vol. XXX, December 1935.

Smith, S. B., National Income of Canada, 1919-1939, Ottawa: Dominion Bureau of Statistics.

Smith, S. E., Youth and Jobs in Canada, Toronto: The Ryerson Press, 1945.

Smith, T. L., Population Analysis, New York: McGraw-Hill Book Co., 1948.

Social Science Research Council, International Wage Comparisons, New York: Manchester University Press, 1939.

Sorkin, P. A., Social Mobility, New York: Harper Bros., 1927.

Stead, R. J. C., "Canada's Immigration Policy", The Annals, Vol. CVII, May 1923.

Stead, W. H., The Occupational Research Program, Chicago: Public Administration service, 1942.

Steiner, W. H., and M. Shapiro, Money and Banking, New York: Henry Holt & Co., 1941.

Stewart, J. H., Young Canada Goes to Work, Toronto: The Ryerson Press, 1946.

Taft, D. R., Human Migration, New York: The Ronald Press Co., 1936.

Thatcher, O. L., Occupations for Women, Richmond, Va.: J. H. Jenkins, Inc., 1927.

Thompson, W. S., Population Problems, New York: McGraw-Hill Book Co., Inc., 1942.

*Truesdell, L. E., The Canadian Born in the United States, New Haven: Yale University Press, 1943.

United Nations, Salient Features of the World Economic Situation, Toronto: Ryerson Press.

United States, The Problems of a Changing Population, Report of the Committee on Population problem, Washington: United States Government Printing Office, 1938.

-------, A Social-Economic Grouping of the Gainful Workers of the United States, Washington: Superintendent of Documents, 1938.

Vance, R. B., All These People, Chapel Hill: The University of North Carolina Press, 1945.

Warner, W. L., and P. S. Lunt, The Social Life of a Modern Community, New Haven: Yale University Press, 1941.

Webb, W. B., "Occupational Indecision among College Students", Occupations, Vol. XXVII, #5, February 1949.

White, E. N., Canadian Restoration, Toronto: The Ryerson Press, 1944.

Whiteley, A. S., "Canada's Optimum of Population", Essays on Canadian Economic Problems, Montreal: 1926.

*Whitworth, F.E., Canadian Census Occupational Data for Counsellors, Ottawa: Dominion Bureau of Statistics, 1947.

Wilcox, W. F., International Migrations, New York: National Bureau of Economic Research Inc., 1931.

-------, Studies in American Demography, Ithaca: Cornell University Press, 1940.

Williamson, E. G., Students and Occupations, New York: Henry Holt & Co., Inc., 1937.

Wilson, I., "Labor Organization in Canada", The Annals, Vol. 253, September 1947.

Wood, G. L., "Occupations and Urbanization", The Annals, Vol. 158, November 1931.

Ziegler, S. H., and H. J. Wildes, Choosing an Occupation, Chicago: The John C. Winston Co., 1933.

Zimand, G. F., "The Changing Picture of Child Labor", The Annals, Vol. 236, November 1944.