

# **THE SCIENCE OF LABOUR AND ITS ORGANIZATION**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649698912

The Science of Labour and Its Organization by Josefa Ioteyko

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**JOSEFA IOTEYKO**

**THE SCIENCE OF  
LABOUR AND ITS  
ORGANIZATION**



# The Science of Labour

AND

## Its Organization

BY  
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In charge of the course on "Fatigue" at the Collège de  
France in 1916*

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The human motor and the measurement of industrial fatigue—  
Scientific management—Measurement of aptitudes—Anthro-  
pological comparison of the sexes from the point of view  
of strength and endurance—Alimentation and work—  
Re-education of the left hand for the mutilated—Belgian  
methods of technical education and the University of Labour

UNIV. OF  
CALIFORNIA

LONDON:  
GEORGE ROUTLEDGE & SONS, LIMITED  
NEW YORK: E. P. DUTTON & CO.

1919

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CALIFORNIA  
AIRBORNE

## PREFACE

**I**N this little volume we have collected together a series of articles published in 1916 and 1917 in the *Revue Philosophique*, the *Revue Scientifique*, and the *Revue Générale des Sciences*. We have revised them to ensure that continuity of thought which has always run through them all, but which does not shew quite so distinctly in scattered publications; to these we have added the substance of some of our lectures on *Fatigue* delivered at the *Collège de France*.

The leading idea running through this collection has been the necessity for throwing light on certain points in industrial psycho-physiology, which is universally recognised as important at the decisive hour through which we are now passing. Close collaboration between science and industry will be necessary in the near future; the importance of this alliance will be greater than ever when the actual crisis is passed and the need for making a fresh start and for increased activity has made itself felt. Now, events have caused a scarcity of labour; it is, therefore, necessary to partly supply its place by as perfect and scientific an organisation of labour as is possible. A great part of life will have to be re-constructed. It is important that this reconstruction should be well devised from the first start, and that it should be based upon scientific rules, so that the unhappy errors of the past may be avoided.

This necessity has been so clearly seen that the attention of the Paris Academy of the Sciences has recently been drawn to the importance of the problem, and various measures have been proposed.

In the present volume we shall examine certain aspects of the question, and add some personal contributions

collected in the course of investigations of many years' duration on the problem of Fatigue in the motor function.

Four problems are examined:—

The first concerns the *Human Motor*, and here the question of apprenticeship, the manner of the economic working of the body, and the limits of industrial fatigue form the chief part.

The second is devoted to *Taylor's System*, which is so much discussed at the present time.

The third relates to the relative *Aptitude for Work of the Right Hand and of the Left Hand*, a question the importance of which has become very real, on account of the large numbers of men maimed in the war. We shall examine in succession: the estimate of the strength, and of the power of endurance of each hand, in the case of man and of woman, comparatively; we shall advance a new theory of our own regarding right-handedness; we shall give some rules for the re-education of the motor power of the wounded, and closely examine the process of writing with the left hand.

Finally, the fourth problem deals with the *Belgian Methods of Technical Education*. We have thought that it would not be uninteresting to make these known, since Belgium now occupies the foremost place in productivity in proportion to her population. She owes this productivity to her methods of industrial and technical education.

We trust that the importance of the problems discussed justify the publication of this volume and that it will emphasize the interest already felt in the subject.



## TABLE OF CONTENTS

	PAGE.
PREFACE . . . . .	iii.
<b>I THE HUMAN MOTOR . . . . .</b>	<b>I</b>
1.—DEFINITION OF THE PROBLEM . . . . .	1
2.—THE PROBLEM OF APPRENTICESHIP . . . . .	5
Importance of the psychic element.—The principle of the small muscles.—Omer Buyse's investigations.—The Law of the Economy of Effort by J. Loteyko.	
3.—THE ECONOMIC METHOD OF WORKING THE BODY . . . . .	12
Imbert's investigations. — Haughton's Fisher-women.—Function of the antagonistic muscles.—Adaptation of the muscles.—Defensive function of fatigue.—Insufficiency of the defensive principle of fatigue under present conditions of Industrial Labour.—Whence the necessity for objective investigations.	
4.—THE MEASUREMENT OF INDUSTRIAL FATIGUE . . . . .	23
The wear and tear of the body progresses geometrically.—The length of the working-day should not be fixed uniformly.—Fatigue is a complex product.—The XIII International Congress of Hygiene and Demography, held in Brussels in 1903.—Our plan of study.—Imbert's Report.—Imbert's Experiments on dock labourers, and those of Gauthier on the wine store workers.—XIV Congress of Hygiene and Demography held in Berlin in 1907.—Statistics of industrial accidents.—Researches by Imbert and Mestre on the transport of loads.—Imbert's Researches relating to the workwomen employed in the cutting of vines.—A new chapter in Social Medicine.	

	PAGE.
II. THE PRINCIPLES OF SCIENTIFIC MANAGEMENT . . . . .	53
1.—TAYLOR'S STUDIES ON THE ORGANISATION OF LABOUR. . . . .	53
Choice of workmen. — Chronographic measurement of their movements. — Examples of increased output. — Study of the constituents of Labour. — The Human Factor is by far the most important. — The System of Premiums. — Scientific Management. — Scientific Organisation of Factories and of the Home.	
2.—THE OPINION THAT SHOULD BE FORMED OF THE PRINCIPLES OF SCIENTIFIC MANAGEMENT . . . . .	76
Three great mistakes: The absence of scientific information concerning the fatigue of the workman, The absence of any guarantee to the workman in all that relates to the future, The System of "Premiums" which leads to over-work, and which is unsatisfactory from the moral point of view. — Gravity of the other objections. — The necessity of studying this system scientifically from the bottom, and for not applying it to the present time without great caution. — Difference between industrial manual work and pedagogic manual work. — The Necessity for augmenting the productivity and the well-being of the Working-man.	
3.—THE FUNCTION OF THE SCHOOL IN THE DETERMINATION OF APTITUDES . . . . .	89
The Science of the Study of the Child, or Pedology. — Necessity for experimental measurements in the Upper Primary Schools, and in the Industrial Schools. — The estimate of technical aptitude. — The Principle of the "most apt" should regulate future Society.	
III. POWER AND APTITUDE FOR WORK . . . . .	94
1.—THE VALUATION OF THE POWER AND WORK OF THE RIGHT-HAND, AND OF THE LEFT. ANTHROPOMETRIC COMPARISON OF THE SEXES. . . . .	94
The test of strength (dynamometer), and the test of endurance (ergograph). —	

## CONTENTS

vii.  
PAGE.

- Dynamometric indication.—Ergographic indication.—Bimanual indication.—Sexual indication of strength and power of endurance.—The woman's power of endurance.—Applications to industrial work.—Necessity for a selection of working women.—Longevity of Woman; Her greater resistance to disease; The Feminine Sex is determined by better food conditions.—Woman is anabolic.—Man katabolic.—Worms's statistics.—Statistics in times of war.
- 2.—A NEW THEORY OF RIGHT-HANDEDNESS (THE PSYCHO-PHYSIOLOGICAL THEORY) . . . . . 112  
 Effect of work and fatigue upon the heart.—Woman has a more excitable heart than Man.—They should be spared very hard work.
- 3.—AMBIDEXTROUS EDUCATION . . . . . 127  
 Facts and arguments in favour of a bimanual education.
- 4.—ALIMENTATION AND WORK . . . . . 131  
 Our experiences demonstrate the superiority of vegetarians from the point of view of power of resistance to fatigue when working. The two meatless days are an hygienic measure as well as an economic one.
- 5.—USE OF THE LEFT HAND BY THE WOUNDED AND MUTILATED (SOME SCIENTIFIC RULES FOR RE-EDUCATION). . . . . 137  
 The necessity, among those suffering from aphasia, to develop a new centre of language by means of appropriate exercises.—To teach the left hand the same movements that were formerly made with the right, in the trades followed by the wounded.—Apprenticeship with the left hand to be taught by following the rules of opposite symmetry.—The use of the left-hand only cannot be applied to all trades.—Those trades requiring great effort must not be chosen.
- 6.—LEFT-HANDED WRITING BY THE MAIMED . . . . . 147