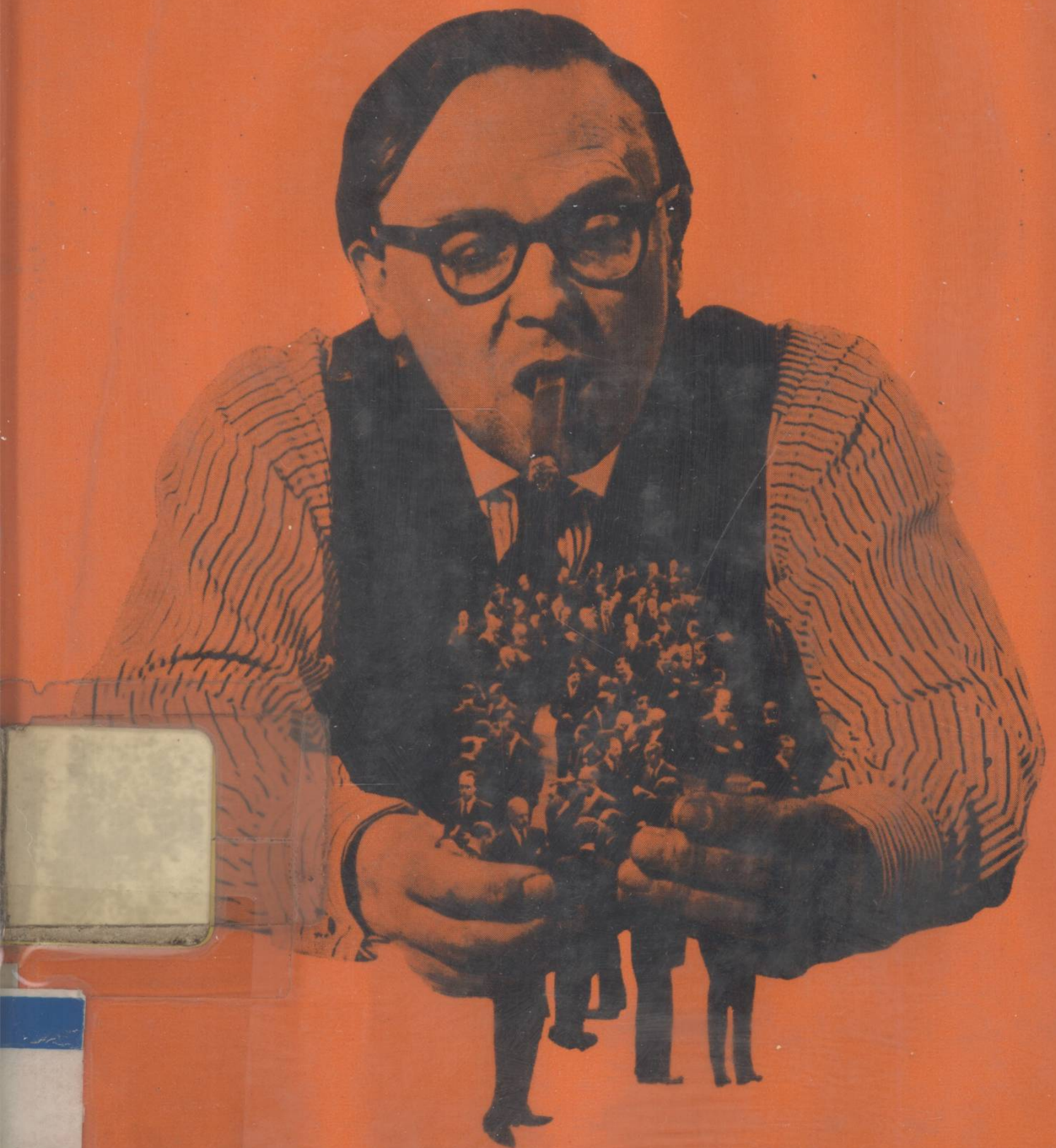


General and Industrial Management

HENRI FAYOL

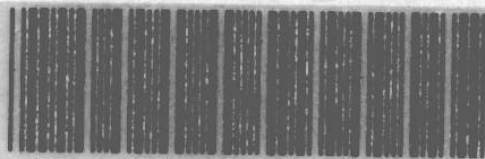


C93
F285

9660894

54268

GENERAL AND INDUSTRIAL MANAGEMENT



E9660894

HENRI FAYOL

Translated from the French Edition (Dunod)

BY

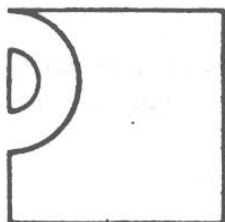
CONSTANCE STORRS

B.A. (London), A.M.B.I.M.
Diploma in Education (Cantab.)

WITH A FOREWORD BY

L. URWICK

O.B.E., M.C., M.A., F.B.I.M.



PITMAN PUBLISHING

HONG KONG POLYTECHNIC
LIBRARY

First published 1949
Reprinted 1954, 1955, 1956, 1957, 1959, 1961, 1963, 1965,
1967, 1969, 1971

First paperback edition 1967
Reprinted 1969, 1971, 1972

The paperback edition of this book may not be lent,
re-sold, hired out, or otherwise disposed of by way of
trade in any form of binding or cover other than that
in which it is published without the prior consent of
the publishers.

SIR ISAAC PITMAN AND SONS LTD.
Pitman House, Parker Street, Kingsway, London WC2B 5PB
P.O. Box 46038, Portal Street, Nairobi, Kenya

SIR ISAAC PITMAN (AUST.) PTY. LTD.
Pitman House, 158 Bouverie Street, Carlton, Victoria 3053, Australia

PITMAN PUBLISHING CORPORATION (S.A.) LTD.
P.O. Box 11231, Johannesburg, S. Africa

PITMAN PUBLISHING CORPORATION
6 East 43rd Street, New York, N.Y. 10017, U.S.A.

SIR ISAAC PITMAN (CANADA) LTD.
495 Wellington Street West, Toronto 135, Canada

THE COPP CLARK PUBLISHING COMPANY
517 Wellington Street West, Toronto 135, Canada

Cased edition ISBN: 0 273 41492 5
Paperback edition ISBN: 0 273 40834 8



PRINTED BY Unwin Brothers Limited
THE GRESHAM PRESS OLD WOKING SURREY ENGLAND

Produced by offset lithography

A member of the Staples Printing Group

(E 4840)

G2—(MAN 31/MAN 99.45)

HONG KONG POLYTECHNIC
LIBRARY

**GENERAL AND
INDUSTRIAL
MANAGEMENT**

3085081

*This translation is published by permission of S. R. L. Dunod,
Publishers, 92 Rue Bonaparte (VI), Paris, owners of the
French copyright.*

FOREWORD

By L. URWICK, O.B.E., M.C., M.A.

SIR ISAAC PITMAN & SONS, Ltd., are to be congratulated on their decision to issue this new English translation of Henri Fayol's famous work, *Administration industrielle et générale*. It first appeared in French in 1916 in the third issue for that year of the Bulletin of the Société de l'Industrie Minérale. It was no sudden exposition of administrative theory. It was the fruit of long study and experience. Fayol had already indicated the direction in which his mind was moving in two previous papers, one delivered to the Congrès international des Mines et de la Metallurgie in 1900, and the second a lecture entitled "Discourse on the General Principles of Administration," given at the Silver Jubilee Congress of the Société de l'Industrie Minérale in 1908. But for the outbreak of the war of 1914-18 his considered summary of his views on administration would have been delivered two years earlier.

The demand for it was immediate and persistent. The Société de l'Industrie Minérale issued a first reprint of 2,000 copies. This was quickly exhausted and was followed by others. By 1925 15,000 copies had been printed. In this year Dunod Frères of Paris republished the monograph in book form.

The first edition in English was issued in 1929. Mr. J. A. Coubrough, of The British Xylonite Co., Ltd., undertook the work of translation voluntarily. The book was printed in International standard format by the International Management Institute at Geneva. A few hundred copies were made available to Sir Isaac Pitman & Sons, Ltd., for distribution in Great Britain.

No English translation was published in the United States of America, despite the widespread interest in management in that country. As far as is known, the only work of Fayol's which has so far appeared in English in the U.S.A. was Miss Sarah Greer's translation of his paper, "The Administrative Theory in the State," delivered before the Second International

Congress of Administrative Science at Brussels in 1923. This appeared in 1937 as part of the collection entitled, *Papers in the Science of Administration*, edited by Luther Gulick and L. Urwick, and published by the Columbia University Press. Possibly the issue of this new English translation will serve to correct this apparent lack of balance in the appreciation in the United States of the work of the greatest of the European pioneers of management.

Henri Fayol was born in 1841 of a family of the French *petite bourgeoisie*. At fifteen he went to the Lycée at Lyon, where he spent two years. From there he passed to the National School of Mines at St. Étienne: aged seventeen, he was the youngest student of his year. At nineteen he graduated as a mining engineer. He was appointed as engineer to the Commentry group of pits of the Commentry-Fourchambault Company in 1860. With this undertaking he remained throughout his long and distinguished business career. He retired from the position of Managing Director in 1918. He remained a Director of the Company until his death in December, 1925, at the age of eighty-four. In the July before his death the Old Students' Association of the National School of Mines, of which he was President of Honour, gave a banquet in Paris to celebrate the sixty-fifth anniversary of his graduation.

As will be seen from the appended Table summarizing the various positions he held and his principal publications, his working life fell into four periods.

(i) From 1860 to 1872 he was, while an executive, still a subordinate. His intellectual effort was largely directed to problems of mining engineering, notably the question of overcoming the fire hazards of coal mining.

(ii) From 1872 to 1888 he had a larger responsibility as Director of a group of pits. His mind turned to the geological problems of the area, and the factors which would determine the life of the various pits for which he was responsible. These studies led to his famous geological monograph on the Commentry coal measure embodying his theory of deltas which appeared in three volumes between 1886 and 1893.

(iii) From 1888 to 1918 he was Managing Director (Directeur Général) of the combine, which under his leadership became Commentry-Fourchambault-Décazeville, popularly

known as Comambault. During this period he did very little writing, the two publications in 1900 and 1908, already mentioned, being the only forerunners of this book. He had a great practical responsibility to discharge. And it is characteristic of the man that he never for a moment allowed his immense range of intellectual interest or the many honorific posts which were offered him to deflect him from his main task. He consistently refused to accept any position unless it was either intimately linked with his duties as Managing Director of Comambault, or wholly disinterested.

The success with which he carried out those duties is one of the romances of French industrial history. When he was appointed its chief executive in 1888, Commentry-Fourchambault was going rapidly downhill and was on the verge of bankruptcy. No dividend had been paid since 1885. Its metallurgical works of Fourchambault and Montluçon were making heavy losses: its coal measures at Commentry and Montvicq were nearing exhaustion. From the day he took charge the tide turned. The only works which had to be closed were Fourchambault. Montluçon was kept in action, the only surviving blast furnace in Central France. Imphy rapidly attained a leading position as a producer of special steels. The approaching exhaustion of Commentry was forestalled by the purchase of the Bressac pits in 1891 and the pits and works at Décazeville in 1892. Décazeville was a difficult field, and the Company had an unfortunate history. It needed all the skill of the engineers Fayol had trained at Commentry and all his own scientific genius and practical sense to wring success from such an unpromising situation. But it was done. "Comambault" went on growing. In 1900 it extended its activities into the Eastern coal-field with the purchase of Joudreville. In the 1914-18 war this great combine rendered France inestimable service. When Fayol retired at the age of seventy-seven its financial position was unassailable and its staff of exceptional quality.

(iv) Though Fayol had retired at a ripe old age he continued active. From 1918 till 1925 he devoted himself to popularizing his Theory of Administration, the fruit of his thirty years of astounding practical success. A pen portrait of him in the last year of his life describes him as "still

young—upright, smiling, with a penetrating and direct glance. M. Fayol meets you as a friend. His natural air of authority, his kindness, his youthfulness of spirit, which makes him interested in everything, enabling him to be a past master in the art of being a grandfather (and even a great-grandfather), are both impressive and, at the same time, most attractive.”¹

In this period he undertook two main tasks. The first was the foundation of a Centre of Administrative Studies. For several years this Centre held weekly meetings attended by eminent men from the most varied professions—writers, philosophers, men of action, engineers and soldiers, officials, and industrialists. Henri Fayol presided at these meetings. A large and authoritative literature developed from them. As early as 1918 M. Carlioz organized a series of lectures on “Fayolisme” at the School of Higher Commercial Studies. Marshal Lyautey circulated through the French Army in Morocco 2,000 copies of a pamphlet applying Fayol’s principles to military administration. He himself was invited to give a series of lectures at the *École supérieure de la guerre*. Administrative doctrine was also taught at the Navy’s supply school.

The second was the far more difficult venture of trying to persuade government to pay some attention to principles of administration. He had no illusions as to the vastness of the task: but, he believed that it was possible. He was invited by M. Deschamps, then Under-Secretary of State in the Posts and Telegraphs, to undertake a complete investigation of this Department. His *La Réforme Administrative des Postes et Télégraphes* was published in pamphlet form in 1921. In the same year he contributed an important article to the *Revue politique et parlementaire* under the title, “The State’s Administrative Ineptitude” (“L’Incapacité Administrative de l’État—les Postes et Télégraphes”), which was republished in book form by Dunod Frères. In 1923 he took a leading part in the Second International Congress of Administrative Science held at Brussels. During the 1924 Assembly at the League of Nations he accepted an invitation

¹ *Un Grand Ingénieur—Henri Fayol*. Study published by the Students’ Association of the National School of Mines of St. Etienne, p. 5.

to address the International Federation of Universities at Geneva on the importance of the doctrine of administration as a contribution to peace. At the time of his death he was engaged in investigating the organization of the French tobacco industry—a government monopoly.

Thus his life embraced four careers rather than one, and in each of them he was pre-eminent. As a technical man he achieved national distinction for his work in mining engineering. As a geologist he propounded a completely new theory of the formation of coal-bearing strata and supported it with a detailed study of the Commeny district, almost unique as a piece of geological research. As a scientist turned industrial leader his success in both fields was phenomenal. The days of his own detailed research were over but he applied the scientific approach to problems in every direction and encouraged those associated with him to do likewise. It was at the metal works at Imphy that Mons. C. E. Guillaume did the research work which secured him a Nobel prize in 1921. His success financially has already been recorded. But he always declared that that success was not due to personal qualities, but to the steady application of certain simple principles. Finally, as a philosopher of administration and as a statesman he left a mark on the thinking of his own and of many other European countries, not less than the mark left by Frederick Winslow Taylor in the U.S.A.

In the early stages of the popularization of his work attempts were made to represent Fayol's doctrine as in some way in competition or contrast with Taylor's studies. But at the opening of the Second International Congress held at Brussels in 1925, he himself announced that he wanted to make clear how false he found this antithesis. This speech led to the unification of the organization founded by Henri le Chatelier, the "Conférence de l'Organisation Française," and Fayol's Centre of Administrative Studies, into a single national body—"Le Comité de l'Organisation Française." The work of Taylor and Fayol was, of course, essentially complementary. They both realized that the problem of personnel and its management *at all levels* is the "key" to industrial success. Both applied scientific method to this problem. That Taylor worked primarily on the operative level, from the bottom of the

industrial hierarchy upwards, while Fayol concentrated on the Managing Director and worked downwards, was merely a reflection of their very different careers. But Fayol's capacity to see and to acknowledge this publicly was an example of his intellectual integrity and generosity of spirit. They gave France a unified management body more than twenty years before the same ideal began to be realized in Great Britain.

This book contains only the first two parts of the treatise Fayol had meant to write. The third and fourth parts were never completed. Since these parts contain the analysis of his doctrine they may seem a little dry and theoretical. It was his intention to give the practical application of his principles in the projected Parts III and IV. Some suggestions of his views in this field may be found in an interview published in the *Chronique Social de France* of January, 1925. Since they throw light on his ideas as to the working out of his doctrine some paragraphs may be quoted.

The editors had asked Fayol the question, what, in his opinion, was the best method of taking a view of the organization of an undertaking and of determining what improvements were necessary? He replied—

“The best method is a study of what I have described as the administrative apparatus. If this is as it should be, it will be possible to secure precise information on the current situation and on the general progress of the undertaking. One can also ascertain immediately that forecasting and planning, organization, command, co-ordination and control are properly provided for, that is to say that the undertaking is well administered. If there are gaps in the administrative apparatus, these are often pointers to weaknesses in the organization or to faults in the running of the undertaking.

“The administrative apparatus is further a concept of very wide application. Not only is it useful to those who may have to manage or control an industrial undertaking but to my mind its absence is a fundamental weakness in our public services, and I cannot imagine a better service to our country than to ensure its application by the State. That would be the starting point for essential reforms.

“What, then, is this administrative apparatus? It is a system of recording which includes the present, the past and the future; in which the contributions made by senior members of the staff, together with information from outside sources, ensure for the Directors the best possible means of appreciating the probable consequences of their decisions.

“It must comprise: The Survey, The Plan, Reports and Statistics, Minutes of Meetings, and The Organization Chart.

"*The Survey* is concerned with each and every part of the undertaking. It shows the situation in the present, in the past, and in the probable future. The historical part of the Survey deals with the considerations that led to the formation of the undertaking, the changes that have taken place, and the results that have been achieved. The present situation is shown in full detail as to the resources and needs of the undertaking, looked at from every point of view. The probable future is arrived at by taking into account the past, the present, and the prevailing circumstances, economic, political, and social. This Survey presupposes an adaptable Chief Executive who can win loyal and enthusiastic support from subordinates, and who will carry his share of responsibility.

"From this Survey it is possible to develop a policy which is implemented in The Plan.

"*The Plan* is the synthesis of the various forecasts: annual, long term, short term, special, etc. It is a sort of picture of the future, where immediate events are shown clearly, and prospects for the future with less certainty. It gives the known facts, and those foreseen for a certain time. Everyone recognizes the necessity for a Plan but even private undertakings often neglect to prepare one, and the State rarely does so. This is because its preparation demands considerable effort from the senior members of the staff with at their head a stable Chief.

"These are the reasons for a long-term Plan, and some of the advantages which accrue—

"In an undertaking with any complexity at all it is necessary to have well thought-out directives, which indicate anticipated progress for a period of time. These directives must be based on an understanding of the undertaking, its present position and the reasons for this, and external circumstances. If decisions are made in the light of certain facts, and some of these turn out to be ill-founded, it is possible to modify the Plan accordingly.

"The Plan must receive the support of all those with authority and responsibility.

"The act of forecasting is of great benefit to all who take part in the process, and is the best means of ensuring adaptability to changing circumstances.

"The collaboration of all concerned leads to a united front, an understanding of the reasons for decisions, and a broadened outlook. It increases the value of every member of the staff: and is evidence to the Chief of their goodwill. The Plan charts the course: its general acceptance builds unity, and mutual confidence.

"*Reports and Statistics* regarding work undertaken are the complement of the Plan. Reports from subordinates to the superior officers come up right through the undertaking: they can be daily, monthly, yearly, etc. They are a powerful means of control.

"*Minutes* of Conferences of Senior Executives are a record of the weekly meetings of the various heads of departments. At these

meetings each department head explains, in turn, the results obtained in his department, and the difficulties encountered. There is then discussion, and decisions are made by the Chief. At the end of the meeting each one knows he has the most up-to-date information, and co-ordination is ensured.

"The Minutes of these Meetings are of paramount interest to the Chief Executive. They give him an insight into the minds of each member of his staff, to be secured in no other way.

"*The Organization Chart* shows at a glance the set-up of the undertaking, the services rendered, the hierarchy, how each position is filled—who reports to whom, and so on. From this Chart it is possible to discern faults in organization, dual command, functions for which no one is responsible, etc. It is a sign-post to imperfections, and indicates ways to better utilization of available personnel.

"Attached to the Chart is a definition of duties, showing individual authority and responsibility for all activities.

"These are the constituents of the administrative apparatus with which I shall deal particularly. The notion could easily be extended. To know the exact standing of the undertaking it is essential to have a detailed statement as to the personnel—those who may be expected to assume positions of authority, and those who will be retiring."

Personally, and taking the long view, I feel that it is a pity that Mrs. Storrs and Messrs. Pitman have decided to translate Fayol's word "*administration*" by "management." In the original English translation his title was translated directly, "administration."

Immediately there is much to be said for the course they have followed. One of the difficulties of the French language is that it has no exact equivalent for the term *management* as used in the English-speaking countries. When Le Chatelier was trying to make F. W. Taylor's ideas known to his countrymen he was driven back on to the awkward paraphrase, "*L'organisation scientifique du travail*" as a translation of "scientific management." The objection to this phrase is, of course, that "*travail*" in French has the same political flavour as attaches in English to the term "labour": one of the great Trade Unions in France is known as the "Confédération Générale du Travail." Thus the French phrase carries the suggestion that scientific management is concerned solely with the work of operatives. This is, of course, not only far from being the case, but is the exact antithesis of Taylor's philosophy. It is the additional responsibility thrown on the managers which is the core of his teaching. Much of the

difficulty encountered in Europe in securing acceptance of modern methods of industrial control has been due to the impression that they were merely a device for extracting more effort from operatives and called for no corresponding change of outlook on the part of supervisors, managers, and directors.

The activity which Fayol discusses in this book is unquestionably the activity popularly described in the English-speaking countries as *management*. And the translation of his title as "Industrial and General Management" is therefore, as at the present moment, both accurate and convenient.

On the other hand, the word *management* in the English-speaking countries is itself used very loosely and with a variety of meanings. The *Concise Oxford Dictionary* still carries the quaint definition—

"*Management*, n. In verbal senses; also or especially: trickery, deceitful contrivance; *the management*, governing body, board of directors, etc."

The close association of these ideas is unlikely to enhance the dignity either of the subject or of those who practise the activity.

If the subject is ever to be treated seriously as one in which theoretical study and the systematic arrangement of knowledge can contribute to practice, this confusion in the use of terms must be cleared up. Each word must have one meaning and one meaning only. Otherwise precise communication and effective organization of experience will prove impossible. But if the words used are to have an exact and single meaning it is imperative that the same word should not be used to describe status and function. Human beings are incapable of any objective discussion of the correct distribution of functions, if, owing to the terms used, the problem becomes confused in their minds with their status as individuals, that is to say with their personal dignity, prospects of advancement, and desire for emoluments.

This is not a theoretical difficulty. It is of urgent practical importance. For instance, the use of the term *The Management* to describe those who occupy certain positions of authority has caused in some factories in Great Britain the most embittered and embarrassing disputes as to whether foremen are

or are not part of "The Management." There is no question that such foremen, indeed supervisors of every grade, however humble, carry out *activities of management*: they manage or mismanage people. Equally there is no question that some knowledge of the *subject of management* is required for the effective discharge of their duties. But the barren controversy will continue as long as the word *management* is used not in *one* meaning, to denote a subject or an activity or a rank, but alternatively in all these different connotations.

Now it will be quite clear to all who read his text carefully that Fayol employs the word "*administration*" with *one* meaning and one meaning only. He uses it to describe a function, a kind of activity. And he is quite indifferent whether those exercising this kind of activity are described as "Managing Directors" or as "Charge-hands." He is concerned with the function, not with the status of those who exercise it. To be sure, those holding positions high up in the hierarchy will devote a larger proportion of their time to this function and a smaller proportion to other functions and vice versa (*vide* Table III). But he is quite clear that some element of *administration*, as he uses the word, enters into all tasks involving supervision of the work of others.

It seems regrettable that a term which is thus used by a high authority in the French-speaking countries in a strictly defined and logical sense and which has an exact transliteration in English should be translated by another English word which lacks this precise connotation. Moreover, if the terminology of the subject is ever to become standardized in the English-speaking countries it seems likely that the word *management* will be used, not of the activity or of the function or of those who exercise it, but as a substantive describing the subject, the body of knowledge and practice as a whole, the "discipline." There are signs that this usage is gaining ground in the United States. We find such phrases as "a government without good *management* is a house builded on sand,"¹ or, "In creating the Tennessee Valley Authority, Congress carefully adapted and wrote into law the basic principles of modern management."²

¹ F. D. Roosevelt, letter introducing to Congress the Report of the President's Committee on Administrative Management, 1937.

² David E. Lilienthal, *TVA—Democracy on the March*, p. 144.

Such a usage would find a close analogy in the evolution of the terminology of the only other practical art dealing, as does management, primarily with man, based on a range of underlying sciences and practised in the scientific temper and spirit—namely, medicine. The word *medicine* is confined, for purposes of serious discussion, to the subject, the body of knowledge and practice. It carries a secondary and popular meaning, viz., the remedy prescribed by one who practises the art—"a bottle of medicine": but, this meaning of the term is not used in technical speech or writing. When we wish to describe the activity we speak of "medical practice": those who exercise the activity are "medical practitioners" or "doctors." We do not describe them as "the medicine."

In the second place there is a tendency in the English-speaking countries to try to draw a distinction between *management*, an activity confined to conducting industrial or commercial undertakings, and *public administration*, the art of conducting undertakings concerned with the government of nations or localities. It was of the essence of Fayol's teaching that this distinction is false and misleading. He said in his address to the Second International Congress of Administrative Science—

"The meaning which I have given to the word *administration* and which has been generally adopted, broadens considerably the field of administrative science. It embraces not only the public service but enterprises of every size and description, of every form and every purpose. All undertakings require planning, organization, command, co-ordination and control, and in order to function properly, all must observe the same general principles. We are no longer confronted with several administrative sciences, but with one which can be applied equally well to public and to private affairs."¹

As has been shown, he devoted much of his effort in the concluding years of his life to demonstrating this unity of administrative theory.

In this he was at one with the most distinguished exponents of scientific management in the United States—F. W. Taylor himself, Mary Parker Follett and others. If the analogy with

¹ "The Administrative Theory in the State," in *Papers in the Science of Administration*, edited by Luther Gulick and L. Urwick, Columbia University Press, 1937.

medicine is accepted the idea of a subdivision of the field of inquiry by occupational groupings seems unrealistic. It is difficult to contemplate seriously a bio-chemistry of bankers, a physiology of professors or a psychopathology of politicians. The attempt to subdivide the study of management or administration in accordance with the purpose of particular forms of undertaking seems to many authorities, as it seemed to Fayol himself, equally misdirected.

But the force of tradition, of habit, in human affairs is obstinate and persistent. There is a well-recognized tendency among the members of established professions to imagine that their procedures are sacrosanct, beyond question, and that no lessons of utility can be drawn from the practice of other callings. It is a tendency for which the French have coined the phrase, "*déformation professionnelle*." It is almost untranslatable in English. Perhaps "occupational paralysis" comes nearest to expressing the meaning. This tendency is likely to be at its strongest where a profession has enjoyed high public esteem and has, within the limits of its former purposes, been particularly effective and therefore powerful. This tendency is directly opposed to Fayol's concept of the unity of administrative theory.

Even in the United States, where popular recognition of the importance of the subject of management is wider and deeper than in Great Britain, the attempt to develop separate principles in dealing with public administration is constantly repeated. David E. Lilienthal felt it necessary to warn his compatriots only a few years ago that "this failure to recognize the importance of principles of modern management in public affairs may bring upon us the gravest consequences in the immediate future."¹ In Great Britain the danger of delay in the development and application of knowledge owing to this professional fragmentation of the field of inquiry is much greater. The false antithesis between "business management" and "public administration" is far more widespread and cherished more tenaciously by members of both callings.

It is to be hoped that the translation of "*administration*" in Fayol's title by *management* will not lead those engaged in central and local government in the English-speaking countries,

¹ TVA—*Democracy on the March*, p. 145.