Its Ability to Further Man's Culture and Development as Part of Industrial Culture and Development the Criterion of Its Usefulness

By JOHN LEE, C.B.E.'

TT IS comforting to reflect that one of the vastest pieces of industrial organization in the history of the world was associated with the beginnings of an undying literature. The building of Solomon's temple called for a closeness of organization which amazes one the more it is examined. Solomon himself was the chief organizer, with a passion for detail. His association with Hiram of Tyre for the production of all sorts of material, gold and silver and cedar and purple, and for the purchase of the services of skilled workmen, including Huram-abi, the architect, was the beginning of a functional division, for there were the skilled technicians and side by side with them there were the workersover 70,000 of the "strangers in the land" to bear burdens and 80,000 to hew the stone in the mountains and 3,600 overseers, probably Israelites, as

Mr. Lee was personally known to Professor Joseph H. Willits of the Wharton School of Finance and Commerce of the University of Pennsylvania, who pays him the following tribute:

"In ten months in Europe I met no person whose philosophy of management was more interesting or seemed to me to be contributing so fundamentally to the profession of management as that of Mr. John Lee. For forty-five years he had been in the British Civil Service—the later years being spent as Comptroller of the Central Telegraph Office. He was the British delegate to the International Telegraph Conference held in Paris in 1925 and was Chairman of the Conference during the months over which the meetings were spread. After resigning his position about two years ago, owing to failing health, he continued his many connections with management and with management teaching. He published many significant articles and was the author of a number of books, including the following:

Letters to an Absentee Director

Management Industrial Organization

Dictionary of Industrial Administration (Editor)

He had to an unusual degree the faculty, not always given to men in management work, to think in terms of the philosophy behind the concrete symbols and devices to which the most of mankind predominately give their attention. The world lost a delightfully engaging personality, and management lost one of its most fundamental assayers when Mr. Lee died on Christmas Eve on board the "Laconia" while returning from a visit to the United States. This article delivered at one of the conferences at Oxford University therefore constitutes one of his last messages to management science."

deserving a more honorable position. One would like to know more about this early venture in industrial organization, and by what means some of the tremendous stones were carved and conveyed, and how the great brass laver resting on twelve oxen, with the bases on which they were wheeled from place to place, was brought to Jerusalem. Still the broad divisions show us the separation between artistic designing, artistic production, the labor of transport and the labor of building with their parallel distinctions in supervision.

Functional divisions, at least in their essential form, have a long history. There is an admirable account in Mr. H. Stuart Jones' article on "Administration" in "The Legacy of Rome" of the organization which "without ceasing to be the imperial household, became the Whitehall of Ancient Rome." There is the accountant, the principal private secretary, the clerk of petitions, with five differentiations of function, and later on we find Hadrian breaking with "the idea that the citizen must be equally qualified to render service in peace and war" and establishing a purely civil service with functional divisions. So, also, we find functional divisions in the ecclesiastical orders and throughout history we see recognitions of the fact that organization always demands some functional differentiation.

As functional divisions are targed upon us today they come from that conception of scientific management which believed that organization should be focused upon functional divisions. So it was that in Taylor's scheme there were to be eight foremen each with his own function. This extreme doctrine has largely been surrendered and functional division takes a part which I think can best be called a co-ordinated part in organization. What exactly that co-ordinated part is to be has not been thought out. It seems to me to be quite fair to say that functional division of higher responsibilities has its kinship with that functional division

of the work of production which we call "mass production." It comes from an emphasis upon men in the bulk rather than upon men as individuals. In a sense it is a recognition of human limitation, but I would prefer to describe it as a correlation of human capacities into an organic whole. I take the following definition from a recent valuable book on factory organization, "By this plan specific functions common to all or several departments. . . are each placed in the hands of a man specifically qualified for his particular function, and instead of giving attention to all the factors in one department, he gives his attention to one factor in all departments." It means, obviously, that what ordinarily we have called "departments" are broken up and there are fresh divisions on a functional basis culminating in the management. From the same admirable book we may sum up the advantages and the disadvantages of functionalization before we come to our own analysis. There is no doubt a focusing of an expert efficiency which tends to raise the whole tone from the point of view of considered expertness. There is a basis for expansion which is not provided by the departmental system without vast change and the addition of departments. There is the presumption that men are better suited to the function to which they are allotted and that they will be for that reason more happy and confident in their work. Then there is the fact that it is a type of specialization which is in accord with the spirit of the age. So far for advantages. On the other hand a precise delimitation of function is exceedingly difficult to fit in with an organization and it does happen that a functional organization is very complex. It demands a sense of organization which conflicts with many natural human instincts and especially with the instinct of control, for to fit in a functional organization demands self-surrender. There is also a danger lest responsibility should be passed from function to function since it, is exceedingly difficult to divide and to define the functions. Lastly there is the fear lest the functional division should not fit in with human qualities so that capacities and inclinations may either overlap or find themselves lost between functions.

When we come to examine the position in our own way it is as well to remember that functional

divisions of authority and of responsibility differ in degree rather than in kind. Put as we have put it above there would seem to be a fundamental difference between the departmental and the functional system, the former being sometimes called "geographical" or "territorial." It is very doubtful if there is today a purely "geographical" system of division in any industry. At any rate the accounting will be separate and will function for all the departments; so will the technical processes and at the other end the sales. Then it should be remembered that in life there is a considerable adoption of the functional system. The professions are functional and indeed as time goes on the functional side is emphasized, as can be seen in the medical profession where it is now customary for two or three medical men to be associated together in serving a district, a remarkable change from the "geographical" or "territorial" to the "functional," and very considerably aided by the telephone and the motor car. We may say therefore that in industry we are faced not so much by the crude issue between the functional and the territorial systems as by the more or less of the functional. Moreover, it will be as well for us to have in mind the danger which accrues from striving to build up a final organization at one stroke. "We shall be fortunate," says Mr. Stuart Jones, "if the builders of the new order bring to it the tact and patience of Augustus and his infinite capacity for taking pains in framing provisional institutions so as to provide for orderly development." When we place a perfected departmental system side by side for purposes of comparison with a perfected functional system we are failing to recognize the fact that growth and development are of the essence of any human organization. The error which Taylor made in his eight functional foremen was to overlook the human need on the part of the workers for such definite direction as is incarnated in one person. It is true that to have a foreman who in turn appeals to eight functional chiefs is to make it but one remove; it is, however, just that one remove which makes all the difference. It is the intrusion of some of the departmental element which makes the functional organization possible.

On this ground, therefore, I would hesitate to put into crude and rival divisions the pros and the cons of the functional system. It will be wiser, I think, to take it for granted that the functional

[&]quot;Northcott, Clarence H., and others, "Factory Organization," London, Sir Isaac Pitman & Sons, Ltd., 1928.