

system is inevitable, just as mass and machine production was inevitable. But it is the work of human beings to safeguard humanity against many ills which seem to accompany movements apparently inevitable. A full-fledged functional system, vigorously introduced, is full of peril. In the first place it tends to dethrone the discipline of industry upon the human mind. It operates in this direction by its tendency to rob the industrial worker and his immediate director of the sense of a completed product resulting from their work. Put a little differently, it has in respect of direction precisely the demerit of mass production. In the second place, though it would seem, on the face of it, to allot responsibilities according to particular capacities, it does leave gaps, and the more precise the functional division the more likelihood there is of these gaps and of friction in respect of operations where it is doubtful whether they belong to this or to that function or, on the contrary, belong in a measure to more functions than one. This possibility of friction does much to counterbalance the increase of skill and of zeal and of happiness which follow from the allotment of responsibilities according to personal qualifications. In the third place, there is a lack of elasticity. It follows in many cases that an increase of knowledge on the part of a functional director tends to bring him up against the hard walls which limit his function. Lastly there can be little doubt that to the really able functional director a long experience tends to irritation and to discontent, and discontent on the plane of leadership is a very grave evil. It is not always the case that the function fills all that he finds himself able to do. He peers over the walls, as into a paradise, and he regards his reputation in one particular line as being almost a disaster to him. If only, he sighs, he could change his function for a while—but then it is of the very essence of the functional system that the functions are permanent or, at any rate, that they are not readily changeable.

So that where we stand in constructive criticism of the functional system is to seek such an application of the system as will be least disadvantageous to human kind. Manifestly the continuous intensive development of industry and increasing competition force upon us the adoption of every means to efficiency, and among those means the functional system of direction is inevitable. Where this system has been introduced to the best purpose

the greatest care has been taken to procure co-ordination, sometimes by committees and sometimes by a special co-ordinating functional director. In its origin, however, as laid down by F. W. Taylor, it was a much simpler matter than it has become, for it was "a recognition of qualitative differences, as to capacities required and the conditions of routine performance, between the function of execution in manipulating machine or tool and the function of planning and preparing work; and the grouping of operatives into two major divisions responsible respectively for these qualitatively different groups of functions." Thus the present claims for somewhat elaborate differentiation of function have grown from the original differentiation into two functions, on which all would probably be in agreement, and where co-ordination was not so difficult. It is co-ordination which is the crux of the problem today. We may smile at the suggestion that a specially expert staff has been necessary in some cases to co-ordinate the precedent work of experts. It is clear, however, that functional development is only practicable, or at any rate is more likely to be successful, where it is firmly based upon a departmental division with co-ordination secured to begin with. On this subject of organization we have much to learn, in general, from the Army, but in no particular is the lesson more valuable than in the means of weaving a functional system into a departmental system. Signals, communications, ordnance, aeroplanes, tanks—all of them highly technical modes of warfare—have successfully been brought into play, and they have their proper subordination to the general scheme while they have their full functional development. We may apply in a spirit of paradox this lesson to industry by saying that we shall get the best results from an adoption of the functional method where we do not attempt to substitute it at once and *in toto* for the departmental or geographical or territorial method. Probably much of the criticism which the functional principle has received has been due to this preliminary misunderstanding. It has been regarded as an alternative method of organization from top to bottom and men trained by long years of experience and of habit to the other systems have found it difficult to adapt themselves to it. We should have made more progress if we had proceeded a little more slowly. We had forgotten that

for the most part the organization under the old conditions was largely haphazard and that we needed to teach the value of organization itself before introducing a principle which depends upon the sense of organization. The balance between functional direction and general direction has to be found in the particular industry and it has to be found at various levels. It is in the effort to discover this balance that we shall learn to develop the sense of organization and to find the true place for a functional system.

Then there is the question of the individual. Men and women who are conscious of their ability, who have the sense of responsible leadership, are bound to feel that the functional system robs them of scope. They have been accustomed to looking at the industry as a whole, at its processes as a whole, at its production as a whole. They find themselves not only focused in their attention but actually robbed of other points of view. They feel that though all along they may have had a specialized functional interest, yet that it was accompanied by healthy marginal interests, and that these are ruthlessly cut off. Instinctively they regard themselves as sacrificed, under a functional system, to the success of that system. To these criticisms, weighty as they are, we have to make the reply that the functional system has some place in the adaptability of industry to be the chief force which is fashioning us in our time. Whether it be a tradition from the individualism of last century or not the fact is that our lack of social cohesion today is largely due to the fact that in our industrial enterprises we are not yet being trained in social cohesion. It may be that the functional organization in future will play its part in welding us together more closely and more mutually. Plato told us, as St. Paul told us, that there are diversities of natures amongst us which are adapted to different occupations, that all things are produced more plentifully and easily and of a better quality when one man does one thing which is natural to him and done at the right time, and when he leaves other things. Possibly that referred rather to professionalism of calling than to functionalization as we understand it in the unit industry. Yet there is reason to suggest that just as this moderate functionalism was the basis of Plato's claim for a co-ordinated state so the interweaving of functions and the close interdependence of human unit with

human unit may come about from an acceptance of the functional system in industry in such a way that it may develop, but also that it may be co-ordinated. To the Greek mind the city or state, convertible terms, was a community—an association of men—an ethical unity. It was this concept which dominated the social theory of Plato and Aristotle. Civic life was the normal life, and it was the relations which men sustained to each other and to the collective whole that constituted the problems of social philosophy.

They constitute also the fundamental problem of industrial administration. I have described functional organization as inevitable. I believe that it is inevitable if there is to be organized efficient production. But there is reason, at the same time, to be apprehensive if it is introduced as a completed whole without regard to its corollaries. So essential is co-ordination that I would plead for the continuance of the departmental organization as the basis and the introduction of the functional system gradually and only so far as the "sense of organization," to use words which Dr. Northcott uses in the book I have already quoted, justifies the venture. Nor is it certain that there are types of mind which suit the functional and others which suit the departmental. It may indeed prove to be wise, when we know something more about functional systems in practice, so to organize the functional tasks that men may pass from them to departmental tasks, or may pass from one functional task to another after a reasonable, probably rather a long, period. There may be an apparent loss at the time but the widening of outlook and the freshening of outlook may prove to be an ample recompense. For it is not only that we are considering the influence of our method of industrial organizations upon the men and women to whom we give the exercise of authority but that we are remembering that this, in turn, will react and that the industry of tomorrow will gain. The precision of the detail which will be within the scope of the knowledge of the functional practitioner will be all the healthier when it is balanced by being transferred to the point of view of general management or when, perhaps, it is correlated to the detail of the knowledge of another functional position. We have leaped rather too readily to the view that the functional positions are finally and permanently separated from each other and from the manage-