THE DISADVANTAGES OF SPECIALIZATION: A METHOD NEEDED WHICH WILL ADAPT THE WHOLE RACE KNOWLEDGE TO THE COMMON LIFE: BY SIDNEY MORSE

What the world wants today is a new conception of democracy. That the common man, often falsely called the ignorant man, is the most important social factor; that the mass of common men is the basis of social law and order and its heart the social center of gravity; that the common way of life is the right way,—all these are phases of a more democratic habit of thought to which we must return.

These facts will be more apparent on consideration of the opposite extreme represented by the modern type of specialist. The phrase "common man" is suggestive. There is a certain amount of knowledge,—as of the nutritive and reproductive functions—that a man must have to be human and to be normal. This knowledge all men share in common. The significant fact concerning the so-called common man is that he has little other knowledge. He is not ignorant. As compared with animals or savages, he knows much. But his knowledge, being common to all, does not attract the attention of his fellows. The most advanced specialist is an opposite extreme. His distinction is due to the fact that he has a knowledge of his specialty possessed by no other human being save himself. There is a vast gap between these antipodes.

So regarded, the specialist is at once seen to be in a lonely and precarious position. He is a pioneer beyond the confines of knowledge. The heart of humanity beats back yonder, centrally, in the mass of common men. The varied interests of human life are there. These the specialist has forsaken. One is reminded of the Forty-niner who abandoned home and friends, placed his all on a prairie schooner and directed his footsteps toward Sutter's Creek. Piece by piece he lightened his load of possessions, to arrive at last,—if by chance he did arrive,—a spent and not infrequently a broken creature.

The confines of knowledge are now so extensive and the frontier is so far away that to reach it a man must concentrate the energies of a lifetime upon a single task. Concentration is essential to the specialist. Unavoidably it implies neglect of other things. And society, like Nature, punishes neglect of function by atrophy. The specialist tends to encroach upon the time due to the interests and obligations of common life,—friends, family, society. His specialty detracts from the duties of parent, of citizen or of churchman. He not infrequently withdraws from these to spend himself in the attempt
to outstrip every competitor in the race for scientific achievement. And friends and society, by a law of Nature, repay him by like neglect. Common men have no use for the specialist. Eventually he wins, perhaps, but the mass of men take little account of his winning. A few newspaper notices, soon forgotten; a few magazine articles that nobody understands; a few books unread; vast potential good, no doubt, to coming generations, but little present benefit, and least of all to the specialist,—such is the record.

But, notwithstanding, the age of specialization is hardly past. We are in the thick of it. If pervades every phase of life. Farmers specialize, laborers specialize; so do business men, doctors, lawyers, clergymen, educators. Scientists specialize, of course. Doubtless a distinction should be drawn between the scientist who specializes in Sanskrit and the workman who specializes in shoe-peg. But there is truth in the witticism of a philanthropist who referred to a specialist in the natural sciences as “a kind of sublimated day-laborer.”

MEANTIME we are told that the day of the all-round man has passed. In pioneer times most men were farmers, most women mothers and housekeepers. We are told that the farmer’s family of past generations conducted some sixty-five occupations on his farm, each of which has given rise, in modern times, to a distinctive trade. The farmer was carpenter, blacksmith and carriage ironer. He worked metals. He made boots and shoes. He built furniture. And the women of his family spun, dyed, and wove cloth, made rugs, carpets, and the like. Nowadays a farmer goes to a blacksmith for metal work, hires a carpenter to construct and repair his buildings, and buys at the general store cheap factory-made articles. We are told that these articles are a thousand times better than the crude, homespun and handmade fabrics and furnishings of his grandparents; further, that no man willingly would hark back to the days of his grandsires. But this would seem to be a mere begging of the question.

At all events, in those days they made men. And a question is persistently coming up from all points of the compass as to the mental and moral fiber of the rising generation. The suspicion is shrewdly gaining upon us that perhaps, in the process of cheapening everything, we are turning out also a generation of cheap humanity; which proposition, if it be demonstrable, would cause us to question whether the benefits of specialization and the division of labor resulting in cheapness may not, after all, have been too dearly bought.

The same question presents itself in the domain of education.
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A recent volume lays the axe at the root of the tree. Or, to change the figure, like a high explosive, it seems likely to shatter the foundations of present methods in education and ultimately to clear the way for a sounder basis and more enduring superstructure, for it frankly points out that the way of advancement for the college teacher now is through specialization. His back is accordingly turned to the groups of undergraduates in his classes and his face is set toward the confines of advanced learning. Undergraduates are the sons of common men. The college or university teacher too frequently has little time for them and less sympathy, for the energies of the specialist are absorbed in striving to win place in the ranks of scientific investigators. He abstracts himself from his class to concentrate upon his monograph, and meantime the undergraduates are as sheep without a shepherd.

That the effect of extreme specialization must be to narrow the individual to the focus of his specialty, will hardly be denied. A farmer’s boy, making for himself a pair of shoes, gains breadth of skill and aptitude as far beyond comparison with that of the artisan whose day’s work is making shoe-pegs, as crude handiwork is below the standard of a modern factory. But making shoes represents one sixty-fifth of the skill of the old-time farmer’s boy; making shoe-pegs, one sixty-fifth of the task of a modern factory. And the square of sixty-five would suggest perhaps the superior advantage in intellectual development of a New England farm training a hundred years ago, as compared with the factory life of today. They had a saying once that the great crop of New England was men. The saying is as old-fashioned now as the mode of life that justified it.

UNFORTUNATELY, the evils of over-specialization are not confined to the specialists. There is something seductive about a new trail. Men like to follow it just to see where it will end. And the specialist, naturally enough, likes to justify his own wisdom. The result is that we are all solicited to specialize, and that not in one but in fifty directions. The day of the all-round man being at an end, let the boy decide what he is to be. Let him elect studies and shape all efforts to that end. Or, if he cannot decide for himself, let him take advice of the experts until he can make his own election. The difficulty is that the doctors disagree. The specialists have not only moved diametrically away from the social center of gravity but at different angles to one another. The farther they advance, the farther apart they become. Thus having little sympathy with common men, they have less with one another. Among college teachers, the specialist in ancient languages advocates
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the classics as the gymnasium of the mind and the main avenue to social distinction. The specialist in modern languages disparages dead language and urges English or other modern tongues. The expert in mathematics ignores the languages and advocates specialization in his department. Is it surprising that among these conflicting opinions, a student not infrequently is said to select the master who is the best fellow and the subjects that he thinks likely to be easiest to get through?

The result of excessive specializing are so numerous and apparent that they need only be suggested. The whole influence of this principle is centrifugal. It is anti-social. It tends to split up the family, giving each member an interest not shared in common, and thus to disorganize the home. It tends also to disrupt the village community by impelling the more intelligent members to pursue the lines of their special interests toward centers of population. It disrupts the church into sects and the sects into cliques. It has produced chaos in the educational world. By its very nature it loosens all bonds. Common men are injured when their sons are taken from them to become specialists. And the specialist, who gets most out of touch with common life, is the most injured of all.

Of course, it goes without saying that the wheels of time cannot be set back. A case could doubtless be made in favor of the specialists which would justify them in the good opinion of mankind. Civilization has profited by the fruits of their labors. We have them amongst us and we would not willingly dispense with them even if we could. The question then is not how to destroy, but how to construct. How may we turn to account the results of specialization in such fashion as to counteract its abuses and take advantage of the resulting good?

THE interpretation of the diagram on page twenty-eight may afford a clue to the solution of this problem. The field of society is seen to consist of a mass of common men, a great majority of the race, located centrally. The radial lines indicate the direction of the various tendencies of scientific investigation. The spiral suggests the rhythm of human evolution; the isolated dots, the position of specialists pushing out toward the confines of knowledge.

It is at once seen that no matter how far, under modern conditions, a specialist may go, he is not quite alone. The most advanced worker has always at his heels a little group of his rivals and associates. Modern means of communication have brought these remote groups into close intellectual touch, and the result has been to give occasion to the principle of voluntary association which, in its nature, is com-
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Their aloofness from common life, recognize in their specialty a bond of union. Associates and disciples, even rivals, are bound together by this tie, and thus by voluntary association various scientific bodies are formed. The first effect of this closer knitting of human bonds among advanced thinkers is, perhaps, to revive their social sympathies. Local, national and international congresses are held. Friendships are formed. Wives and families attend and become acquainted. The younger men, in the attitude of discipleship, establish personal relations with their elders. But on the other hand this type of voluntary association is not wholly beneficial, for the effect is also to accentuate the prejudices of the most advanced specialists against common men and the common way of life. The lone specialist, cut off by his very learning from the sympathy of mankind, is a pathetic figure. He may return upon the critics, who characterize him as “dried up,” scorn for scorn and look for his reward to future generations, but he is in some need of human companionship. With a group of associated specialists the case is otherwise. They derive mutual strength from union and it seems unfortunately too true that the attitude of the most advanced thinkers, the men who just now are determining the ideals of the race, is largely disdainful of common men and skeptical as to the idea of true democracy. This is not merely a figure of speech. The editor of a great modern encyclopedia reports to the writer that scientific experts, as a rule, not only disdain to “write down” to the masses the results
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of their investigations, but appear, when they condescend to the attempt to do so, to be incapable of making themselves understood by common men. The prejudice of the common mind against specialists and the corresponding embittered hauteur of advanced thinkers toward the masses throw into strong relief the extremes of the gulf by which society threatens to become divided.

Fortunately, the principle of voluntary association is rapidly producing a new type of social institution from which there seems to be abundant promise. This is the voluntary association for social service, of which the Society for the Prevention of Tuberculosis may be taken as a type. Associations of this sort are composed of two classes of persons, shading gradually into one another; and, in opposite directions, merging into the mass of common men upon the one hand and into the scientific associations upon the other. One new and most interesting type is the modern social worker, the man (or woman) who perhaps knows very little more about technical aspects of the prevention of tuberculosis than does the common man; but who sees the need and possesses the social sympathies, the tact and insight needful to disclose the remedy to those who are afflicted. The opposite type is, of course, the trained medical man or the social worker. He has advanced in the way of specialization so far as to meet upon a footing of discipleship, if not of equality, the leaders in medical or other research in a given direction. But he has now faced about and is directing his energies toward conveying to the common mind the needful accession of knowledge that will enable humanity in the mass to effect cures and avoid contagion. Such an institution as the New York School of Philanthropy, where the humblest social worker may come in contact with the most advanced philanthropic thought and training, stands as a milestone of human progress. Perhaps no more significant institution exists today.

The name of these voluntary associations, which extend the left hand, nearest the heart, to the common man, and the right hand of intellectual fellowship to the most advanced scientific thinker, is legion. There is perhaps a tendency to overdo the remedy and to create unwisely a multiplicity of associations. Indeed we are still on the backward track from extreme specializing and this principle has not yet lost its hold upon us. The very associations that are counteracting the evils of too much specialization are themselves specializing. Indeed, along each of the radial lines of scientific investigation a voluntary association is springing up, valuable in itself,
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but mischievous in so far as it is indifferent or even detrimental to other efforts.

Perhaps the best illustration of the danger of over-specialization, even in efforts that are themselves social and synthetic in their tendencies, may be found in the difficulties inevitably met in small towns and villages in establishing branches of the various national organizations. There are in a given village but few persons of sufficient initiative, courage and enthusiasm to inaugurate a campaign of any kind. Let us say that there are three. One chances to become interested in the movement against Child Labor, another in that for the prevention of Tuberculosis, and the third specializes against Cruelty to Animals. Each attempts to organize locally. Each appeals to the public for funds to support the respective national organizations. The obvious result is unwise duplication of machinery, inadequate organization and support, temporary and sporadic effort. What is wanted in every village and hamlet is a federated local body that shall represent and keep in touch with every worthy national movement.

The next step obviously is an ultimate association of associations,—a federation or merger of all those who, having pursued the path of specialization until they felt the tug of social sympathy, have faced about and are now seeking, from the so-called “sociological point of view” and in the new spirit of so-called “philanthropy,” to bring back to common men the gold and gems and other merchandise that the pioneers have unearthed in newly discovered fields of learning. To make the whole movement concrete and give it a visual image in the imagination, let us assume the possibility that every national or international voluntary association, either for the advancement of learning or the betterment of human life, could be housed under a single roof in New York City, or otherwise. Let us suppose further that the official heads of these various associations should form a democratic body somewhat analogous in influence to the Royal Society of Great Britain, or the Academy of France, with an executive head and adequate organization. Thus if every voluntary association of sincere purpose and substantial merit would find its efforts focused upon a single point, would not the effect be to accomplish in the largest fashion the good results that have already accrued, in the special field of charities, through the Charity Organization of New York, in the efforts of the Twentieth Century Club of Boston, and otherwise? The conception appeals to the imagination and who shall say that it is not within the possibilities of coming years?
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The existence of such an institution would, of course, be instantly made known by the periodical press throughout the rank and file of democracy. Once admit the thought that any person in need of guidance how to aid his fellow man could, by addressing a letter to a single individual,—the executive head of the ultimate association of associations,—obtain the best available knowledge and most adequate possible coöperation, and one is at the brink of a new revival of the principle of democracy greater than the world has ever seen. The conception is perfectly simple. The task of society, broadly speaking, is to transmit to the rising generation with usufruct its heritage from the fathers. The principle of specialization contemplates dividing individuals, families and communities along lines of special interests and transmitting to each piecemeal a fraction of the race knowledge.

WHAT is wanted is a new type of institution and a new educational propaganda which will contemplate nothing less than focusing upon the individual the entire race knowledge in its adaptation to the common life. And this must be done, not by taking the boy or girl away from the family, still less by alluring visions of inaccessible rewards and distant distinctions,—but by dignifying the common life. What our boys and girls want is to learn how to be happy at home; how to make the old farm pay; to overcome the loneliness and the inertia of rural life; to conquer disease, vice and ignorance,—not to run away from them; to transform housework into domestic economy; to make social life educational, home life artistic. The waters of learning, so long dammed into reservoirs, to be sluiced off through the exclusive mill-wheels of the college and university system, must be tapped and led abroad to irrigate the farms and the gardens of common men. The university of the people, which will mean that men can get all that is valuable of the higher learning at their own firesides and at intervals in the occupations of common life, can no longer be regarded as an impossibility. It may be said, with safety, that it is at hand. Some men will continue to specialize. Others will go abroad to bring home again the results of their labors. But the dawn is at hand of a renascence of Democracy, when the life of the farm, of the work-bench and of domestic labor will be regarded as the ideal life, because the individual worker, without leaving his natural environment, will be admitted to a full share in the total enlightenment of the race.