

### Chapter III: The Rhythmic Claims of Freedom and Discipline

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The antithesis in education between freedom and discipline is not so sharp as a logical analysis of the meanings of the terms might lead us to imagine. The pupil's mind is a growing organism. On the one hand, it is not a box to be ruthlessly packed with alien ideas: and, on the other hand, the ordered acquirement of knowledge is the natural food for a developing intelligence. Accordingly, it should be the aim of an ideally constructed education that the discipline should be the voluntary issue of free choice, and that the freedom should gain an enrichment of possibility as the issue of discipline. The two principles, freedom and discipline, are not antagonists, but should be so adjusted in the child's life that they correspond to a natural sway, to and fro, of the developing personality. It is this adaptation of freedom and discipline to the natural sway of development that I have elsewhere called The Rhythm of Education. I am convinced that much disappointing failure in the past has been due to neglect of attention to the importance of this rhythm. My main position is that the dominant note of education at its beginning and at its end is freedom, but that there is an intermediate stage of discipline with freedom in subordination: Furthermore, that there is not one unique threefold cycle of freedom, discipline, and freedom; but that all mental development is composed of such cycles, and of cycles of such cycles. Such a cycle is a unit cell, or brick; and the complete stage of growth is an organic structure of such cells. IN analyzing any one such cell, I call the first period of freedom the "stage of Romance," the intermediate period of discipline I call the "stage of Precision," and the final period of freedom is the "stage of Generalization."

Let me now explain myself in more detail. There can be no mental development without interest. Interest is the *sine qua non* for attention and apprehension. You may endeavour to excite interest by means of birch rods, or you may coax it by the incitement of pleasurable activity. But without interest there will be no progress. Now the natural mode by which living organisms are excited towards suitable self-development is enjoyment. The infant is lured to adapt itself to its environment by its love of its mother and its nurse; we eat because we like a good dinner: we subdue the forces of nature because we have been lured to discovery by an insatiable curiosity: we enjoy exercise and we enjoy the unchristian passion of hating our dangerous enemies. Undoubtedly pain is one subordinate means of arousing an organism to action. But it only supervenes on the failure of pleasure. Joy is the normal healthy spur for the *élan vital*. I am not maintaining that we can safely abandon ourselves to the allurements of the greater immediate joys. What I do mean is that we should seek to arrange the development of character along a path of natural activity, in itself pleasurable. The subordinate stiffening of discipline must be directed to secure some long-time good; although an adequate object must not be too far below the horizon. If the necessary interest is to be retained.

The second preliminary point which I wish to make, is the unimportance—indeed the evil—of barren knowledge. The importance of knowledge lies in its use, in our active mastery of it—that is to say, it lies in wisdom. It is a convention to speak of mere knowledge, apart from wisdom, as of itself imparting a peculiar dignity to its possessor. I do not share in this reverence for knowledge as such. It all depends on who has the knowledge

and what he does with it. That knowledge which adds greatness to character is knowledge so handled as to transform every phase of immediate experience. It is in respect to the activity of knowledge that an over-vigorous discipline in education is so harmful. The habit of active thought, with freshness, can only be generated by adequate freedom. Undiscriminating discipline defeats its own object by dulling the mind. If you have much to do with the young as they emerge from school and from the university, you soon note the dulled minds of those whose education has consisted in the acquirement of inert knowledge. Also the deplorable tone of English society in respect to learning is a tribute to our educational failure. Furthermore, this overhaste to impart mere knowledge defeats itself. The human mind rejects knowledge imparted in this way. The craving for expansion, for activity, inherent in youth is disgusted by a dry imposition of disciplined knowledge. The discipline, when it comes, should satisfy a natural craving for the wisdom which adds value to bare experience.

But let us now examine more closely the rhythm of these natural cravings of the human intelligence. The first procedure of the mind in a new environment is a somewhat discursive activity amid a welter of ideas and experience. It is a process of discovery, a process of becoming used to curious thoughts, of noticing what happens as the result of new ventures; This general process is both natural and of absorbing interest. We must often have noticed children between the ages of eight and thirteen absorbed in its ferment. It is dominated by wonder, and cursed by the dullard who destroys wonder. Now undoubtedly this stage of development requires help, and even discipline. The environment within which the mind is working must be carefully selected. It must, of course, be chosen to suit the child's stage of growth, and must be adapted to individual needs. In a sense it is an imposition from without; but in a deeper sense it answers to the call of life within the child. In the teacher's consciousness the child has been sent to his telescope to look at the stars, in the child's consciousness he has been given free access to the glory of the heavens. Unless, working somewhere, however obscurely, even in the dullest child, there is this transfiguration of imposed routine, the child's nature will refuse to assimilate the alien material. It must never be forgotten that education is not a process of packing articles in a trunk. Such a simile is entirely inapplicable. It is, of course, a process completely of its own peculiar genus. Its nearest analogue is the assimilation of food by a living organism: and we all know how necessary to healthy is palatable food under suitable conditions. When you have put your boots in a trunk, they will stay there till you take them out again; but this is not at all the case if you feed a child with the wrong food.

This initial stage of romance requires guidance in another way. After all the child is the heir to long ages of civilization, and it is absurd to let him wander in the intellectual maze of men in the Glacial Epoch. Accordingly, a certain pointing out of important facts, and of simplifying ideas, and of usual names really strengthens the natural impetus of the pupil. IN no part of education can you do without discipline or can you do without freedom; but in the stage of romance the emphasis must always be on freedom, to allow the child to see for itself and to act for itself. My point is that a block in the assimilation of ideas inevitably arises when a discipline of precision is imposed before a stage of romance has run its course in the growing mind. There is no comprehension apart from romance. It is my strong belief that the cause of so much failure in the past has been due to the lack of careful study

of the due place of romance. Without the adventure of romance, at the best you get inert knowledge without initiative, and at the worst you get contempt of ideas—without knowledge.

But when this stage of romance has been properly guided another craving grows. The freshness if inexperience has worn off; there is general knowledge of the groundwork of fact and theory; and above, all, there has been plenty of independent browsing amid first-hand experiences, involving adventures of thought and of action. The enlightenment which comes from precise knowledge can now be understood. It corresponds to the obvious requirements of common sense, and deals with familiar material. Now is the time for pushing on, for knowing the subject exactly, and for retaining in the memory its salient features. This is the stage of precision. This stage is the sole stage of learning in the traditional scheme of education, either at school or university. You had to learn your subject, and there was nothing more to be said on the topic of education. The result of such an undue extension of a most necessary period of development was the production of a plentiful array of dunces, and of a few scholars whose natural interest had survived the care of Juggernaut. There is, indeed, always the temptation to teach pupils a little more of fact and of precise theory than at that stage they are fitted to assimilate. If only they could, it would be so useful. We—I am talking of schoolmasters and of university dons—are apt to forget that we are only subordinate elements in the education of a grown man; and that, in their own good time, in later life our pupils will learn for themselves. The phenomena of growth cannot be hurried beyond certain very narrow limits. But an unskillful practitioner can easily damage a sensitive organism. Yet, when all has been said in the way of caution, there is such a thing as pushing on, of getting to know the fundamental details and the main exact generalizations, and of acquiring an easy mastery of technique. There is not getting away from the fact that things have been found out, and that to be effective in the modern world you must have a store of definite acquirement of the best practice. To write poetry you must study metre; and to build bridges you must be learned in the strength of material. Even the Hebrew prophets had learned to write, probably in those days requiring no mean effort. The untutored art of genius is—in the words of the Prayer Book—a vain thing, fondly invented.

During the stage of precision, romance is the background. The stage is dominated by the inescapable fact that there are right ways and wrong ways and definite truths to be known. But romance is not dead, and it is the art of teaching to foster it amidst definite application to appointed task. It must be fostered for one reason, because romance is after all a necessary ingredient of that balanced wisdom which is the goal to be attained. But there is another reason: The organism will not absorb the fruits of the task unless its powers of apprehension are kept fresh by romance. The real point is to discover in practice that exact balance between freedom and discipline which will give the greatest rate of progress over the things to be known. I do not believe that there is any abstract formula which will give information applicable to all subjects, to all types of pupils, or to each individual pupil; except indeed the formula of rhythmic sway which I have been insisting on, namely, that in the earlier stage the progress requires that the emphasis be laid on freedom, and that in the later middle stage the emphasis be laid on the definite acquirement of allotted tasks. I freely admit that if the stage of romance has been properly managed, the discipline of the second stage is much less apparent, that the children know how to go about their work, want to make a good job of it, and can be safely trusted with the details. Furthermore, I hold that the only discipline, important for its own

sake, is self-discipline, and that this can only be acquired by a wide use of freedom, But yet—so many are the delicate points to be considered in education – it is necessary in life to have acquired the habit of cheerfully undertaking imposed tasks. The conditions can be satisfied if the task correspond to the natural cravings of the pupil at his stage of progress, if they keep his powers at full stretch, and if they attain an obviously sensible result, and if reasonable freedom is allowed in the mode of execution.

The difficulty of speaking about the way a skilful teacher will keep romance alive in his pupils arises from the fact that what takes a long time to describe, takes a short time to do. The beauty of a passage of Virgil may be rendered by insisting on beauty of verbal enunciation, taking no longer than prosy utterance. The emphasis on the beauty of a mathematical argument, in its marshalling of general considerations to unravel complex fact, is the speediest mode or procedure. The responsibility of the teacher at this stage is immense. To speak the truth, except in the rare case of genius in the teacher, I do not think that it is impossible to take a whole class very far along the road of precision without some dulling of the interest. It is the unfortunate dilemma that initiative and training are both necessary, and that training is apt to kill initiative.

But this admission is not to condone a brutal ignorance of methods of mitigating this untoward fact. It is not a theoretical necessity, but arise because perfect tact is unattainable in the treatment of each individual case. In the past the methods employed assassinated interest; we are discussing how to reduce the evil to its smallest dimensions. I merely utter the warning that education is a difficult problem, to be solved by no simple formula.

In this connection there is, however, one practical consideration which is largely neglected. The territory of romantic interest is large, ill-defined, and not to be controlled by any explicit boundary. It depends on the chance flashes of insight. But the area of precise knowledge, as exacted in any general educational system, can be, and should be, definitely determined. If you make it too wide you will kill interest and defeat your own object: if you make it too narrow your pupils will lack effective grip. Surely, in every subject in each type of curriculum, the precise knowledge required should be determined after the most anxious inquiry. This does not seem to be the case in any effective way. For example, in the classical studies of boys destined for a scientific career—a class of pupils in whom I am greatly interested—What is the Latin vocabulary which they ought definitely to know? Also what are the grammatical rules and constructions which they ought to have mastered? Why not determine these once and for all, and then bend every exercise to impress just these on the memory, and to understand their derivatives, both in Latin and also in French and English. Then, as to other constructions and words which occur in the reading of texts, supply full information in the easiest manner. A certain ruthless definiteness is essential in education. I am sure that the secret of a successful teacher is that he has formulated quite clearly in his mind what the pupil has got to know in precise fashion. He will then cease from half-hearted attempts to worry his pupils with memorizing a lot of irrelevant stuff of inferior importance, The secret of success is pace, and the secret of pace is concentration. But, in respect to precise knowledge, the watchword is pace, pace, pace. Get your knowledge quickly, and then use it. If you can use it, you will retain it.

We have now come to the third stage of the rhythmic cycle, the stage of generalization. There is here a reaction towards romance. Something definite is now known; aptitudes have been acquired; and generally rules and

laws are clearly apprehended both in their formulation and their detailed exemplification. The pupil now wants to use his new weapons. He is an effective individual, and it is effects that he wants to produce. He relapses into the discursive adventures of the romantic stage, with the advantage that his mind is now a disciplined regiment instead of a rabble. In this sense, education should begin in research and end in research. After all, the whole affair is merely a preparation for battling with the immediate experiences of life, a preparation by which to qualify each immediate moment with relevant ideas and appropriate actions. An education which does not begin by evoking initiative and end by encouraging it must be wrong. For its whole aim is the production of active wisdom.

In my own work at universities I have been much struck by the paralysis of thought induced by pupils by the aimless accumulation of precise knowledge, inert and unutilized. It should be the chief aim of a university professor to exhibit himself in his own true character—that is, as an ignorant man thinking actively utilising his small share of knowledge. In a sense, knowledge shrinks as wisdom grows: for details are swallowed up in principles. The details of knowledge which are important will be picked up *ad hoc* in each avocation of life, but the habit of the active utilisation of well-understood principles is the final possession of wisdom. The stage of precision is the stage of growing into the apprehension of principles by the acquisition of a precise knowledge of details. The stage of generalization is the stage of shedding details in favour of the active application of principles, the detail retreating into subconscious habits. We don't go about explicitly retaining in our own minds that two and two make four, though once we had to learn it by heart. We trust to habit for our elementary arithmetic. But the essence of this stage is the emergence from the comparative passivity of being trained into the active freedom of application. Of course, during this stage, precise knowledge will grow, and more actively than ever before, because the mind has experienced the power of definiteness, and responds to the acquisition of general truth, and of richness of illustration. But the growth of knowledge becomes progressively unconscious, as being an incident derived from some active adventure of thought.

So much for the three stages of the rhythmic unit of development. In a general way the whole period of education is dominated by this threefold rhythm. Till the age of thirteen or fourteen there is the romantic stage, from fourteen to eighteen the stage of precision, and from eighteen to twenty and twenty the stage of generalization. But these are only average characters, tinging the mode of development as a whole. I do not think, that any pupil completes his stages simultaneously in all subjects. For example, I should plead that while language is initiating its stage of precision in the way of acquisition of vocabulary and of grammar, science should be in its full romantic stage. The romantic stage of language begins in infancy with the acquisition of speech, so that it passes early towards a stage of precision while science is a late comer. Accordingly a precise inculcation of science at an early age wipes out initiative and interest, and destroys any chance of the topic having any richness of content in the child's apprehension. Thus, the romantic stage of science should persist for years after the precise study of language has commenced.

There are minor eddies, each in itself a threefold cycle, running its course in each day, in each week, and in each term. There is the general apprehension of some topic in its vague possibilities, the mastery of the relevant details, and finally the putting of the whole subject together in the light of the relevant knowledge. Unless the pupils

are continually sustained by the evocation of interest, the acquirement of technique, and the excitement of success, they can never make progress, and will certainly lose heart. Speaking generally, during the last thirty years the schools of England have been sending up to the universities a disheartened crowd of young folk, inoculated against any outbreak of intellectual zeal. The universities have seconded the efforts of the schools and other topics, and thus educated England is not hospitable to ideas. When we can point to some great achievement of our nation—let us hope that it may be something other than a war—which has been won in the classroom of our schools, and not in their playing-fields, then we may feel content with our modes of education. . .