THE UNIVERSAL CONSTANT IN LIVING.

By F.M ALEXANDER

With an Appreciation by PROFESSOR G.E. COGHILL Author of ANATOMY AND THE PROBLEM OF BEHAVIOUR

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APPRECIATION

THE EDUCATIONAL METHODS of F.M. ALEXANDER by G.E. COGHILL

In this appreciation Coghill gives a comprehensive explanation of what he discovered about posture and movement during 40 years of study of Amblystoma and the reader should study this for him/herself. I have quoted a few paragraphs below.

"The practice of Alexander in treating the human body is founded, as I understand it, on 3 well-established biological principles:

1. that of the integration of the whole organism in the performance of particular functions

2. that of proprioceptive sensitivity as a factor in determining posture,

3. that of the primary importance of posture in determining muscle action. These principles have I established through 40 years in anatomical and physiological study of Amblystoma in embryonic and larval stages and they appear to hold for other vertebrates as well."

"In posture the individual is mobilised for a definite movement in which the energy mobilised in posture is released in a definite pattern of activity. In posture the individual is as truly active as in movement."

"Proprioception applies to sensory nerves that serve the muscles, tendons and joints, and the middle ear - vestibular apparatus - and its nerves. The proprioceptive system has nothing to do with local or cutaneous sensation."

"Alexander has found these same principles operative also in man. His work is concerned with the nature of the influence of the working of the psycho-physical mechanisms on the general functioning of the human organism - posture - and his technique was evolved as an aid in maintaining the general condition best suited to this working in those in whom they already exist, and in changing and improving them when this working can be shown to be harmful. He has further demonstrated the very important principle that the proprioceptive system can be brought under conscious control, and can be educated to carry to the motor centres the stimulus which is responsible for the muscular activity which brings about the manner of working - use - of the mechanism of correct posture. Of course the time required for this education could be greatly lessened through the assistance of a competent teacher."

On Amblystoma - a type of vertebrae well known for its lack of specialization of structure and function and in which movement can be observed under controlled conditions from the first. It is amphibious, so walking and swimming can be studied:- "There are two possible functions of the limbs: a primary one, wholly and always integrated with the trunk, and a secondary one in response to local stimuli. The first gives rise to total reactions and the second elicits reflexes, and reflexes as partial patterns are normally always subject to the total pattern".

Still on Amblystoma "The earliest postural reaction of the limbs - in development - is a total reaction and the sensory factor is in the proprioceptive system. The stimuli arise wholly within the organism."

"In the development of Amblystoma, I have observed also, that an appropriate posture is assumed at intervals for an appreciable time before the particular muscular pattern is geared to action. This occurs in swimming, walking and feeding. Posture, therefore, is a forerunner of action and must be regarded as basic to it."

"These are the simple rudiments of movement which Alexander uses in his methods of re-education. He is pre-eminently an educator. He seeks to restore the functions of the body through their natural uses. His methods are original and unique, based on many years of extensive and exhaustive study. Yet they can be scarcely and adequately described, although the results are marvellous."

"One ordinarily assumes that rising from a chair to a standing position is a simple process perfectly understood by every adult. But this pattern of behaviour is not natural. It was introduced into our behaviour, very late in our racial development, with the invention of the chair, the most atrocious institution hygienically of civilised life. Primitive man sat on the ground or squatted. He still does and the ease and apparent comfort of the squatting position is witnessed among the less privileged classes, who rest in that position for long periods. This posture requires extreme stretching of the extensor muscles of the legs and abduction of the thighs. Habitual use of the chair, on the other hand, prevents this stretching of the extensor muscles and tends to produce adduction of the thighs, even to the extreme of crossing one leg over the other. This unnatural posture tends to stimulate reflex responses which antagonize the normal total pattern of rising to a standing position".

"It is my opinion that habitual use of the improper reflex mechanisms in sitting, standing and walking introduces conflict in the nervous system, and this conflict is the cause of fatigue and nervous strain which bring many ills in their train. Alexander, by relieving this conflict between the total pattern, which is hereditary and innate, and the reflex mechanisms, which are individually cultivated, conserves the energies of the nervous system and this corrects postural difficulties, as well as many other pathological conditions that are not ordinarily recognised as postural. This is a corrective principle that the individual learns for himself and is the work of the self as a whole. It is not a system of physical culture, which involves only one system of organs for better or worse.

His method lays hold of the individual as a whole, as a self-vitalising agent. He reconditions and re-educates the reflex mechanisms, and brings their habits into normal relation with the functions of organisms as a whole. His methods are thoroughly scientific and educationally sound".

PREFACE

The readers of this and my other books will know that I have been constantly concerned with the nature of human reaction in its bearing on individual and mass activity, for my experience justifies my assertion that the nature of a person's manner of reacting at a given time determines the nature of behaviour.

The subject-matter of this book is the outcome of unique experiences in the past 8 years in the field of human behaviour. Should readers be disappointed that it has not been built to a definite plan, I would remind them that, in view of the subject-matter and its source of origin, the inherent limitations in a book made to plan have been sidetracked.

I am often taken to task for my long sentences. It is comparatively simple to express some idea in several short sentences, if they represent something specific, or something that can be done by direct method, for this involves the concept of separation and disconnectedness. But ideas and experiences concerning unified phenomena and involving indirect method for general application can only be fully expressed by a sentence that conveys the meaning of them so that they are conceived of as a co-ordinated indivisible whole.

I now ask my readers before passing judgment on the experiences described in these pages to apply the test of principle to any evidence emerging from my practice which may chance to conflict with their beliefs in practice or theory, or which runs counter to their individual interests. Then if it is found that this evidence is based on the same principle as that underlying the practice it is intended to supersede, judgment should be given against the practice and the evidence discredited. But if the opposite is found to be the case, then the evidence should be put to a practical test by observing the nature of the working of the mechanisms of the psychophysical organism during the persistent application of the procedures of my practice, and if this working leads to the raising of the standard of general functioning, judgment must be given in favour of the practice.

16 Ashley Place Westminster London April, 1941.

PREFACE TO THE NEW EDITION

Letters I have received from many people reveal that a clearer understanding and fuller acceptance of the "means" of my technique has enabled them to put the knowledge gained into practice in their daily lives.

The basic connection of my technique with education, re-education, rehabilitation and prevention in general has been stressed by responsible workers in many fields. They recognise that the "means" employed in my technique for making changes in the use of the self, are essential for the success of any attempt to bring about a lasting improvement in the control of human reaction. But such a fundamental change in human reaction as this calls for is one which man's efforts have failed so far to bring about. I have 50 years experience in acquiring knowledge necessary to allow me to help those who have come for assistance in improving their reaction to the stimulus of living. This experience has shown me that man's failure to make a fundamental change in reaction is due mainly to the unnatural and unscientific belief in

1. man's organism as "spirit", "mind" and "body", attributing to "spirit" greater value than "mind" and considering "spirit" and "mind" so superior that the ^body" is almost ignored and so treated with disrespect and suspicion; in extreme cases it has been castigated as the prime offender in frustrating the efforts of would-be helpers of man.

2. the concept which led man to make this separation is seen in the experiments he did to discover the nature and working of the mechanisms and systems of the human organism. From this he concluded that separate departments of study - namely anatomy, physiology, psychology and the rest - were best for his purpose. But we have abundant proof that efforts in these directions have not resulted in practical knowledge of how to PREVENT him from developing harmful habits in control of reaction, let alone what is needed to change or eradicate such habits. In consequence, man is the slave of habit in thought and action. He cannot make that fundamental change in reaction which would allow him to escape from habit-bondage, because he is still dominated by impulse, the associate of subconscious direction and guidance.

The human self was robbed of much of its inheritance when the concept of separation of the organism as "spirit", "mind" and "body" was accepted as a working principle, because it left unbridged the gap between the subconscious and the conscious. This gap remains unbridged by the studies, scientific or otherwise, which have been stimulated by the concept of separation. I assert that if the gap is to be bridged so that the self may enter into and enjoy the fuller benefits of "man's supreme inheritance", it will be through knowledge gained by practical experience which will enable man to inhibit impulsive "subconscious" reaction to stimuli and to hold it inhibited while initiating conscious direction, guidance and control of use that was previously unfamiliar.

The crux of the matter is that change demands the use of procedures that are unfamiliar and in my long experience I have never met a person who, in attempting to carry out a decision to make a given change was sufficiently endowed with the ability - which the mystics choose to call "detachment" - to keep that decision.

The reason is that the procedures are too difficult because they are not in keeping with habitual use. "Detachment" has long since been a watchword of the mystics. I suggest then that only those people who can translate into practice what is involved in the procedure just described can claim to have experienced detachment in the basic sense.

16 Ashley Place London S.W.1 January 1946

INTRODUCTION

I have stressed in previous books the concept of the indissoluble unity of the human organism, but some readers still stick to the concept of separation.

Misunderstandings have arisen because of my choice of words. I have persistently avoided using words that are labels for ideas and "systems". When reasons for criticizing my words have been given, I have always found in my critics a tendency to read into words meanings which fitted in with a particular construction that they were used to putting on them. This habit and their misunderstandings are closely connected. I refrain as far as possible from using such terms as "postures", "mental states", "psychological complexes", "body mechanics", "subconscious" or any of the thousand and one labelled concepts which have become attached to the complicated idea we have of ourselves owing to the kind of education we are given. Instead I prefer to call the psycho-physical organism simply "the self" and to write of it as something "in use" which "functions" and "reacts". My conception of the self is thus very simple, but can be made difficult by needless complication due to preconceived ideas readers bring to it.

It is essential to gain knowledge and experience required for putting the concept of THE WHOLE HUMAN BEING into practice consistently, if our acceptance of the concept is not to remain merely an intellectual belief. A great deal of confusion and perplexity in the world today is due to the acceptance and spreading of theoretical concepts which have not sprung from the personal experience of those who advocate them. This is particularly true in fields of education and medicine, where few people who support the concept of the WHOLE HUMAN BEING can offer knowledge of how to translate the concept into experience or give a technique to use in applying the principle in practice. Professor Coghill writes, "It is a very different thing to state a theory and to demonstrate it as a fact. It is the demonstration that places the concept on a scientific foundation. In my own case the concept came after I had the demonstration ".

Coghill's experience is in line with mine and removes a scientific concept from the status of an intellectual belief. When I began the observations that led to the evolution of my technique I did not hold any hard and fast theory about the working of the organism, but thought of "body" and "mind" as separate. But the time came when I saw that defects in my reaction at a given point were not due to defects in use and associated functioning of the parts of the mechanism seemingly most immediately concerned - in my case the vocal organs - but were the indirect result of defects in general use.

I observed the close connection between the processes of use and functioning which worked from the whole to the part, evidence of an integrated working of the organism. In using this principle I discovered a control of this integrated working, and I realised that, not only had I discovered the primary control of the psycho-physical mechanism that I needed to change my own reaction, but also, because of the objective proof emerging from my own observations and the procedures I used, the concept of the organism-as-a-whole had been placed on a scientific foundation.

The foregoing is fundamental to the comprehension of the practice and theory of my work and its wide implications in respect to man's reaction in living. People in general have not realised that the influence of the manner of one's use is a constant one on general functioning of the organism in every reaction and in every moment in life. It is an influence for good or ill and from this there is no escape. It is a universal constant in a technique for living.

Daily for 50 years I have demonstrated this constant influence to pupils. The fact that repeated demonstration is possible provides proof of the soundness of concept and principle and of the method based upon them.

We cannot hope to understand the essentials of improving the manner of reaction without first acquiring knowledge of the integrated working of the self that can prevent interference with this working. It is man's failure to perceive this necessity that has caused the tragic events that disfigure and undermine the civilisation he has built up.

If man is to change, he must begin by throwing overboard the conceptions and beliefs that go with the feeling on which he has previously relied for guidance and control in his use in all activities. New conceptions, leading to belief in new procedures, are needed. Conscious control leads to changes in use which are associated with unfamiliar motor and sensory experiences, disconcerting changes - so that much more is needed than a belief arising from intellectual considerations alone - if he is to maintain this belief during the employment of these procedures.

Judging from the opinions expressed by authorities in many fields since the publication of "The Use of the Self", my experience may one day be recognised as a signpost directing the explorer to an undiscovered country and one which offers unlimited opportunity for fruitful research to the patient and observant pioneer.

After working for a lifetime in this new field, I am conscious that the knowledge gained is only a beginning, but I predict that those who are sufficiently interested in my findings - and will be guided by them in further research - will find their understanding of the question of human behaviour so completely changed that they will see that knowledge of the self is fundamental to all other knowledge, particularly to that which can make for the raising of the standard of human reaction and understanding essential to a sane plan of civilisation.

CHAPTER 1

THE CONSTANT INFLUENCE OF MANNER OF USE FOR GOOD OR ILL

"The classic observations of Dr. George E. Coghill on the growth of the nervous system and the earliest development of embryonic behaviour showed that behaviour first appears as a total reaction of the organism, which is integrated from the beginning, and that the smaller patterns of behaviour, or specific reflexes, arise by a process of individuation from the total pattern." (Extract from the SIX YEAR REVIEW, 1930-36, of the Josiah Macy, Jr. Foundation)

Few of us have ever considered to what extent we are individually responsible for our bodily ills, because we are unaware of the faulty, harmful way in which we use ourselves in our daily activities and even in sleep, or of the misdirection, strain and waste of energy due to this misuse.

Note: People often tend to exaggerate in sleep the harmful manner of use they employ during waking hours, even although the function of the mechanism is lowered. (End)

Recently, in some fields of activity, it has been admitted all is not well; certain harmful effects of factory work have been recognised and efforts made to deal with them. Unfortunately, up to now only palliative measures have resulted from the efforts of those concerned, because they have not taken into account the part played by the psycho-physical mechanisms, both in physical and intellectual activity. No matter whether the activity is

1. one which involves the use of the limbs in general locomotion and movement, or for the use of the hands with tools and instruments

2. one of conceiving, reasoning and understanding which express themselves in speaking, writing in education, science etc.

The part played by the organism is common to both.

Every human being is a psycho-physical unity equipped with marvelous mechanisms and it is through these, when set in motion by the stimulus of some desire or need, that all reactions take place. Every reaction, therefore, is associated with a particular manner of use that constantly influences all human activity, whether manual or mental.

First, the manual worker. His use influences general functioning and the way he employs tools of his trade. All activity is a particular reaction to a stimulus. In this case there is one STIMULUS -- his desire to employ tools as the means of gaining his end.

The position is more complex when it comes to intellectual work in education, science, politics, etc. Workers in these fields employ theories or plans they have formulated as the instruments or means of instructing others. Success in gaining their end depends on their manner of reaction to several stimuli of varying intensity, e.g. ideas they wish to put forward; the desire to convert other people; the presence of an audience and so on. In addition, success will depend on the reaction of the people they are trying to instruct or convert, since these people in their turn will react according to the manner of use of themselves set in motion by the new ideas and personality of those presenting it.

It is surprising how few people realise that reaction is influenced, just as functioning is, by manner of use and not many, even of these, are aware how intimately the individual's use of self modifies the functioning and reaction of his whole being.

Note: We all know from experience that the obvious often escapes our notice and we fail to see things of great importance. When we meet some new fact or experience, we do not use the knowledge and experience we already have to deal with it and so fail to make a connection

between the familiar and unfamiliar, thus missing new knowledge. This explains why so few people among those who know my work have appreciated the truth of what I have written regarding the influence of use upon functioning and reaction, the association of manner of use and reaction and conditions of function being so closely related that control of one depends on control of the other. (End)

Yet surely this association is the fact above all others which should have emerged from knowledge of my work and writings. However, if anyone reads the various published appreciations of my work it will be apparent that this fact has been overlooked. Well-known authorities in other fields have endorsed the value and soundness of my work, but no reference will be found of the acceptance of a truth which is fundamental to its practice and theory, and which I am now about to stress.

The question of the nature of use in relation to functioning and reaction requires an answer and the attitude of most people is that Nature makes provision for us in this respect. "Why should our use go wrong? What is the cause?"

Nature has provided us all with the potential for reasoning out the means of preventing wrong use, but we have not developed any preventive measures because we have assumed, quite erroneously, that our use cannot go wrong or fail us. But the manner in which we use ourselves is operating continuously either for or against us every moment of our lives. Good use exerts a good influence upon general functioning, which grows stronger as time goes on, that is a constant influence tending to raise the standard of functioning and improve the manner of reaction. A bad manner of use works in reverse.

The vital point in estimating the extent of this influence is whether it is spasmodic or constant. If it is spasmodic it will have only a slight effect on functioning, but if constant its effect on functioning will tend, as time goes on, to grow stronger and stronger.

Constant attention to what we do in the daily round of life makes for success: that constant energizing in a given direction is the most effective way to produce a given result: that constant application to a given task by a slow person can bring success where a quick person who indulges in spasmodic application will fail: that constant dripping of water will wear away stone: that constant pressure on parts of the human body produces irritation and pain, and that constant indulgence in bad habits leads to irritation, undue excitement and depression. Therefore, the kind of constant influence our manner of use exerts upon functioning is of utmost importance. Habit indeed, may be defined as the manifestation of a constant.

For this reason we should know and be able to employ the means of establishing a good manner of use as a constant. Readers of "The Use of the Self" will remember that when I was experimenting with various ways of using myself, I discovered that the use of the head in relation to the neck constituted a primary control of the mechanism as a whole.

Unfortunately, the great majority of civilized people use themselves in a way that interferes with this primary control and it constantly operates against them, as well as adversely affecting their achievements in the outside world.

This adverse influence still operates even in patients who have medical, surgical or any other form of treatment for the "cure" of some specific trouble, not only during but after treatment. This will be so no matter how successful the "cure" may be. This applies in all fields of human activity and to pupils in education whether their subject be maths, languages, athletics, etc. where the primary control is being interfered with, and this will lower the standard of functioning, as well as the quality of output.

On the other hand, a person who has good use and does not interfere with the primary control experiences an improvement in functioning. Experience of my technique involves a practical demonstration that our manner of use is a constant influence for good or ill upon our general functioning.

Once we have accepted what this implies, we will appreciate the part played by wrong use in general psycho-physical inefficiency and ill-health and conversely - with good use - how we can restore and maintain psycho-physical efficiency and well-being. It is important that every one of us should know to what extent our functioning is being influenced by our manner of use, so that we can confidently check any trend in the wrong direction. This ability to assess the effect of use on general functioning provides a basis that is fundamental to diagnosis. This acceptance means a changed outlook for all who seek to help themselves out of their difficulties, or to change thought and action. Self-help by orthodox or unorthodox methods of treatment, self-discipline or anything else will have this most potent force of an improved manner of use working with it, raising the standard of functioning in all activities, affecting for good, every reaction.

Only in the last 40 years has this fact been appreciated, so that comparatively few of us today recognise that our manner of use has anything to do with our way of functioning. A wrong manner of use can be a source of individual failings, peculiarities, wrong ideas and ills of all kinds, as well as inward unhappiness which is so evident in the social life of today. From my long experience, I can now confidently assert that the underlying cause of our personal and social difficulties will persist until we adopt "means" which will not only prevent the children of our time, and of the future, from developing a manner of using themselves that is constantly harmful, but, in those cases where harmful conditions are already present, will restore use which will be a constant influence for good. This remains true no matter what other means are used for alleviating them.

Faulty use, whether inherent or developed, will become a more and more firmly established habit and therefore more difficult to change. On the other hand, improved use raises the standard of general psycho-physical functioning which is a constant influence for good in the development of the human being.

END GAINING AND "MEANS-WHEREBY"

These terms stand for two opposite conceptions and procedures. According to endgaining, all that is necessary to achieve an end is to start to employ different parts of the organism in a manner dictated by our "feeling" with regard to the movements needed, irrespective of any harmful effects due to misuse during the process; this conception implies the subordination of thinking and reasoning to the vagaries of instinctive guidance and control of the self in carrying out the activity.

End-gaining involves going directly for an end without considering whether the "means" employed are best for the purpose. This end-gaining plan is one of trial-and-error and was more or less successful when man's use was satisfactory; but during experiences in civilization use has become harmful and the end-gaining procedure no longer meets individual needs.

This fact is recognised in using the second procedure, the "means", and is based on the conception that the manner of use of the self is no longer satisfactory, and that the associated mechanisms, being misdirected, are responsible for activity which does not meet the requirements for the gaining of desired ends. This, therefore, necessitates thinking out new and improved "means" which will ensure that proper use of the mechanism is not interfered with.

This is an indirect procedure and involves the inhibition of familiar messages responsible for habitual activity, and the substituting for these of unfamiliar messages responsible for new, unfamiliar activity.

"Throughout my writings I use the term 'conscious guidance and control' to indicate primarily a plane to be reached, rather than a method of reaching it." (From my book, "Constructive Conscious Control".)

CHAPTER 2

THE CONSTANT INFLUENCE OF MANNER OF USE IN RELATION TO DIAGNOSIS AND DISEASE

Ever since I started taking pupils, doctors have been sending me their patients because they believed that I had evolved a sound technique. I am deeply indebted to them for their encouragement and support, and especially for the effort they are now making to bring knowledge of my technique to the notice of those determine the range and nature of the medical curriculum with the aim of it being included in medical training. This is evidenced in the following letter in the BMJ, May 29, 1937:-

"Constructive Conscious Control"

To the Editor

Sir, - In a review of F.M Alexander's book, "Conscious Control of the Individual", which appeared on May 24, 1924 your reviewer wrote: - "He appears to have something of value to communicate to the medical profession*.

We, the signatories to this letter, agree with your reviewer. As the doctors concerned, we have observed the beneficial changes in use and functioning brought about by the employment of Alexander's technique in patients sent to him for help - even in cases of chronic disease - while those of us who have been his pupils have personally experienced equally beneficial results.

We are convinced that he is justified in contending that "an unsatisfactory manner of use, by interfering with general functioning, constitutes a predisposing cause of disorder and disease", and that diagnosis of a patient's troubles must remain incomplete unless the doctor takes into consideration the influence of use on functioning.

Unfortunately, those responsible for the selection of subjects to be studied by students have not yet investigated the new field of knowledge and experience that has neen opened up by Alexander's work, otherwise the training necessary would already be included in the curriculum. To this end we urge that as soon as possible steps should be taken for an investigation of Alexander's work, he on his side having given us an assurance that he is willing to give us the benefit of his experience for the carrying out of any plan suggested, provided that in his opinion the plan is one that would make t possible for him to help us to the desired end. We are etc.

Bruce Porter, D. Ligat, J.R Caldwell, J.E.R McDonagh, J.H Dick, Peter MacDonald, Mungo Douglas, R.G McGowan, H Duffet, Adam Moss, C.A Ensor, A.Murdoch, W.J Graham, F.J Thorne, A Rugg-Gunn, Harold Webb, Percy Jakins, A.H Winchester, J.Kerr

This endorsement of what I wrote in my chapter on "Diagnosis" in "Use of the Self" comes from doctors associated with my work for many years and I am particularly anxious that my readers should grasp the full significance of their support of my contention that diagnosis of a patient's condition cannot be complete unless the doctor can assess the influence for good or ill of the manner of use on general functioning. Doctors are beginning to appreciate that a fundamental need in medical training and diagnosis has remained unrecognised.

It has been suggested to me that the doctor has made the field of diagnosis entirely his own. My experience, however, allows me to suggest that this attitude was not justified, since medical investigation had missed the most fertile part, particularly where full diagnosis was required for the purpose of prevention. Doctors have written to me saying they have, in certain cases, been unable to diagnose what was wrong. They asked if I could do so and, if successful, to help them in any way that would be beneficial to their patients.

For many reasons, I have refused to publish particulars of cases, but will now quote from some of the medical evidence I have, because it supports my contention that interference with the correct employment of the primary control of use is a potent factor in inducing and maintaining the harmful functioning accompanying ill health. In my pupils I have demonstrated that this misuse can be checked and evidence from medical friends encourages me to believe that a better understanding of the primary control and its influence on the general working of the organism will help us to understand more fully the nature of the interference with manner of use and general functioning.

In the cases that follow there is a common factor underlying the diversity of symptoms that is the fundamental cause of ill health. Cases sent to me by doctors include neurasthenia, visceroptosis, angina pectoris, epilepsy, locomotor ataxia, tic douloureux, short sight, stuttering, nasal and throat troubles, loss of voice, respiratory and heart troubles and severe damage from accidents. Children and young people have been sent to me because they were considered backward or defective, some of them actually diagnosed as mentally defective.

The striking characteristic in all cases was misdirection and misuse of parts caused by extreme interference with employment of the primary control of use, leading to undue lumbar curving of the spine, undue tension in the neck, arms and legs and overaction of muscle groups, causing maladjustment and misplacing of viscera, harmful pressure on joints, ribs and vertebrae. Use of the anti-gravity muscles was so misdirected that their working lessened the anti-gravity influence vitally important in maintaining equilibrium. Any movement of the head involved movements of other parts that should remain passive. This meant misdirection of energy and overaction of muscle groups and the greater the desire to turn the head the more misdirected energy was used.

Mr. B had osteoarthritis. His head was tilted backward and downward and he had so much tension that his head and neck were almost fixed. Lateral movement of the head was infinitesimal and caused acute pain. He had an extreme lumbar curve and his pelvis was thrust too far forward.

Orthodox diagnosis had led to the conclusion he needed orthopaedic treatment, and a collar 6 centimetres high was prescribed to prevent further pulling down of the head.

After 3 weeks of lessons with me Mr. B was able to remove his collar. After 2 months, his doctor wrote to him saying:-

"Dear Mr. B

I have been so convinced from the very first of the essential rightness of Alexander's technique that I have read his book 4 times, and if proof were required that his teaching is fundamentally correct, you provide the living proof.

Arthritis of the cervical spine at your age is a 'postural' disease that causes reflex spasm or overaction of muscle groups which is a vicious circle that menaces the deformity and increases the pain.

Alexander teaches how to inhibit the reflex spasm: that is the real secret that I have longed to do for years.....

Yours sincerely

J.R Caldwell.

Shortly afterwards, Mr. B sent me a copy of a letter he had received from the orthopaedic surgeon on who's advice he had worn the collar.

Dear Mr.B

I am delighted to hear what you say about what is being done for you by Mr. Alexander. There is no doubt he has done you good, physically and mentally, and you now have an aim and an object which unfortunately surgery could not give you.

Regarding the exercises, I probably am a sceptic and I know that as long as the muscles are developed temporarily by any system of exercise, you will feel better until such times as these muscles return to the condition in which nature meant them to be to accommodate with the conditions of your cervical spine......

As you know, doctors are frequently blamed for being reactionaries, but it is not so. We are delighted to know anything new, anything that can improve a patient, but occasionally we find systems of treatment which temporarily relieve, but not permanently.

(Signed M)

By the date of this letter it is clear that Mr. B's condition had continued to improve and this is corroborated by the following:-

Dear Mr. Alexander

I saw Dr.Caldwell yesterday and he was extremely pleased and interested. He says, of course, the bones are on a cant and the cartilage is probably worn away on the side where the pressure comes, but with the relief I now have it will grow again.

The arthritic nodules he agrees will disappear. He thinks it a wonderful result.

(Signed G.E.B)

These letters are of special interest to me, because they show that Dr. Caldwell has linked up his medical knowledge with that which came to him through observation of his patient's improvement during lessons with me. I hope that people in therapeutics and other fields of activity will follow his example.

If we look, however, at the letter Mr. B received from the orthopaedic surgeon, we see that he doubted if the changes would afford "permanent cure", because he assumed my work was "some system of exercises". Had he read my books, he would have known that all "systems of exercises" give only temporary relief and conversely in my technique no attempt is made to gain specific results by direct means. The changes in Mr. B's condition were brought about indirectly by improvement in his general manner of use of himself. His condition was caused by his habitual interference with the primary control.

Positive changes occurred even in the structural conditions. Nodules that had grown were disappearing, worn vertebrae were growing back to normal and the deformity of the cervical spine was corrected. Permanent changes were brought about in the bony structure of the thorax and spine, together with improvement in functioning of the abdominal viscera and an increase in mobility and capacity of the thorax.

Since these structural changes came about through changes made in manner of use, it follows that all the muscle groups had to play their part in making the changes and in accommodating immediately and continuously to the changes they were bringing. As long as the improvement in the manner of use was maintained, the muscles would not revert back to the original conditions.

In Mr. B's case - in his lessons with me - positive changes came about as an indirect result of learning how to inhibit wrong use of the primary control. With more experience, he learned to maintain the new manner of use when responding to any stimulus to activity in his daily life.

Note: Hence the futility in such cases of exercise that raise the degree of muscle tension. This applies equally to "relaxation" which brings about, under certain conditions, a form of collapse. (End)

Alexander then recounts his experiences in developing his technique and refers to them being in his book, "The Use of the Self". He goes on: -

Obviously in all doing there is a conception of what is to be done and how to do it. Whether we react to this conception by giving consent to the act or by withholding that consent, the nature of reaction is determined by the habitual manner of use in which we depend on feeling - kinesthesia or sensory appreciation - for guidance. When sensory appreciation is defective - as in nearly everyone - the impressions are also deceptive. When a certain degree of misuse is reached the deceptiveness of these impressions reaches a point where they can mislead us into believing that WE ARE DOING SOMETHING WITH SOME PART OF OURSELVES, WHEN ACTUALLY WE CAN BE PROVED TO BE DOING SOMETHING QUITE DIFFERENT. This is equally true of things we believe we think - which more often than not - are things we feel.

Here then is a vicious circle. Directly we get a conception of doing something, we react according to habitual misuse. The functioning of some part is thereby impaired and, as the organism works as a whole, all parts are affected.

In working out my own problem, I was at once caught in this vicious circle. As soon as I tried to change my reaction directly, these impeding influences stood in my way. I saw from repeated experience that, to solve the problem, any technique I might evolve must enable me to eliminate these influences and indirectly bring about real psycho-physical change in my habitual reaction: change of habitual reaction is fundamental to success.

We need to work to the principle of inhibiting habitual desire to go directly to our end while trusting to feeling - sensory appreciation - for guidance. Then we must employ only those "means" that indirectly bring about change in habitual reaction - the end.

On receipt of a given stimulus to perform an act necessary to change habitual reaction, CONSENT TO ACT MUST NOT BE GIVEN, BUT WITHHELD, so that the usual messages to the motor nerve and muscle mechanisms that determine our manner of employing the primary control of use in habitual reaction will not be projected. This clears the way to project new messages which, in time, will be associated with new and unfamiliar use of the organism.

Here are 2 fundamental procedures - inhibition and direction - which if repeated will:-

1. cause the habitual "means" whereby we have energized our old reaction to fall into disuse and

2. enable us to employ new means whereby we may energize the new desired reaction.

In this process we have a connection between what happened in my own case of throat trouble and in that of osteo-arthritis we have been discussing. Someone with such a condition in the neck is being gradually pulled down and bent forward, chiefly from the pelvis, in the same way as if his feet were fastened to the floor and he were being, day by day, more and more pulled forward and down by a rope tied round his neck.

I have gone into this case at length to show that the field of experience I am dealing with is outside any that comes within the survey of the practitioner and the patient when dealt with by orthodox means. In this case orthodox treatment was unsuccessful. I emphasize that, in teaching Mr. B, the means used were not a new method of treatment for "postural disease", but were the outcome of a new outlook on a fundamental cause of such a condition. My technique is not treatment - orthodox or unorthodox - but education in the widest sense of the word.. It deals with the control of human reaction.

I will now give a brief outline of other cases.

A. Spasmodic Torticollis: - with overaction of neck muscles, spasmodic movement of the head, harmful lordosis and scoliosis of the lumbar spine, extreme a b d o m i n a l protrusion, extreme forward pushing of the pelvis in standing and walking that increased stress and strain in attempts to preserve equilibrium. There was definite injury to the vertebrae resulting from pressure and harmful displacement of viscera. All these conditions were so acute that I would not give the doctor an assurance of what I could do until I had given the pupil 2 weeks of lessons, one every day. In this case, aid had been sought from physicians, surgeons and psychologists, all of whom pronounced the case hopeless.

B. Stuttering: - with overaction of neck muscles and spasmodic movement of the head. Special to this case was undue excitement of the fear reflexes in response to any stimulus to move or speak. Orthodox treatment had been given in use of the speech organs, based on what to do with them directly. The attempt at "cure" had not only failed, but was also responsible for the cultivation of new bad habits and exaggeration of old ones. The lessons I gave were based on the same principles given in the previous case. Thus the change brought about in the manner of use of the vocal organs was an indirect result of the change in the pupil's manner of general use of the self.

C. Asthma: - The manner of use was particularly harmful with misdirection of the chest and throat musculature, so that breathing was impeded, particularly in expiration. During an attack this misdirection was increased. This type of misdirection stems from interference of the primary control and showed in a harmful pulling-back and down of the head, together with fixation of the bony structure of the neck in the region of the occipital muscles, while the back of the head was pulled down on to the collar. There was an extreme lordosis, the chest was unduly raised and the pelvis thrust too far forward, all of which decreased the stature and unduly widened the chest causing harmful tension and minimum mobility. The attempt to breathe during the slightest attack exaggerated all this harmful misuse and accentuated the severity of the attack.

D. Seriously Damaged Neck, Owing to Riding Accident: - After 8 months of medical treatment, this man was still unable to walk. He was wheeled into my teaching room in an invalid chair. He was wearing a support to stop the head from falling so far backward that it was out of control. In a few days he could walk a little way without assistance and the head support was not needed. He eventually resumed riding.

E. Tic Douloureux: - This person's general use was particularly bad. The right eye was almost closed, the skin very dark under the eyes and inflamed on the forehead. The abdominal viscera were harmfully dropped, lumbar spine unduly curved, head thrown too far back. Attempts to move the jaw in speaking, to wash the face and comb the hair caused intense pain. 5 doctors who had been consulted decided the only thing to do was to operate and inject alcohol. After 3 weeks of lessons there was a distinct improvement in his general use and after 2 more weeks the eye was normal and the pain had practically disappeared.

F. Sciatica: - My daughter's improvement, which began so soon after coming under your care, continued until her complete recovery.

G. Legs Damaged in Flying Accident: - Extract from letter from S.B, 22 January, 1940: - My legs were broken, right leg lost 2 inches in length, left knee cap in several bits. You completely did away with all lameness.

After examining this patient, Dr. J.E.R McDonagh wrote: - "I have seen S.B and must congratulate you on the work you have done on him. I consider this the best example of your work".

H. Letter from Adam Moss, M.D, 8 June, 1939: -

Dear Mr. Alexander

I wish to place on record the remarkable results of your work on a number of my patients who had been regarded as derelicts.

10 years ago I sent you Mr. D.C, a bad spasmodic torticollis case, about whom a London nerve specialist had said, "he had never known such cases to get better". Under your care the improvement in a short time was extraordinary.

The next was Mrs.D, spasmodic torticollis, in a pitiable condition, having to be fed. She had been seen by consulting physicians, surgeons and orthopaedic surgeons and had spent 10 weeks in a psychologist's nursing home. I advised that she should see you. She is now living a full life and driving her car.

Next Mrs. B, scoliosis, head almost in the axial and torticollis; she had had osteopathic treatment, was wearing a collar and was partially bed-ridden. 6 weeks after she came to you I watched you give her a lesson; she was then quite erect - lateral curvature gone.

Then Mrs. R, a hopeless neurasthenic, bordering on melancholia, in and out of nursing homes for 4 years and had seen many physicians: the last one told her nothing could be done. She is now radiantly happy. There is much more I should like to say. Your books have been most instructive and thought provocative.

Your personality, your strict honesty of purpose, and the generous way you explain your methods and technique have earned you the esteem and regard of your many medical friends, from all over the country, who know your work.

Yours sincerely

Adam Moss

Old Age

Letter from Dr. W. Smith to my brother A.R, who teaches in New York, 10 January, 1941.

Dear Mr. Alexander

Your pupil and my patient, Mr. A died suddenly aged 81, but this does not alter in my mind the appreciation of the remarkable rehabilitation you gave him. When I first saw him in 1931, shortly before he became your pupil, he showed a very disabling degree of hypertrophic arthritis of the spine. The usual course at that age is increasing disability, and comfort can be given only by using orthopaedic appliances that lead to further fixation. He had reached a turning point in his life's physical activities and I am sure there is no known medical procedure that would have resulted in the remarkable rehabilitation he had shown in the past 8 years. He has had a steadily increasing well-being and interest in living, especially in the last 2 years when he has had harder burdens to bear than at any other time in his life. From the medical standpoint, he has really shown a reversal of the ageing process. His blood pressure has been lower and he has lost angina symptoms he had 9 years ago. The hyperttrophic process in his spine had diminished. In the last 2 years his zest for living has been such that he has taken regular vocal lessons and regularly played golf. This fall he skated 3 times a week, doing very difficult figure-skating, excelled by only a few of the best amateurs. In fact, his death occurred just after he had completed a difficult figure. I consider his death a mere incident to the fact that his work with you made it possible to live a very active, normal and happy life, as compared with the probability of increasing marked discomfort when he first became your pupil.

Millard Smith

I now refer to the influence of use in relation to functioning during childbirth and the preceding period. I will quote remarks by Mr. A.M Ludovici. This will draw attention once more to a fact that cannot be too often emphasized - namely, that it is the whole psycho-physical self, with all its manifold functions, which gains in efficiency and well-being from the correct employment of the primary control of use in every activity of life.

Ludovici writes: -Faulty bodily co-ordination affects health and efficiency in men as well as women, but whereas men are not, in peace-time, called on to perform any feat that reveals on a national scale the extent of their deterioration, women have their lack of efficiency constantly brought into the limelight by childbearing and childbirth.

25 years ago, Alexander was probably the only man in the civilized world insistently calling attention to this evil and showing how to correct it. And in my 2 books, I tried to convey the fact that in this vicious use of the body as a mechanism we had a veritable modern plague, which was all the more alarming, seeing that there was no escape from it along the ordinary lines of disinfection, medical pills, squills and tablets, or even serological therapy - hence the great importance of Alexander's work.

Suppose that, through faulty co-ordination and wrong use of the self - and Alexander leaves us in no doubt about this - we get a general shortening of the trunk, so that cavities are distorted, organs dropped, respiratory functions hampered, and the abdomen made to bulge and sag. Can a gravid uterus in such a body fail to suffer from these abnormal conditions?

Is it not fantastic to expect normal functioning or anything approaching easy and pleasant functioning where such a state exists? And yet, for 30 years, Alexander has been saying that such conditions are almost universal in modern urban people.

Since then, however, orthodox orthopaedic surgeons seem everywhere to have appreciated that vicious bodily co-ordination is a grave danger, even if they have not recommended the best means of correcting or preventing it, and neither such enlightened books as "Body Mechanics" nor Mr. Philip Whiles' article in the Lancet - incredible as it may seem mentions Alexander's work.

Now all that Alexander said, when he was alone in saying it, is being emphatically restated by orthodox orthopaedic surgeons. And nobody can read the latest scientific contributions without appreciating the accuracy of Alexander's original criticism of modern man.

For instance: - "Poor health may be found with no disease of the organs, but is always associated with faulty body mechanics".

This is not a passage from one of Alexander's books, but from a book quoted by 4 orthopaedic surgeons in 1934. They also say: - "Is it not possible that much of that which concerns chronic medicine has to do with the imperfect functioning of sagged or misplaced organs? Is it not possible that such sagging results in imperfect general secretions, or mixtures, that at first are purely functional, but which, long continued, may produce actual pathology".

There is hardly a bodily function, from digestion to respiration, which cannot be gravely interfered with by faulty bodily co-ordination. And in view of the wide range of its evil effects, it is impossible to take too serious a view of this question. (End of Ludovici)

THE EFFECT OF FAULTY USE OF SELF ON CHILDBIRTH

There is neither the space nor the need to deal with the general aspects of this question. And even its immense importance in obstetrics and gynaecology should be fairly obvious. For if it be admitted that, by faulty co-ordination, the normal and natural relations of the organs, their condition and tone, may be adversely modified; if it be acknowledged that by the wrong use of self an abdominal wall may sag, abdominal viscera may be displaced, and a thorax may expand so inadequately as to restrict the respiratory function, then here alone we have a sufficient amount of mischief to impair not only the course of pregnancy, but also - and above all - that of childbirth. Letter from Mr. G.M Martineau: -

A son was born to us early this morning; he is thriving nicely and my wife is wonderfully well. I want you to know that both of us will be eternally thankful for what you have done for her because her extremely robust health right through pregnancy and now that all is over is due to your work.

The extreme test of birth has been put on the worth of your work so successfully that throughout the pregnancy she required no support for the abdomen. When we remembered the acute trouble our first baby caused and the deplorable way the abdomen sagged in the later stages, we are gratefully amazed.

Five years have passed since your training was received, during which time she has enjoyed robust health, vastly different from anything before, being entirely without corsets, so it cannot be said that the benefit is a "flash in the pan".

Though we never saw you again, you will live with us for the rest of our lives, because of what you have given, and your training is progressive daily right through a lifetime.

Please use this description as evidence of long-distance results in any way you want.

Ever yours

G.M. Martineau

My justification for taking Mr. B and the other pupils mentioned was this: -

Experience had taught me that by employing the procedures of my technique, one can help a person afflicted with, for instance, osteo-arthritis to gradually overcome his habit of interfering with the primary control of use of himself and so indirectly bring about a constant improvement in the manner of general use. These procedures lead to change which will prove permanent, for they will become associated with a tendency for the disease to be diminished and undesirable symptoms will disappear. The standard of sensory appreciation will also be raised, so that in time it will be almost as difficult to revert to the old habitual manner of use that once felt right.

I was not concerned with curing any of these diseases or defects as such. My concern is always to re-establish as a constant that employment of the primary control of use, with its associated standard of functioning, which is found in people who are not in need of "cure", but are in good health.

I have yet to see a person afflicted with conditions in need of "cure" whose employment of the primary control is not having a constant harmful effect on his manner of general use and, therefore, on the standard of his general functioning.

Should I find such a case, I should at once admit that the contentions I have been making almost all my life were wrong, and I should seek another outlet for my energies.

CHAPTER 3 Part 1

A REVIEW OF THE REPORT OF THE PHYSICAL EDUCATION COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION

Part 1: Fallacies and Limitations in Physical Culture

In November, 1937, a committee reported on methods of physical culture for the purpose of offering suggestions for improvements. At that time the authorities were encouraging a national movement of improved physical development and the committee was asked to examine the physical culture methods in vogue and if necessary improve them and bring them up-todate.

When the report was published, several copies were sent to me by doctors, condemning it, and laymen who urged me to reply to it in the Press or in my next book.

I will start by giving a quotation that typifies the nature of the report:

"Each of these exercises is designed to produce specific effects which, taken together, bring about the desired physical development."

Just so! But what was the committee's picture of "desired physical development" and how does it differ from the conception of those whose methods they examined? By what scientific findings were they guided?

It can be seen from the report that the committee's conception is no different from that of the traditional physical culture teachers, past or present. There is nothing new or original, just the same old idea of muscle development of specific parts by direct means. They do not recognise that all physical effort tends to increase thoracic rigidity and causes breathlessness, and consequently, exercises for developing muscle tension in specific parts tend to develop undue contraction and raising of the chest and to increase lordosis of the back.

Exercises can and do build up muscles on the outside of the chest, but the tendency to increased rigidity is not diminished; indeed, such structural defects as may be present are merely exaggerated. Example: a famous athlete claimed he had a 10-inch chest expansion, his claim being supported by doctors. However, one doctor who was not satisfied examined him and was able to prove that the athlete had only 2-inch thoracic expansion, the other 8 being due to muscle expansion on the outside of his chest.

Further, the means advocated by the committee for putting their theories into practice are the same in principle as those which have been used ever since physical exercises were devised by man. It is just this: the committee realises something is wrong with the physical development of people; therefore they advocate exercises and recommend people to practise them. This shows a complete misunderstanding of cause and effect. I have already shown that if there is something wrong with a person's physical development, this is caused chiefly by wrong use and this wrong use is really what he is doing himself as a result of depending on unreliable sensory guidance in his daily activities including exercises. Sensory guidance is of immediate concern and importance in carrying out instructions given for physical exercises. Wrong use which lowers the standard of one's general functioning will always be associated with misdirection of energy to the musculature through deceptive sensory guidance (feeling).

Today the unreliability of our sensory mechanisms is widely recognised but in the B.M.A. report the reliability of the sensory guidance of those they wish to help through physical culture is taken for granted.

The committee ignores the fact those who practice the exercises are guided by the same faulty sensory guidance which has guided them up to now in all activities and has brought them to the point where they need help. It follows that the individual will do what he feels is right when he exercises, but his "right" will be "wrong". Most importantly he will use his primary control wrongly and this will constantly work against him.

I admit the individual can get an exercise "right", but he cannot put the use of himself right in doing so, because this would mean doing what he feels is wrong. All exercises are fundamentally the same, in the sense that the activity which goes in to their performance is inseparable from the habitual manner of general use of the performer.

The reasoning should be so:- here are people whose physical development is unsatisfactory and this is associated with their sensory misdirection of their habitual use of themselves. We should point out to them where this misdirection lies and show them how to prevent it. I maintain that the performance of any exercise not only tends to exaggerate bad habits of use, but cultivates new bad habits.

John Dewey, long before he had lessons with me, had seen that in methods of general education new defects are cultivated during attempts to eradicate old ones and wrote in his 'EDUCATIONAL ESSAYS' (p. 151)

"It is through a partial and defective psychology that the teacher in his reaction from dead routine and arbitrary and intellectual discipline has substituted an appeal to the satisfaction of momentary impulses. It is not because the teacher has knowledge of psycho-physical mechanisms, but because he has PARTIAL knowledge of it. He has come to consciousness of certain sensations and certain impulses, and of ways in which these may be stimulated and directed, but he is in ignorance of the larger mechanism - just as a mechanism - and of the causal relation which subsists between the unknown part and the elements on which he is playing. What is needed to correct his errors is not to inform him that he is only misled by taking the psychical point of view, but to reveal to him the scope and intricate interactions of the mechanism as a whole. Then he will realise that, while he is gaining apparent efficacy in some superficial part of the mechanism, he is disarranging, dislocating and disintegrating much more factors in it."

Yet I have never met a teacher of physical culture who had awakened to this fact. Once when I was lecturing at a Physical Training College and was asked to demonstrate on a few students chosen because they were considered especially good at their work, I felt very sorry for them because, in whatever they did for me, their use of themselves could not have been worse.

After the lecture I was asked to look at the back of one of their best teachers, because she had trouble. It was obvious the trouble was caused by her bad general use, which accounted for other specific defects, such as stiffening the muscles of her legs and throwing her knees back to keep her equilibrium. I pointed this out and another teacher then said "We teach them to do that to improve the condition of the abdominal muscles". Could one have a better example of a harmful by-product being cultivated through the practice of exercises "designed for the purpose" of producing a "specific effect"?

I challenge the committee to show that any person performing "each of these exercises" will not, in producing a specific effect, also produce by-products such as new bad habits of use with harmful effect on general psycho-physical functioning, making normal physical development impossible. Obviously, the greater the number of "specific effects" aimed at, the greater will the opportunity be for further misuse of the mechanism.

Also, the committee assumes that the designers of the exercises know exactly how many specific effects will be required for bringing about the "desired physical development". How could they calculate the number? They would have to make a complete diagnosis of the conditions present in every person whose needs the exercises are supposed to meet. Those who practise the exercises will almost certainly not be able to diagnose their own physical shortcomings, let alone the defects in their use. They will be forced to practice indiscriminately a

set of ill-assorted exercises, the effects of which they cannot foresee or check and, therefore, have little chance to avert the harmful effects on their general use and functioning.

Note: In "Human Nature and Conduct", John Dewey discusses what happens when a man, slouching along with a stoop, is asked to stand up straight. "He immediately pulls himself up and imagines that he is improving himself. Of course, something happens when a man acts upon his idea of standing straight. For a little while he stands differently, but only a different kind of badly. That is to say, unless he is taught the correct use of his primary control, his 'standing up' will only be another form of the wrongness associated with his slouching". (End)

Together with one of the best physical culture teachers I have ever known, we observed the results of exercises designed for "specific effects" and we were both impressed by the fact that the same set of exercises was responsible for quite different effects in different people. How could it be otherwise?

We all notice differences in people's manner of walking and speaking, and this same difference in use they bring to the performance of the exercises. Who is to decide what is "cause" and "effect"? Or which are the particular parts affected and needing attention?

Suppose, for instance, that 2 people, one with round shoulders and contracted chest, the other with protruding chest and lordosis perform the exercises recommended by the B.M.A. In these people the habitual use will be so different that the process of gaining the specific effects desired will make greater demand on the specific muscles concerned in one person than in the other and in other muscles throughout the organism.

If the committee should argue that it is not concerned with the effect of exercises on muscles, or muscle development, but with "physical development" generally associated with health, then their case becomes worse still. The idea of health cannot be disassociated from that of an optimum standard of functioning. No person can enjoy an optimum standard of functioning when, in all activities, there is such interference with the primary control. The practice of exercises exaggerates such interference and lowers the standard of general functioning.

The committee could not have been guided by any scientific findings. Only by ignoring a whole field of essential data could the committee have come to its conclusions.

If these exercises produce harmful by-products, they cannot be in accordance with scientific method, which demands that in any experiment the means employed shall produce the results they are supposed to produce and no others. Also, the relationship of the results to the means employed shall be subject to sensory observation.

In teaching people, my daily experience proves to me that if specific effects which will last are to be secured by scientific method, they must be gained by indirect means, which involves knowledge of the use of the primary control. The committee makes no mention of such a control despite the fact that the late Rudolph Magnus established its existence and I have given a detailed description of it in "The Use of the Self". A medical friend assures me that he urged influential members of the committee to take my work into their survey, but they refused to do so. When arriving at their conclusions they placed themselves at great disadvantage by ignoring

1. the discovery of a primary control of use;

2. that the sensory guidance of all people needing physical development is unreliable;

3. that such people will employ their primary control wrongly in their exercises and that this is a constant influence for ill working against them before and after practising;

4. that no method of help can meet their needs unless they are taught to employ the primary control in such a way that their use becomes a constant for good.

The public is now deeply interested in "physical fitness" and if the committee had placed this new knowledge before them it would have set them thinking along new lines and helped them to avoid the pitfalls which exist in physical exercises. This could have been the beginning of a practical campaign in prevention. The substitution of preventive for curative measures was not even mentioned in the report.

In ordinary mechanics, if a machine is out of order, we put it right before we expect it to function properly, but the committee's plan suggests that we should take an already ill-controlled human machine and increase the work done by it.

My technique demonstrates that interference with the primary control cannot only be prevented, but also remedied in people who have interfered with it. Anyone who has learned this technique will be able to put it into practice in daily life in any form of activity, including games and all forms of outdoor exercise. In this way a reasonable standard of physical development can be attained without harmful by-products, and the act of living itself will become a constant means by which change in the direction of more and more desirable physical development can be brought about.

Note: In a lecture to the Ling Society, Lucy Silcox, Head Mistress, said "I have to judge your system (someone else's system, not Alexander's) as an onlooker, by the eye, taking simple and obvious tests that meet the eye; sitting down, standing up, running, walking, speaking, listening. Not in the gym but in the house, field and street and it is only the rare exception that has, in the simple ways of life, aroused in me the emotion of living, moving beauty. Everywhere I have gone I have made notes, asking myself, what is lacking? Why is it, that of specially selected and trained persons, A is unable to stand in quiet repose, B moves across the room with a lurch, and C nods her head whenever she speaks? Why is the heavy step so frequent among teachers and taught? (End)

Under the committee's plan this "desirable physical development" is to be produced by performing exercises for a certain time during the day. We are actually asked to believe that muscle tension exerted for a short time daily by people whose habitual use is so defective will counter the general wrong functioning due to misuse that is operating against them all day long. Exercises will simply exaggerate bad habitual use and their repetition will establish more and more firmly wrong sensory experiences.

In my technique, the boredom of performing exercises every day is avoided and the opportunities for wrong sensory experiences minimized. As long as we stick to the principle of consciously inhibiting interference with the primary control, then our ordinary daily activities can be a constant means of psycho-physical development in its fullest sense. Instinctive misdirection of the primary control will be changed to a conscious guidance, associated with reliable sensory appreciation.

This means it will be possible for us to live a full life in civilisation, in which the activities necessary for the support of life can be made as effective in securing and maintaining a satisfactory standard of physical development, as were the activities of man in uncivilized life when he was a hunter and his very existence depended on the standard of development required for survival.

Alexander concludes part one of this chapter by showing 2 photographs, one of the Oxford Boat Crew in training for the famous race and the other of a sergeant-major standing to attention.

Of the boat crew he says that 4 of them look as if they were being tortured, 3 as if in a trance and only one, third from the left, looks as if he has the right attitude. Alexander says also that sport should be played for sport's sake and should be an experience of pleasure, happiness and healthy recreation. What does it matter who wins?

Of the sergeant-major, he says that this is an example of the harmful result of building posture on "plumb-line" theory and practice. It is further proof of ignorance and stupidity that prevail today in areas where experts rule supreme. In this picture, physiological, anatomical and biological laws have been outraged and it is incredible that anyone could submit to the indignity and folly of the procedures that brought it about.

It has been shown that man, by using exercises as a means of improving his physical condition, becomes a specialist in the production of harmful by-products. By doing this, he not only nullifies anything he may gain at one point, but in the long run loses rather than gains. Exercises lead also to the cultivation of harmful psycho-physical habits which lower the standard of general functioning. In this way man, in the fundamental sphere of activity within the self, defeats his own ends. His habit of end gaining is so deeply ingrained that it persists as a menace to him in his relations with the body politic and the outside world.

There is proof of this in all his activities, scientific and otherwise. It matters not whether he considers it necessary to do something to improve his personal well-being, or that of others, or to make some social, political, financial, business, religious or educational reform; in the long run he will defeat himself by his habit of concentrating on his end without having first thought out the means by which harmful by-products will not be created in the process of gaining it.

CHAPTER 3 - Part 2

A NEW TECHNIQUE FOR NEW SOLDIERS BY ALDOUS HUXLEY

We learn that in recent months, the training of English soldiers has undergone a radical change for the better. The nature of the change is so important that it is worthwhile to give a brief account of it.

Physical training for soldiers has its origin in parade-ground drill which was intended, first, to teach the use of arms and the performance of certain manoeuvres: and second, to provide an agreeable spectacle for the important personages in the reviewing stand. Among these important personages a convention grew up that the most agreeable of all military spectacles was that of large bodies of men standing in positions of extreme tension and rigidity, moving with the stiff precision of automata, and doing difficult and unnatural tricks like trained animals. This explains those pigeon-chests, stiff shoulders, concave backs, taut necks, raised chins and horrible monstrosities like the Russian goose-step and the Fascist "passo ginnastico".

50 or 60 years ago came the first signs of change. Physical culture came to be taught in schools and it was found that the traditional military methods were far from giving satisfactory results. Even in the armies, enlightened officers began to talk about physical training for health, not just for smart appearance on the parade ground. The question was; what kind of physical training would bring health? While the experts argued soldiers and children continued to be taught in the old way. Chests were still thrown out, spines bent backwards and neck-muscles strained, just as they had been in the days of Frederick the Great.

Meanwhile, many new and better methods were tried out, but none was wholly satisfactory. For in all of them, the organism was conceived as a collection of parts to be Corrective treatment was aimed at palliating the manifest symptoms of exercised in turn. weakness and deformity, not at removing the underlying causes. The trouble was that nobody knew what these underlying causes might be. All that the physical culturists knew was the obvious fact that some people used their bodies well and others did not. Then early this century an obscure young Australian, F.M. Alexander, completely revolutionised the situation. By long and patient experiment he found that the underlying cause was in the faulty carriage of the head in relation to the spinal column. F.M. said that in man - as in other animals - there is a certain natural and correct relation between head and spine, which when preserved, guarantees that all the organs shall be in their proper position and functioning harmoniously. Animals retain this correct adjustment instinctively. Human beings interfere and it goes wrong. Men acquire bad postural habits under the stresses of urban and industrial civilisation. How or why we acquire these habits we do not know, but F.M's work corrects them and produces far-reaching results of benefit to the entire psycho-physical organism.

The importance of Alexander's discovery was early recognised by that eminently practical philosopher and educationist, John Dewey, who wrote prefaces to his first two books. But in spite of this and of his great success as a teacher, F.M. received little recognition from official quarters in medicine and physical education. Recently however, biologists and physiologists began thinking of the body as a whole and studies of animals in motion have revealed the significant part played by the head and neck in co-ordinating the body. These people have become increasingly receptive to the hypothesis which F.M. has been so clearly verifying during 40 years of teaching. For the past few years Alexander has been enjoying that curious triumph which comes to unorthodox and professionally unqualified men of genius, who live long enough to see their ideas appropriated - without acknowledgement - by the orthodox and the qualified.

The latest and most striking tribute paid to F.M's ideas is the fact that physical training in the British Army is to be based on his principles. (End of Huxley's article).

Note by Alexander: - It appears, however, that although there may be some appreciation by the Army authorities that the head-neck relationship should not be interfered with, they have relied on direct instruction to attain this end and have therefore fallen into as bad an error as they would have done if they had remained in ignorance.

CHAPTER 4

A TECHNIQUE FOR PREVENTION

We are all familiar with the saying "Prevention is better than cure" and in medicine "prevention" means the doing or taking of something either to make the subject immune to germ infection, or to arrest the progressive aggravation of a functional disorder so that it does not become acute or organic, or to forestall and remove the more obvious conditions causing dysfunction at a particular crisis.

People may argue - with some justice - that this is to narrow the scope of prevention and in its full sense its primary object must be to promote such conditions of well-being in the individual as a whole which will prevent the development of specific or organic trouble.

In my experience I have found that, in cases where changes for ill have developed, the primary control is interfered with in all activities and there is a constant tendency towards wrong conditions. The opposite is true when this control is not interfered with. This means that a good subject for the application of the principle of prevention, in the wider sense, would be the person whose employment of the primary control ensures the best standard of functioning of the organism, as well as the healthiest chemical composition of the tissues.

Unfortunately, the doctor's training, through no fault of his own, does not equip him to work with prevention in this wider sense. It does not provide the knowledge to enable him, in diagnosis, to consider the influence of use on his patient's general functioning. Therefore, he cannot advise the patient, whose primary control is interfered with, on how to restore its correct use, which means that in treating the patient, the doctor will leave the constant harmful influence of this misuse as a legacy for future trouble.

If the doctor is to practise prevention in the wider sense with his baby patients, then he would need to show mothers and nurses how to avoid inducing bad habits in the baby's use by their manner of handling it. This would apply also to avoiding bad habits of use during rest and sleep, and particularly while the baby is getting the first experiences in sitting up and in learning to crawl and walk. It is equally essential that when changes for ill have developed in the growing child, the doctor should be able to provide the means by which right conditions can be restored and a recurrence of the trouble be prevented in future. This, for want of a better name, I will call "comparative prevention" and the technique we employ meets the demands of this form of prevention as well as prevention in the wider sense.

When a baby is born with correct working of the primary control prevention will entail providing the means by which this state of use and functioning can be maintained in living. But the adult manifests harmful results of poor use in both waking and sleeping hours. When an adult or child begins to learn to dance, skate, play games, write, read or start work for the first time, one can see the beginnings of new bad ways of using himself, which will become habitual and will lower the standard of functioning.

Ernest Bevin at the Trades Union Congress in 1937 said, "The nation has awakened to the fact that too great a price can be paid for the mad rush to increase production and industry is constantly creating new diseases".

I can assure Bevin that industry will continue to do so until workers learn to avoid cultivating bad habits of use. Interference with the right working of the primary control during daily activities will become exaggerated in learning to do new industrial work. People constantly misdirect their energies in daily activity; therefore it is fundamentally importance to prevent cultivation of bad habits in learning and learning to do.

Similarly, bad habits are cultivated by children in school, in sitting, standing, learning from a book and other school duties as well as in playing games.

Bad habits are also being cultivated in every hospital, particularly when the patient can again sit up or start to walk. I respect the doctors and nurses in hospitals, but they do not have the knowledge to recognise if the patient's use is impeding him in his early attempts to sit up or move about. Therefore, the patient's difficulties are increased and the more he repeats his attempts, the more his misuse becomes. Letter in the B.M.J:- "Diagnosis must remain incomplete unless the doctor takes into consideration the influence of use upon functioning" and Lord Harder wrote in the Daily Telegraph:-

"The Future Role of the Family Doctor:- And if it be said that the doctor's training does not fit him for work of this sort, then the sooner it does fit him the better. Inevitably the doctor's work in the future will be educational and less curative. More and more will he deal with physiology and psychology, less and less with pathology. He will spend his time keeping the fit fit rather than trying to make the unfit fit."

Lord Harder is on the track of prevention, but medical investigation has been devoted to finding "cures" for diseases, not to giving the doctor knowledge for preventing disease or for preserving well-being or acquiring a full understanding of the nature of health. The clue to what is wanted in medical training is to be found in knowledge of the influence of use upon functioning, which the group of doctors in a letter to the B.M.J state "should be included in the medical curriculum."

By means of my technique, the doctor would be able, when diagnosing conditions in a child, to detect from the very start any interference with use and functioning and would then be equipped for the work of prevention in its fullest sense. With the doctor's help the standard of the child's functioning would be maintained into adolescence at a much higher level, so that the ills which beset the adult would be lessened. Further, the idea of a "palliative method of cure" which still narrows the practice of medicine would pass and make way for preventive medicine in its widest sense.

Today, the patient's outlook is as much at fault as the doctor's. The patient does not consult the doctor until he is ill. People stay away from the doctor until they are forced to go with a fear that there may be something seriously wrong. This is because the patient believes the doctor is trained to treat disease and not to prevent it.

But prevention cannot become a practical possibility until people's attitudes change and doctors - in diagnosis - become mainly concerned with the influence of use on functioning. If the doctors are trained in this way, they will see that the consideration of the influence of use upon functioning comes first in any scheme of prevention and any other knowledge required in medical training can be best applied, not as a principle, but as an auxiliary measure.

Life is the manifestation of use in association with functioning of the organism, and it is this combination, working as a unity, that makes reaction to stimuli possible. Health in living, therefore, may be defined as the best possible reaction of the organism to the stimuli of living. To ensure this we require as a constant the best possible use and functioning at a given time, in a given environment, and under given circumstances; and this I submit is the ideal of human attainment in the field in which we are interested.

It may be argued that this ideal is unattainable; but those who argue so are influenced by past experience of failure in making changes necessitated by the acceptance of new knowledge and they fail to see that their failure is due to the fact that their end-gaining outlook led them to try to make these changes directly. The end-gaining outlook, which has been and still is almost universal, must pass and give way to a new outlook, in which allowance is made for the time required for the consideration and working out of the means by which any particular change can be made.

Training of the use of the self should be a feature of the curriculum at medical schools. People qualified in this training should be engaged in diagnosing use in their own patients. Doctors generally could avail themselves of the help we can give in improving the use of their child patients, because, with the best intentions, medical people consider children to be satisfactory specimens of well-being when they can be shown to be unsatisfactory specimens of use and functioning.

The result is that bad use, which should have been diagnosed earlier, grows worse until sooner or later functional disorders arise, serious enough to be recognised by the parents. The

child is taken back to the doctor and a course of treatment begins which could have been prevented.

Example:- A 12-year old girl with the body frame and general characteristics of a potentially fine human being. She was passed by her doctor as perfectly healthy, but her mother was not satisfied with the condition of her back and brought her daughter to me. I have seldom seen a worse manner of use. She had extreme lordosis, a protruding abdomen, fallen arches and the pelvis was held too far forward. I had noticed in particular a bad curve in the cervical spine and muscle tension on the left side of the neck, due to her wrong use of the primary control. Her case was a clear example of failure to detect seeds of future trouble.

Example: - A schoolboy who stuttered. Various treatments had failed so his parents brought him to me. I told them his stuttering was due to harmful use of himself. He was successful at games and was the best boxer in the school. I explained that such strenuous exercise was affecting the boy's general well-being and was adding to his difficulties. I agreed to teach him only if he gave up strenuous games and boxing for a time. This was agreed to and good progress was made until he reached the stage when a lesson at intervals was all he needed. However, at a particular lesson, I was alarmed by the rapidity of his heartbeat, and he said he had been sprinting regularly. I warned him again about strenuous exercise and arranged for him to consult a doctor that his family had confidence in.

After a long interval he was due for a lesson but did not turn up as he had broken his arm at football. I wrote to his headmaster to say that I was greatly disturbed to hear that the boy had been allowed to play football because he had heart trouble. He replied that the school doctor had given him permission, as he was of the opinion that there was nothing organically wrong with his heart. I wrote that I was well aware of this, but pointed out there was serious functional trouble which would soon develop into organic disorder if he went on with strenuous exercise. Meanwhile the doctor whom I had advised the boy to consult told me that he fully agreed with my diagnosis and disagreed with the school doctor, with whom he took the matter up.

The school doctor is especially hampered in his work because his training does not equip him for this important job. To diagnose conditions in children and say whether they are fit or not for strenuous exercise is a grave responsibility and not less grave is the responsibility of having to suggest preventive methods which, if left unchecked, can lead to serious disorders. In my experience, the school doctor diagnoses chiefly for organic, not functional trouble. But if he cannot diagnose those incipient functional troubles, wrong employment of the primary control being the forerunner, it is not his fault but that of his training. The fact that such guidance is not given to the child at school means that its potentialities for health and well-being are not being fully developed and its efforts in the actual school work are being seriously impeded.

Among my pupils are school teachers who are well aware of this but they encounter difficulties because parents, through habit, rely on the school doctor's opinion. Few of them have the inclination to look for new knowledge with which they could check the school doctor's opinion.

Another aspect of paramount importance is the influence of imitation on the child and the way the average parent approaches the problem. Example and imitation are powerful influences in education. In childhood, most of us are influenced by good or bad example, and are prone to imitation. Here is an interesting experience I had regarding parental attitudes in this matter. Some parents had heard of the success of our school at Ashley Place, and later at Penhill and when I interviewed them about places for their children, they invariably pointed out that they would not like their children to attend the school if there were children there with peculiarities that their own children might imitate. It never seems to occur to these parents that their own children might be bad examples to the children already at the school and other parents might object to this.

I point out that the habits which they dread are the particular reactions of a given child manifested in wrong use in all daily activities and although they may consider their child normal, I could show them that he displays bad habits of use other children might imitate. I draw attention also to the very bad use present in the great majority of teachers today and how they are bad examples to the children. That is why all teachers at Penhill must become proficient in conscious control of their own use before taking up their teaching work. Most of them are qualified Alexander teachers. Their first aim is to be good examples and the experience of applying the technique gives them the standard by which to judge.

Having explained all this to the parents, I answer their original query and assure them that in our experience children do not copy one another's bad habits of use if they apply the technique in learning and "learning to do." Even the youngest child will, after being at the school for only a few weeks, begin to notice faults and will be able to find out how and when they occur, the cause invariably being failure to apply the technique in some activity. Application of the technique is of first importance in pupils and teachers at our school because the best manner of use ensures that the best conditions possible at a given time will be present in the organism while learning and "learning to do".

CHAPTER 5

THE CONSTANT INFLUENCE OF MANNER OF USE IN RELATION TO CHANGE

PART 1 - THE HUMAN ELEMENT

We all know how difficult it is to change habits and to keep newly made resolutions. Many people say they have succeeded in doing so by self-control, but as a friend of mine once said to me; "What most people call exercising self-control against a bad habit is a process of elimination": and I agree with him. He was thinking of all those cases of drinking, smoking etc. where people had to give them up, because if they indulged in them at all they did it to excess.

Dependence on instinct is shown in the ordinary attitude towards self-control. If a person habitually manifests such things as outbursts of temper, irritability, lying, drunkenness, stealing etc, it is assumed that all the person needs to do is exercise control. The same is true of the general attitude to functional troubles and defects.

As few people become uncontrolled intentionally, it is strange that the belief in control still exists. Also, self-control has always been advocated by all moral, educational, and religious teaching with small success.

The truth is that so far we have not understood fully what is required for changing habit, if the change is to be a fundamental one. Also, we have not realised that the establishment of a particular habit in a person is associated with a certain habitual way of using the self, and as the organism works as a whole, to change habit in the fundamental sense is impossible as long as this habitual use persists. True, people claim success in "curing" habits by following some precept and others claim they have changed by "willing" themselves to do, or not to do, by trialand-error.

Yet it is a fact that control of use and control of emotional and other reactions are as closely associated as are control of use and control of all that prevents interference with raising of the standard of functioning. Therefore, if people try to change themselves without first making that change in their use which raises their standard of functioning, the constant influence of habitual use remains and any change they make may justly be considered a matter of transfer, i.e. the habit is transferred to some other part of the self.

"Transference" is generally mistaken for "cure" and-or permanent change. It is true that a habitual activity may, in response to some new stimulus, show itself in another form, a form which may be considered a great improvement. But if our aim is to suppress one specific symptom without reference to the effect upon the organism as a whole, the value of the improvement must be judged entirely according to whether or not the standard of general functioning has been improved.

To change habitual reaction permanently, without harmful by products, it is necessary to change the use of the self that goes with it. This reconditions the reflex activity of the old use and allows a new reflex activity which brings about a new reaction.

This reconditioning opens the way to unlimited development of control, but not control resulting from conditioning such as Pavlov's dogs, which would render an individual a passive puppet to be played on by external manipulations. The control I mean is made possible by that use of the primary control which, as Dewey says - "conditions all other reactions, brings the conditioning factor under conscious direction, and enables the individual to take possession of his own potentialities. It converts conditioned reflexes from a principal of external enslavement into a means of vital freedom."

Thus he who has, by some direct specific conditioning, controlled his intake of alcohol or tobacco, or eliminated some emotional disturbance, or reaction to a distressing environment, does not constitute a case of control in the sense that I mean. My way calls for that "vital freedom" in reaction -- freedom IN thought and action - which allows us to make effective any decision previously reasoned out, such as to take or not to take alcohol or tobacco, or to take either in moderation, and be able to stop at any time.

The addict finds such a decision difficult to carry out because of the nature of the sensory experiences habitually associated with satisfying his needs. These experiences are a continuous stimulus to indulgence in bad habits, and therefore, a decision not to indulge implies inhibiting habitual reaction to the stimulus arising from the sensory experiences which are the background of his craving. They create a harmful influence towards indulgence and are as much a part of such addicts as habitual sensory experiences in other people which cause them to use themselves in certain harmful ways in standing, walking, sitting and other activities. The sense of satisfaction which comes from the indulgence in both cases is associated with "feeling right" and comfortable even although the habitual manner of use is lowering the standard of functioning leading to ill health.

Bad habits of use are fundamental conditions of abnormality, and it is reasonable to expect them to be associated with such other abnormalities as excessive cravings for alcohol and tobacco. It is even more reasonable to conclude that when we start to eradicate abnormalities in the organism by changing its use, we begin the gradual eradication of other abnormalities within the self. Ordinarily, the addict is considered to be "cured" if he ceases to indulge his particular habit, without attention being given to other bad habits certain to be present, or to new bad habits cultivated during or after the "cure". Too often the "cure" leaves him depressed and discontented and I have known cases where these after-effects have been so distressing that I was forced to the conclusion that the "cure" was worse than the disease.

The close connection between habit and use has been missed in all schemes of reform and in past and present methods of education and development harmful changes in use and functioning of the organism have developed unchecked. Therefore, man's reactions in general seldom correspond to the ideals he professes, especially now that his material inventions are becoming an ever-increasing danger to him.

He has forgotten that in the last resort it is the human element that counts, and my work has always been a practical plea for the truth. Mechanization is used in a way that prevents the full development of human potential. This is the price we are paying for so-called progress, scientific and otherwise, achieved by changing conditions in the outside world regardless of the cost in human sacrifice and of the means employed to gain our ends. This so-called "progress" causes a lowering of the standard of our sensory awareness of harmful changes in the organism, changes recognised only when their harmful effects show up as bad habits, defects and disease, Therefore, we must understand the "means" of preventing such harmful conditions in the organism or, if they have already developed, how to change them back to desirable ones.

PART 2 - PROCEDURES INVOLVED IN THE TECHNIQUE

FIRST PRINCIPLES IN THE CONTROL OF HUMAN REACTION

I use the word "habit" in its widest sense, as the embodiment of all instinctive and other human reactions which is determined by the use of the self as a constant influence operating for or against us under given circumstances and at a given time.

If we view habit from this wider angle, which shows the link between any single reaction and the working of the whole mechanism, it is easier to understand the difficulty we all experience in breaking even simple habits; this difficulty increases in proportion to the intensity of the stimulus to indulge in this habit. This added difficulty is taken into account from the start of lessons in my technique, and so I begin with simple activities such as sitting and rising from a chair, thus giving the pupil the opportunity to inhibit his habitual response when any stimulus to activity comes to him. However, even in simple activities difficulties arise which are almost incomprehensible to people inexperienced in trying to bring about such psycho-physical changes as we are concerned with here.

The attitude of most people towards learning to do things which will change them is one which causes more anxiety, and this often reaches a stage of emotional disturbance, particularly if they are assisted by a teacher. This is not surprising since in orthodox teaching the teacher expects the pupil to try to be "right" in whatever he is asked to do, and the pupil also believes in

this idea. The teacher is asking him to overcome, at one stroke, long established habits of use and also to do this while being guided by some unreliable feeling which had led him into wrongness.

To clarify the point, consider a person whose use is unsatisfactory and for whom lessons in physical culture, remedial exercises, dancing or other methods has been decided as a remedy. I re-emphasize the fact that because this person has been guided up to now by his feeling of "right" in life's daily activities and his "doing" has caused misuse, it is obvious that the "right" of his past experience must have been wrong. In short his "right" is wrong. If then, in working with his orthodox teacher, he is convinced that he must try to be right in performing exercises etc., he will continue to do what he feels to be right - the known - and so exaggerate the wrong.

If he wishes to avoid this result in performing exercises, he would have to do what feels wrong; but he is not likely to do this because it would be the unknown to him. It is difficult enough for the pupil to allow the Alexander Technique teacher to do something for him that feels wrong and even more difficult for him to perform an unfamiliar activity by himself which feels wrong. This shows that a pupil who thinks he must try to be right and worries about this in his lesson merely adds to his difficulties. The same pupil will also expect the teacher to tell him the "right" way to stand, sit or whatever and that to be a good pupil he must concentrate on trying to be right.

Concentration in such cases resolves itself into a condition of increased muscle tension and self-hypnosis and lessens the chance of success. This is also true of the beginner's attempts to visualize what is to be done and how to do it, because he depends on past feeling which caused the "wrongness" he wishes to change to "rightness".

Therefore, methods which lead to fixed right postures do not meet the needs of those who desire to change unsatisfactory use and functioning. A satisfactory technique must provide continuous change towards improving conditions, by an indirect approach giving the pupil the opportunity to come into contact with the unknown without fear or anxiety.

To this end, from the beginning, the teacher does his best to reassure the pupil and allay his anxiety about being "right". The teacher explains to him that he should not try to be right, because this would mean reacting in his old habitual way which feels "right". The pupil can prevent this by refusing to react in his habitual way to a request from the teacher, say to sit down. Thus he inhibits his immediate response and cuts off at the source his habitual reaction to the stimulus of the teacher's request and the way is then cleared for the teacher to help him to employ the new "means" of gaining his end through a new improved use. The responsibility for the pupil being right or wrong is the teacher's alone. The pupil is told that the new way of using himself will feel wrong, but with more experience the new way will in time feel right, and he will eventually see that the conception which underlies this new way is not based on any arbitrary theory of what is "right", but on practical knowledge of what change is required in habitual use if he is to control habitual reaction.

As a rule, the pupil will have no difficulty in accepting these points theoretically, but often too quickly, in the sense that he has no doubt that when asked to do something, he will be able to inhibit his immediate response and then put the new "means" into practice.

In spite of this, it is almost certain that the pupil will forget to inhibit and will sit down in his usual way because it "feels right". My experience as a teacher has shown me that even with the best possible intentions a pupil is unable to carry out a decision which runs counter to all his previous experience, counter to his familiar habits. His education has developed in him a habit of end-gaining through hasty and unthinking responses to stimuli and, therefore, at the crucial moment when he wishes to carry out his considered decision, his habit of responding too quickly overrides his new decision and he relapses into habitual behaviour. This is because the new procedure involves using a different way of using himself that is unfamiliar.

Some pupils make a special will-to-do effort to get as much out of lessons as possible. This is very commendable but this extra effort causes exaggeration of habitual ways of "doing" and only time and experience in the work will convince him that, where the "means" are right for the purpose, desired ends will come. They are inevitable. Although a pupil may assert that he realises why he should inhibit his habitual reaction, and not give consent to a certain act, he is clearly more concerned with carrying out the teacher's instructions and gaining his end than with inhibition. He has yet to learn by experience that trying to gain his end, trying to be right is the surest way to failure. He must become convinced by his own experiences that his "right" is "wrong" and the idea of trying to be better at one time than another is a myth. It takes time to help him to stop trying to be right, but eventually he will learn to withhold consent to his habitual, instinctive response while giving consent to the new messages needed for changing his use of himself as he sits in the chair.

When the teacher is satisfied that the pupil has a good understanding of the theoretical side of the work, he can move him on to further stages. He will continue with the variations of the teacher's art to prevent the pupil from becoming emotionally disturbed.

As lessons continue the teacher goes on asking the pupil to give new messages for the new "means" of employing the primary control of use of himself which is fundamental in reconditioning reflexes. At the same time the teacher gives - with his hands - the pupil the actual sensory experience of the new employment of the primary control and thus helps him to maintain the improvement in use which results from the new experiences in making any new movement, such as sitting or standing or whatever. This is the beginning of a process of reconditioning leading in time to permanent change in use, functioning and structural conditions. Obviously, during all this there are a few unexpected experiences, such as a momentary disturbance of equilibrium and some uncertainty about the success to be gained by unfamiliar means. Also there are a few misgivings arising from a situation in which doing what feels wrong is paradoxically associated with gradual improvement in general use and functioning. In time, however, these difficulties are overcome by experience, as in any other field of learning to do.

The reader will now see that the technique is based upon inhibition of habitual wrong use i.e. the refusal to react to a stimulus in the usual way and that the principal of prevention is strictly adhered to from the beginning. The habitual wrong employment of the primary control responsible for the pupil's reaction in performing any act is prevented and gradually superseded by new, improved use which, through reconditioning, is associated with new reflex activity.

Gradually, the pupil passes from the preventive stage to those new experiences of use in which the proper relativity of the parts concerned is brought about. By repetition, the pupil develops confidence and no longer registers confusion, as little by little the new lines of motor and sensory communication are laid down, along which he will sooner or later habitually project messages.

As he progresses, the tendency to use the old lines of communication decreases, as does his dependence on feeling "right". Meanwhile, the continual communication along the new lines goes on, and day by day the new means of sending messages accelerates. The time comes when the pupil no longer feels the need to use the old lines; they fall into disuse, and communication along new lines comes to feel right and is carried out with confidence.

Up to now the pupil has been asked to apply the principle to the circumstances of his lesson, but from now on he can apply it to all the acts of daily life. He learns to "think in activity" - a new way of living - and once he has experienced the joy and satisfaction of this it is difficult to believe that the old way could be reverted to. The new way of use will now feel right while the old way will feel wrong. As we have seen, one of the serious obstacles to be overcome is that any change from old wrong use, the known, to right use, the unknown, feels wrong to the pupil and at each stage of change new use has to be experienced for some time before the pupil can feel that it is right and comfortable and so develop confidence in it.

Here is the answer to those who use the principle that if something is wrong with a person's use, the teacher should tell the pupil as a primary procedure WHAT TO DO DIRECTLY to put it right. In this procedure it is certain that the pupil will not try to employ the right use because this would feel wrong. People don't do what they feel to be wrong when trying to be right. That the myth implied in this belief I am here condemning has obtained credence for so long is proof that we do not think as often as we feel we do.

INHIBITION

I wish to make clear the sense in which I use the word "inhibition" which I already wrote in "Constructive Conscious Control." as the act of refusing to respond to the primary desire to gain an end and it becomes the act of responding - volitionary act - to the conscious reasoned wish to employ the "means" of gaining that end. I have since been interested to learn that in a pamphlet entitled The Brain and Its Mechanism (Cambridge University Press 1937) Sir Charles Sherrington wrote:-

"I may seem to stress the preoccupation of the brain with muscle. Can we stress too much that preoccupation when any path we trace in the brain leads directly or indirectly to muscle? The brain seems a thoroughfare for nerve action passing on its way to the motor animal. It has been remarked that Life's aim is an act, not a thought. Today the dictum must be modified to admit that often to refrain from an act is no less an act than to commit one, because inhibition is co-equally with excitation, a nervous activity."

The execution of the procedures in my technique is just this preoccupation of the brain with the thought responsible for the nervous activity involved in passing on messages, whether in the prevention or execution of an act. The preventive messages stop misdirection of habitual use, and the act of inhibition is primary to any other activity concerned in any act and clears the way for the projection of new directive messages which produce a new, improved use. As long as the brain is preoccupied with old messages which result in habitual use, there is little chance of breaking the vicious circle of the associated reflex activity in "doing". What we feel as "right" is wrong, and to change this habitual reflex activity we need to pass through a series of reconditioning experiences which feel wrong and which must be repeated until this unknown becomes the known and feels right.

Inhibition is the primary procedure for gaining these experiences. This is education in the fundamental sense, because it calls for a conscious recognition and understanding of all that is concerned with the formation of habit, and of the means by which habits can be changed. Our reasoning processes are called upon and, as a result, we must not react at once to a given stimulus. If we keep to this decision, we gain the first experience which leads eventually to the control of habitual reaction.

By this initial inhibition change becomes possible, and we move on to consider our next procedure. Primarily we must find out how we are interfering with the primary control and consciously refuse to project messages which bring it about. Only secondarily do we project new messages which will eventually lead us indirectly, through a change in the primary control, to the change we wish to make in habitual reflex activity.

In this whole procedure we see the new principle at work, because if we inhibit the habitual reaction, and at the same time project new messages to the motor nerves along unfamiliar lines of communication we shall be "thinking in activity". Mankind has not had the experience of thinking in activity where the projection of messages for the primary control of use is concerned. Man has just reacted instinctively to any stimulus to activity, whereas in this new way messages, preventive and otherwise, must be consciously projected, in their right sequence throughout the activity. In my experience, most people, however brilliant, find this procedure very difficult. They "forget to inhibit" and constantly overlook one or the other in the series of messages they have been asked to project.

Inhibition is a human potential of the utmost value for changing the self and is the potential most in need of development. If a pupil can inhibit habitual reactions when faced with unfamiliar procedures, remarkable changes in use and functioning can occur in a very short time, changes which, judged by ordinary results, would seem impossible.

Using inhibition calls for memory and awareness, memory for recalling the procedures in their proper sequence and awareness for the recognition of what is happening. In the process both potentials are developed and the scope of the use of both gradually increased and what I call the "motor-sensory-intellectual memory" is cultivated.

My technique is based on inhibition of undesirable responses to stimuli and, therefore, it is primarily a technique for the development of control of human reaction.

PART 3 - THE FUNDAMENTAL APPROACH

The nature of a person's habitual reaction is determined by habitual use and functioning. This is seen in someone who loses his temper and instantly assumes the attitude of body and limbs and facial expression of a person "spoiling for a fight".

Many examples could be given to show that change in a person's reaction is associated with change in use and functioning. When this change manifests as loss of temper the desire to quarrel will persist until some fresh stimulus is received. If he reacts to this by becoming composed he will return to the manner of use and functioning associated with his habitual reaction when undisturbed; or if he reacts in yet a different way, this change will again be reflected in the tell-tale changes in the associated use and functioning.

Losing one's temper amounts to loss of control in use and functioning and, where this is habitual, there is a tendency to react too quickly to the stimuli of the environment and reactions of other people, and to be at the mercy of "emotional gusts". In any activity, no matter whether the stimuli responsible for particular reactions are "mental" or "physical", the same processes which constitute habitual reaction to a particular stimulus are as characteristic of us individually as our way of writing, walking and carrying out general activities, and they are as easily recognisable by those who know us. All of us have met people who have quite unintentionally irritated us at first sight by some manner of speaking and general behaviour. I listened with a friend to a radio broadcast on an important matter, given by a famous man, an authority on his subject. Within a few minutes my friend exclaimed "That man irritates me!" and it became evident that these words conveyed only a mild impression of the nature of his reaction. He said it was the voice and articulation of the speaker that upset him, despite his deep interest in the subject. Here was a very intelligent man finding it impossible to listen with composure to a talk of vital importance to him because the speaker irritated him.

The point of special interest was that my friend's use was so bad it could well account for his reaction to the speaker. His reaction was yet another reminder that probably the greatest problem still unsolved in the education and development of mankind is the control of human reaction, because of the close interdependence between the nature of this control and the nature of the associated use and functioning of the self.

It may be of help here in view of what is to follow if I recapitulate certain points dealt with in my earlier books.

1. Man tends to become more and more a confirmed end-gainer, insisting on gaining his end by any means, even at the risk of disaster, rather than taking time to consider the means of gaining his end to ensure the best results.

2. Man has stumbled along the path of gradual changes to modern civilization from an environment which had remained static for thousands of years and in which all requirements in life where met by instinctive behaviour. Therefore, from the onset of civilised life man has been handicapped because his experience in adapting himself to the needs of increasingly rapid environmental changes is still inadequate. Also, he has not gained knowledge of the use and functioning of the self essential to the maintenance of well-being in an environment where instinctive, automatic behaviour has proved inadequate, and is actually misleading him as an ever-increasing demand is made on him for quick adaptation. This lack of knowledge has put the success of the civilised plan in jeopardy. His too-quick reaction often leads to results both harmful and unintentional because he relies on instincts which have survived their usefulness. At the same time, he is afraid of change because of limited experience, preconceived ideas, and habits of thought and action which are legacies from his earlier static environment that made comparatively small demands on him. This is also true of his reaction to changes within himself, especially those that adversely affect his position in the outside world, because if he does not come into contact with the unfamiliar - the unknown - within himself, he cannot change himself and the outside world in the way essential to fundamental growth and development in an advancing civilisation.

3. The solution of this problem of change is even more difficult because man's sensory appreciation has become unreliable, while his standard of awareness and observation is being gradually lowered.

Note: This does not always apply in specialist activities where the exercise of potentialities is focused or narrowed, but even in these cases the standard is too often low. Because man's sensory impressions are unreliable, his interpretation of his experience in living is faulty and illusive and he is likely to form false conclusions and make wrong judgments. These tendencies, combined with his too-quick unthinking reaction due to being an end-gainer, will block his way to success in trying to make changes and control his reactions. Success in developing to a stage where he can translate into practice the ideals of good will and peace will depend on whether he can substitute conscious guidance and control for that instinctive behaviour that met his needs in primitive life. (End)

The need for fundamental change in use has never, as far as I know, been recognised by people in education and methods of training. The advocates of new plans still think that people will be able to make the change they consider necessary for putting some new ideal into practice without changing the use of the self, the instrument employed in the new procedures. They have not recognised that in people today misdirection has crept into the automatic working of the self and it is necessary, first of all, to restore reliable guidance and control which will have an integrating influence on the mechanisms of the organism.

Furthermore, there is no evidence to support the assumption that the reliable working of the organism, which was satisfactory in man's earlier, more static environment, can be restored by specific means. Changes in physical, mental or spiritual areas demand from us a decision to make that fundamental change in the working of the mechanisms that will change the use of the self. Unless this is recognised by those who create new ideals and plans for individual and social reform, they are not justified in believing that these reforms will be more beneficial than those that have failed in the past.

To act successfully along new lines of thought means the execution of a decision by an unfamiliar use of the self against the impulse to carry it out by habitual use that feels right; that is, not only in the face of our mental conception of HOW it should be carried out, but also in the face of real discomfort and "feeling wrong" while carrying it out.

The new "means" are unfamiliar and feel wrong, so that to be right, a person will have to "do" what feels wrong, an entirely new experience. So, when the moment comes to employ unfamiliar use, he finds, that although he accepts it intellectually as best for his purpose, he lacks the necessary sensory confidence to proceed. He feels it is a risk he should not take, although he is willing to take a risk in a familiar situation, as for instance, the risk of falling in learning to skate or ride a bicycle. Working with old trial-and-error methods he is willing to take risks, but in this new way of learning he is unwilling to do so, even although he knows it leads to improving use.

In education, or any training scheme, this situation will persist as the greatest stumblingblock in making fundamental changes. He must pass from the familiar - wrong - to the unfamiliar - right - guidance and control of the psycho-physical mechanisms. Most people are unable to carry out decisions successfully in gaining an end by an unaccustomed use of the self, even in such simple acts as lifting an arm or a leg, or standing up or sitting down. This shows the conflict at work when habit is associated with wrong conditions, and it is because this has not been recognised that there is so much misunderstanding regarding what is fundamental to success in making changes. No one can be said to have really accepted a new idea or approved of the "means" of putting it into practice until he has actually had the experience himself of employing the procedures necessary for doing this.

According to the conception of change which still persists today, "creative power", "willing" and "wishing", as expressed in the words "I will" or "I will not", are means by which change can occur and those who favour such methods use them as aids to their accomplishments in all fields of activity, depending on instinctive, automatic behaviour on the trial-and-error plan, without consideration as to HOW to "do" the "doing" that is inseparable from the practice of "wishing" and "willing".

Also it is essential to remember that it is both the psycho-physical experiences of the individual in use and functioning and those that he gains when he is applying himself as an instrument in activities in the outside world which combine to make up experience in living, and it is the sum total of experience which determines the nature and value of his judgment. All judgment is based on experience, and a person with limited experience is hardly qualified to judge the reactions of someone whose experiences have been widened by exploring new fields. Man still relies on limited and deceptive experiences as a basis for judgment in too many spheres of activity and in regard to too many problems; this accounts for the position he finds himself in today, which shows he is in need of something more than "wishing" or "willing" on the trial-and-error plan. He has been "wishing" for continued progress, development and freedom of thought and action, "willing" himself to this end, sometimes concentrating on "physical", sometimes on "mental" and sometimes on "spiritual" means.

But as time goes on, attempts to solve present-day problems by these means only show their limitations - and never more so than now, June 1940. He is becoming increasingly aware of disaster and confusion outside himself and growing disabilities within himself.

This should have warned him that his means are not meeting his needs, but he still retains confidence in them. His only idea of "cure" for his disabilities is to concentrate still harder on "wishing" and "willing" on the same old plan as before and, therefore, the only change he makes is that which comes from ceasing to concentrate on one point in order to concentrate on another, such as "mental" or "physical" or "spiritual" and so on. Therefore, no matter what change he makes, he will not have brought about any change in use of himself. The resultant, harmful influence of this will become intensified through any special effort he makes and will remain a retarding and disintegrating constant, associated with disorder and complication leading to harmful habits of use, and the development of organic trouble and disease.

Any new change in reaction is the result of "doing" in his will-to-do plan, and the nature of this "doing" depends on his particular use, which in turn determines the nature of reaction. Therefore, surely it is clear that change brought about by direct methods of instinctive, automatic "doing" can only be palliative and will be associated with the development of harmful by-products.

It has been found, indeed, that attempts on these lines to change the control of some specific reaction are accomplished by self-repression, which has been recognised on all sides as harmful. Its presence as a by-product is proof of failure in the general sense, despite the fact that some specific control may have been gained in special instances.

Consider a man who decides to control some habit or defect which troubles him, without the accompaniment of repression. The habit may be loss of temper, drink, falsehood, drug addiction or whatever. His problem is to resist the temptation to "do" whenever "doing" is causing the trouble and this calls for the ability to carry out a decision against great odds. If he is shown that indulging in a particular habit - doing is always associated with particular use - he will see that it is futile to try to control this specific habit directly, because this would not change his use. Therefore, he does not try to suppress the habit by sheer force of his will-to-do, but learns to deal with the problem indirectly by inhibiting his usual way of using himself in reacting to the old stimulus. Thus he gives himself the opportunity of making a new decision which calls for new, unfamiliar psycho-physical experiences, and if he sticks to it and employs the new procedures which will change his use, the new desired reaction is made possible, without any repression being present.

The training that this presupposes has already been described. In it a person learns to consciously guide and control his activity in conformity with the new concept of the new means, although the sensory experiences involved will "feel wrong", the crux of the whole matter.

Aldous Huxley writes of my technique: - "No verbal description can do justice to a technique which involves the changing of an individual's sensory experiences. One cannot describe the experience of seeing the colour red. Similarly one cannot describe the much more complex experience of improved physical co-ordination, except to someone who had actually had the experience also. To someone who had not, the same words would mean something

different. Inevitably the malco-ordinated person would interpret them in terms of his own sensory experiences. Complete understanding of the system can only come with the practice of it. It is a technique working to inhibit undesirable impulses and irrelevance on the emotional and intellectual levels. We cannot ask more from any system of physical education; nor, if we seriously wish to alter human beings in a desirable direction, can we ask any less."

When methods are advanced in theoretical and conceptional form only for helping human kind to change and improve the present deplorable world conditions, the real problem practical application of the concepts - still remains unsolved. We are creatures of impulse, dominated by habitual reaction and will remain so as long as we are content to struggle on, depending on instinctive behaviour in adapting to quick environmental changes, economic, social, educational etc. No matter what plan is chosen, success will depend on the individual's capacity to carry out a decision to gain an end by using new conscious "means" involving psycho-physical experiences which feel wrong, discomfort frequently amounting to irritation, and a sense of unsteadiness in equilibrium

WITHHOLDING ACTION OR NON - DOING.

In connection with the foregoing discussion on habit, the following considerations may appear to emphasize unduly what has already been said, but they relate to a question which calls for special consideration.

In my work we are concerned primarily with non-doing in the fundamental sense of what we should not do in using ourselves in daily activities; in other words, with preventing that habitual misuse of the psycho-physical mechanisms which renders these activities a constant source of harm to the organism.

During recent years many people have realised end-gaining methods have harmful effects and are now learning to employ new "means" which will increase the standard of general functioning in the course of their activities. But although they may know that the first step is to learn HOW TO STOP what they themselves are doing, there is little to show that an intellectual grasp of the theory gives what they need for putting it into practice. Nor does it help them to appreciate that non-doing as a primary procedure is not only of the greatest practical value, but is also essential to their purpose.

Experience has shown that a person who has difficulty with non-doing will often suggest it to other people to persuade them not to over-indulge in drinking, eating, smoking etc. His idea of non-doing makes him advocate the direct "means" of preventing misdirected actions - doing - that can be seen in a person's behaviour - use. On the other hand, "non-doing" leads to indirect "means" of prevention. It is the first step in making fundamental changes in functioning which, in process, bring about the desired specific result, but without self-suppression.

Non-doing should not be confused with passivity. It is fundamental because it prevents the self from doing itself harm by misdirection of energy and uncontrolled reaction; it is an act of inhibition in response to a stimulus in which we refuse to give consent to activity and thus prevent the sending of those messages which cause habitual reaction. Non-doing is essential for changing bad habits and controlling human reaction. Few people succeed in changing bad habits, however hard they try. The failure is due to the constant ill effect of wrong use which causes misdirection of our energies, and brings loss of confidence, disappointment and often distress. In my technique even the most difficult cases can be helped to success by employing procedures which build up confidence, not only in the pupil's attempts to "do" but - more important still - in attempts to prevent himself from doing things he knows he should not do, first in his own use of himself and then in applying this use through himself to his activities in the outside world - non-doing in the fullest sense.

CHAPTER 6

PHYSIOLOGY AND PHYSIOLOGISTS

A friend told me that I should try to get "a physiological explanation of my technique in order to convince medical and scientific people of its soundness, because this would allow people to learn it more quickly and easily". I told him a "physiological explanation" would not make it quicker and easier to learn and study of my books would make this clear. I said I had yet to meet a physiologist or anatomist whose use of himself was not harmful, and for this reason, knowledge of these subjects cannot help anyone to improve his use, or even to know if someone else's use is harmful or beneficial.

The first doctor who gave me valuable support advised me to study anatomy and physiology as an aid to my experiments. He asked 2 of his friends, both professors, to teach me. When I met them I was shocked to see how badly they used themselves, despite being deeply versed in anatomy and physiology. I decided it would be a waste of time at the stage I had reached in my career to study subjects which could not help me because I could see that knowledge of these subjects had not helped these scientists.

No doubt knowledge of physiology and anatomy is of great value to surgeons and others, but my technique deals with the living human organism as a whole, which calls for knowledge of the so-called mental - psychological - and physical - physiological and anatomical - working of the human organism as an indivisible unity.

For 45 years I have demonstrated the soundness of my technique and have described it in "Evolution of a Technique" in my book "The Use of the Self". I claim that I meet the demands for proof in exactly the same way as an inventor or scientific engineer who shows that his machine works. People ask for scientific proof on orthodox lines, although such proof has in the past often come to be recognised as wrong. Indeed, one could contend that the first step in orthodox scientific proof should be to show that the means of establishing such proof are thoroughly sound. The physiological side of my technique has been discussed by doctors and physiologists and no findings have been advanced which contradict any of its procedures.

UNITY VERSUS SEPARATION

The original conception behind the acquisition of the knowledge of physiology was a very narrow one, involving end-gaining methods which people believed would establish it as an "exact science". Its study implies complete acceptance of the principle of separation in the working of the organism and this explains why the physiologist does not realise that much more is needed than an understanding of the functions of muscles. This applies in principle to the doctor who applies his knowledge of physiology in diagnosis. To give a full diagnosis the doctor should be versed in what Dr. Andrew Murdoch calls "clinical physiology".

Those who have established physiological data did not have knowledge of the influence of wrong use of the primary control on muscle action, or of the manner of use on the general functioning of subjects they observed. Neither did they have knowledge of the effect of stimuli on the subjects, as well as their own reactions during their observations. This accounts for the serious errors and misleading information to be found in authoritative works on physiology.

My life work has been one of dealing with practical procedures based on the principle of unity and associated theoretical conclusions which flowed from them. Recently there has been a more general advocacy of the theory of unity, but this does not mean that the principle has gone beyond theory. As Dr. P.B. Ballard has said in referring to my technique, "This work is in fact that education of the `whole man' about which so much has been said lately and so little has been done".

SEPARATION - A LIMITING CONCEPT

Knowing the names and functions of all muscles in the body does not help in the matter of using them to the best advantage in the unified working of the organism in daily life. The reason is that the way of using oneself in activity is a matter of the manner of reaction and the influence of it on the subject being observed. The student of physiology does not know this, because reaction means much more than muscle activity when trying to determine what constitutes a "normal working of the postural mechanisms".

It calls for the unity in action of the psycho-physical processes in

- 1. conceiving what is required or desired to be done.
- 2. withholding or giving consent to doing it.

In other words, it means giving or not giving consent to sending messages to the muscles to be employed according to the subject's use, which in turn is determined by how he employs the primary control. Most people send messages which cause overaction in certain muscles and use others which do not have to be used; this indicates misdirection resulting from faulty sensory guidance and control.

Could it be that the concept of separation which led to the study of the organism in parts - anatomy, physiology and psychology - is responsible for the failure to discover the existence of a primary control of the organism, or to recognise the influence of use upon functioning in it's fullest sense ?.

NORMALITY AND COMPLEXITY

In view of the above, the following admission by a professor of physiology is interesting:-

"The underlying basis in anatomy and physiology is a complex business and I cannot offer a criticism of the theory of the normal working of the postural mechanisms".

This is a significant admission considering how much importance is placed on that body of knowledge classed under physiology and anatomy on which, for instance, the orthopaedic surgeon depends for his diagnosis and treatment; because the statement implies that his knowledge does not include an understanding of the "theory of the normal working of the postural mechanisms".

Is it not because anatomical and physiological knowledge has been based on separation of the psycho-physical organism into parts and this knowledge has been used in making deductions about the nature of the working of the organism as a whole?

Separation has prevented anatomists and physiologists from recognising the importance of the working of the postural mechanisms and that the psycho-physical controlling part is inseparable from the working of other parts. Also, it is just as responsible for the misdirected use of specific muscles as it is for that co-ordinated working of the postural mechanisms as a whole which is so necessary to the normal use of these mechanisms.

The influence of misdirection of the primary control has also not been recognised. Neither has it been seen for its influence on the working of the mechanism responsible for the normal position, at a given time, of the head to the neck, and the head and neck to the torso etc. on which the integrated working of the postural mechanism depends. Also, the work done by anatomists and physiologists has not been comprehensive enough to allow them to gain the practical experience necessary for deciding,

1. when the primary control of the postural mechanisms is working normally or not.

2. what constitutes a normal or abnormal use of the primary control in relation to an integrated use of the psycho-physical mechanisms as a whole.

3. what constitutes normal or abnormal working of the postural mechanisms.

As I said before, knowledge of the above is not given in orthodox medical training. Consequently, physiology cannot constitute a "clinical physiology of the human being". Physiology does indicate the function of particular muscles, but it cannot indicate the means of operating these muscles relative to the individual's use of his mechanism as an indivisible unity, so as to ensure the integrated working of the organism. Therefore, anatomists and physiologists gained comparatively limited knowledge by studying the nature and relative position of the bony structures and the specific working of the muscles, tendons etc.

My technique demonstrates how to gain full advantage from the correct use of the primary control. This is the key to bringing about the "normal working of the postural mechanisms" as a whole. 28 years after I discovered it, Rudolph Magnus announced his discovery of it and Sir Charles Sherrington referred to this announcement in his Presidential Address to the Royal Society.

Referring back to the statement, "the underlying basis of anatomy and physiology is a complex one", I would point out that, where the use of the mechanisms is satisfactory, complexity presents no difficulty. It is only when the use of the mechanisms is misdirected, so that the primary control is interfered with, that the working of the complex mechanisms becomes complicated and causes difficulties, just as it is the complications that increase the difficulties in medical diagnosis and treatment. Small wonder that the diagnosis cannot be complete.

It has not surprised me that physiologists, anatomists, physical culturists etc. have not taken the trouble to examine the facts concerning my discovery of the primary control, because I am an outsider. What is surprising is that the findings of an eminent "insider", Rudolph Magnus, have not aroused sufficient interest in the fields of physiology and medicine to cause a "re-orientation of the viewpoint" towards the study of physiology, especially as Magnus's findings were the result of the orthodox experimentation to which they are all pledged.

UNITY AND CELL FUNCTIONING

I wish to restate accepted facts about unity of activity in cell-functioning in the workings of the sensory mechanisms. The sensory mechanism receives an impression through the cell receptors and this impression is a reaction in the form of production of energy. Undue and harmful distribution and misdirection of energy is prevented by the inhibitor and the energy required will be directed to the proper destination by the conductor.

It follows that the standard of receptor, excitor, conductor and inhibitor-functioning must not be lowered, if the psycho-physical condition associated with the well-being of the individual is to be maintained. Conducting and generating energy is done through the receipt of sensory impressions and as long as there is unity between the generating and conducting systems the process remains operative. I assert that such unified working is characteristic of fundamental life processes, and that every manifestation of activity in living will, if carefully studied in the light of demonstrable knowledge, provide as convincing an example as the foregoing of the impossibility of separating so-called mental, physical or any other processes responsible for human manifestations in living.

COMPARATIVE BIOLOGICAL EVIDENCE WHICH REVEALS INTEGRATION AS A WORKING PRINCIPLE IN THE USE AND FUNCTIONING OF THE HUMAN ORGANISM IN ACCORDANCE WITH THE "TOTAL PATTERN" OF BEHAVIOUR.

From G.E. Coghill, Biologist and Professor of Comparative Anatomy:-

"Dear Mr. Alexander,

I am amazed to see how you, years ago, discovered in human physiology and psychology the same principle which I worked out in the behaviour of lower vertebrates. Yet until now we have never come into personal touch".

Letter from Coghill to Dr. Millard Smith.

"Alexander owes me nothing in regard to the principle of the `total pattern', because he and I worked in total ignorance of each other until the last year or two. That he should discover the principle in the human organism is marvelous, and he deserves all the credit that the medical profession and humanity can give him".

A comparison between Coghill's work and mine may be of interest. He studied the nature, growth and development of the life processes of lower organisms functioning in normal conditions. I, however, observed humans in which abnormality had become established. I discovered that a particular relativity of the head to the neck and the head and neck to other parts of the organism improved general use and functioning of the organism as a whole, and that the motivation for this use was from the head downwards.

This corresponds with Coghill's findings that the primary impulses in lower vertebrates are projected along motor and sensory lines of communication from the head downwards towards the tail, and any interference with the "total (working) pattern" adversely affects the growth and working of the "partial pattern". This produces a tendency for the "partial pattern" to gain a dominating influence over the "total pattern".

This is analogous with what I discovered in myself, that is, an interference with specific parts of my organism connected with throat trouble - partial pattern. I found this was brought about by interference with the working of the organism in general - total pattern.

A friend familiar with Coghill's "classic observations" said that the fact that Coghill and I, independently from different standpoints, discovered the same principle in behaviour is striking evidence in observed phenomena from different angles and sources.

Letter to Walter Carrington from Dr. Trigant Burrow, Scientific Director of the Lyfwynn Foundation, New York and well known as a psychiatrist.

"Alexander has done much in getting at certain physiological reactions, and I was greatly impressed with the originality of his method and the very thorough and precise procedures he developed in the observation of his own behaviour. His work needs no endorsement beyond the objective evidence on which it is based. To me his patient, painstaking and carefully controlled observations represent an amazing achievement in the field of human behaviour".

Further, my practice and theory is not affected by the question as to whether or not reflexes are primary and integration of the "total pattern" is secondary, because the employment of the primary control is inseparable from the inhibitory procedures necessary to the reconditioning of the reflexes and to the integration of the "total pattern", using the same inhibitory procedures in a unified process.

The same is true regarding the question as to whether wrong use or wrong functioning is the primary cause of disease because wrong use can be changed indirectly to right use and in the process wrong functioning is restored to right functioning.

SHERRINGTON ON STANDING: - from his book, "Man On His Nature"

"Take the act of `standing'. Suppose my mind's attention is drawn to it, then I become fully aware that I stand. It seems to me an act fairly simple to do. I remember, however, that it cannot be very simple. That to execute it must require the right degree of action of a great many muscles and nerves, some hundreds of thousands of nerve fibres and perhaps a hundred times as many muscle fibres. I reflect that various parts of my brain are involved in the co-ordinated

management of all this, and that in doing so my brain's rightness of action depends on receiving and dispatching thousands of nerve messages, registering and adjusting pressures, tensions etc. in various parts of me. Remembering this, I am disappointed at the very little that my mind has to tell me about my standing. When it gives attention to my standing, it can make me fully aware that I am standing; but as for telling me how it is that I stand, or how to analyse my standing, I get extremely little from it. The main thing I get from it seems the unequivocal assertion that it is `I' who stand. If the standing goes on too long, I get an unequivocal assurance that it is `I' who am tired of standing. It seems that this power within me, which identifies itself with me and calls itself `I', and wills the body to stand upright or whatever and the body does so, does not know how the body does these things. For all the attention it can give it does not seem to be able to get inside the act which it still assumes it does. It cannot think itself into the `how' of the `body' doing these things".

The above extract was sent to me by a pupil whose comment on it is as follows:-

"This introspective account by a pre-eminent neurophysiologist is interesting. What he discovered about `standing' is about all anyone can discover if his investigations stop there. It is when investigation is made into `changing' one's `standing' that any further discoveries are made. His statement that we are unaware of how we stand is correct, so far as the mechanism of Postural Integration is concerned, but you (Alexander) have shown that we can become aware of how we interfere with that mechanism".

As Sherrington admits, he is disappointed with how little he knows about his standing, despite his knowledge of the intricate working of the central nervous system. This disappointment might have made him conscious that his conception of what was required for a full study of the central nervous system could not have been a comprehensive one, because his knowledge did not help him to meet a need that he had assumed his mind would enable him to meet. He had no knowledge of the "means" of directing and dispatching messages through the nerve fibres and the registering and adjusting of pressures and tensions throughout the organism - the "all this" - which results in the act of "standing". These "means" are all-important, because upon them depends that employment of the primary control of the use of ourselves through which we learn to know how we do the thing we are doing. We also come to recognise the "right degree of action" and "co-ordinative management" of the psycho-physical mechanisms in the performance of "standing" or any other act. Further, when the integrated and complex working of these mechanisms is interfered with and becomes complicated and disintegrated, it is the knowledge of the "how" of the conscious employment of the primary control of use that enables us to restore "right degree of action" and "co-ordinative management".

CHAPTER 7

THE THEORY OF "THE WHOLE MAN" AND ITS COUNTERPART IN PRACTICE

This chapter contains articles from newspapers and medical journals about the current thinking in the 1930's regarding what constitutes the "whole man" and Alexander comments on these quotes. I think the concept of the "whole man" is much more easily acceptable nowadays, as is shown in so many of the alternative medicines and perhaps even the orthodox medical profession is showing signs of moving away from specialization and separation. For these reasons and despite the fact that the chapter makes very interesting history, I have summarized it by giving only a few quotes from these articles followed by Alexander's comments on them. Please note that these quotes are random and separate from each other: they do not give continuous, integrated comments of Alexander's on the articles.

Danny McGowan.

The conception of unity, as expressed in such phrases as "The Whole Man" and the "organism-as-a-whole" has become almost commonplace in scientific and popular discussion; but we rarely find that the individual outlook or understanding of those who accept it as a working principle is influenced in such a way that they work consistently with it in dealing with their own problems. Indeed, the plans of procedure adopted by its advocates are more in keeping with a belief in the organism as a composite product of which the separate parts can be controlled, affected, or examined independently of the rest rather than with a belief in the working of the "organism-as-a-whole".

In view of this, I will give a number of examples of this inconsistency shown in a wide diversity of important writings in recent years, together with some comments.

Article in The Times, London, 5 May, 1938: -

"Any one might be forgiven for feeling hurt or angry if he were told he is only half a man. But there are smaller fractions of humanity than a half. A distinguished educationist has recently made public confession that in his days of school-mastering he was prone to the error of dividing each boy into 3 parts and trying to deal with mind, body and character as if they were separate entities in watertight compartments. He himself looked on mind as his primary and main preoccupation. In the revulsion from this misleading analysis he sees education as a process of discovery and development in all 3 fractions at once. He draws a distinction between education and training. Mind, body and character might be subjected separately to intensive training without securing real education as the result.

All three factors are essential to the upbringing of the young. They cannot all be in the hands of one and the same preceptor for each boy and yet, to secure the grand result, there must be somewhere that supervising, guiding influence which will, in the light of some clearly seen ideal, attune the separate treatments to one another and so mix the elements that the final verdict will be 'This is a man'. It is a great ambition."

If, as the writer of the article puts it, "education is to be a process of discovery and development in all three fractions at once - mind, body and character" - it demands from the individual as a "primary and main preoccupation", the education of himself as a consciously changing integrating entity, ready to welcome the experiencing of previously unknown psychophysical changes in the use of the self.

My life's work has demonstrated that by means of this reconditioning process conditions in man can be changed gradually from the abnormal to the normal, although at certain times and circumstances he will have to surmount impeding experiences in psycho-physical activities. Over and above this, he can reach a standard of self-awareness and self-confidence which is denied to those who still continue to depend on the guidance of instinct in living.

This is a remarkable statement and I can assure Dr. Carrel that unless his superman has a conscious knowledge of the procedures which activate the integrating and reconditioning processes involved in bringing about that relationship in the working parts of the organism which constitutes the employment of the primary control, he will not have the fundamental knowledge for effectively directing "the construction of the human being and of civilisation based upon his true nature". Only when human beings acquire this knowledge can we expect the coming, not of one superman, but a large proportion of men and women changed to the conception of unity in the living organism and the philosophy of truth, who would refuse to support any plan whose deductions were made from incomplete premises. Neither would they support methods based on specialization and differentiation that prevented them from changing the organism in the process of reconditioning from a disintegrated to an integrated whole.

CHAPTER 8

AN OSTEOPATH'S IDEA OF A NEW TECHNIQUE

In this chapter Alexander gives quotes from an article by Mr. Paul Van B. Allen which was published in the Journal of the American Osteopathic Association of Chicago. The article was entitled "Re-education in Technique", and in it Allen gives his idea of how an osteopath could incorporate Alexander Technique into his daily work of manipulating bodies to rectify lesions. Alexander points out the many misconceptions which Allen has about the technique, being the usual ones that people have when trying to apply it without the aid of a competent teacher. Alexander makes comment as follows.

Danny McGowan

Re-education should be carried out before the start of training in osteopathy and their osteopathic work should start only when they reach a point where they can maintain a constantly improving use of themselves while putting their technique into practice, or indeed during any other activity. For example, a singer or actor who has been taught deep breathing or some other "breathing exercises" as a preliminary to singing or acting, regardless of the effect the exercises will have on the manner of use of either the breathing or vocal mechanisms.

The artist trained in this way goes on stage with a definite specific idea of "how to breathe" while singing or acting. The bad results of this method make it impossible for the singer or actor to maintain his highest standard of functioning as an artist. The idea underlying such methods of training arises from a belief that it is possible to give specific help to separate parts of the organism, as if the breathing mechanisms functioned separately and apart from the vocal mechanisms or the general use of oneself; and what is more to the point, as if the use and functioning of these mechanisms could be separated from the use and functioning of the organism as a whole. In fact, they are as closely associated and dependent upon one another as are the parts of our mental and physical make-up. The person who learns to use himself properly through the correct employment of the primary control will breathe to the best possible advantage in singing or speaking, as well as in all the other activities of life, including osteopathy".

I have a keen appreciation of Mr. Allen's attempts to help his colleagues, and reluctantly I am forced, in justice to my work, to try to correct the impression of my practice and theory conveyed to his colleagues in his article. Above all, I would impress on them that in trying out new procedures, they have to depend on the guidance of their sensory appreciation which Mr. Allen points out is defective, and it is through this defective guidance that they have been led into errors in use of themselves.

People like Mr. Allen must face the fact that the very essence of change demands coming into contact with the unknown, and therefore past experiences - the known - will only impede them. Unless those who wish to change their habitual reactions in use of themselves can obtain from experienced teachers - or from such long study as I gave - the "means" of gaining the new sensory experiences needed to change, they will not solve the problem inherent in the process of substituting conscious for instinctive control of human reaction.

CHAPTER 9

THE TEST OF PRINCIPLE IN NEW WAYS FOR OLD

People who draw up new plans of action to supersede those followed in the past, but no longer work, should be careful to include in their preliminary survey, the experiences that happened to them while following the old plan. They should also take special note of the principle on which the old plan was based, which accounted for this experience. This is a test of principle. If the new plan is found to be based on the same principle as the old one, it should be discarded. If the new plan is found to be different then it should be put to the test. When applied generally, this test of principle is a dependable means of determining the value of any new plan for reform, in education, social sciences etc. and if its formulators fail to apply this test of principle they will be devoid of a due sense of responsibility to those they wish to help, as well as being untrue to themselves

Even if they succeed in their advocacy of a new plan on the same principle as the old one, they will be putting back the clock of civilisation while it is being tried out, thus increasing the difficulties in the future for these who are not satisfied with such trial-and-error attempts to solve their problems.

Too many people develop a mania for assuming the role of one to "show the way", without first gaining the knowledge and experience needed to do this. Too many people want to teach others what they are not prepared to learn themselves, increasing numbers of the blind leading the blind. To teach or lead others is too often an end to be gained, not a "means" to an end which their experience and training has justified them in trying to achieve. It is doubtful whether it has ever occurred to such people to work to principle in anything they teach or wish to reform.

For instance, if we study the technique of those who claim to change conditions in others and are working for the progress of the individual and the masses we shall find that no fundamental provision has been made for bringing people into contact with the unfamiliar, the unknown. But progress depends on making this contact in both practice and theory. If we do not continue to gain new experiences, or if the conditions in our organism this year are still there next year, then we have not progressed or furthered our growth and development. Unfortunately, in most of us, the impediment that blocks the way for our acceptance of facts which do not fit our own beliefs and theories is a deeply rooted subconscious reaction, making us cling blindly to the orthodox and familiar. This is due to habits of thought which orthodox education does little to correct, and much to encourage. Mention something to people they have not heard before and the reaction will be one of doubt and too often a sudden emotional reaction revealing unreasonable resistance and prejudice. This would not be so if we really stood for progress, development, and truth, because the unknown would stimulate interest. The unorthodox would be welcomed and investigated with the same sense of responsibility as is aroused by any great opportunity for service, for opportunity is a great thing.

My technique allows one to gain new experience by reasoning from known to unknown areas in changing one's use. Habitual, harmful use is changed to beneficial use. This calls for discarding cherished beliefs and giving up familiar ways to learn unfamiliar ways of doing things in the process of making changes in habitual use of the self. We must gain these new experiences in order to understand the significance in the working of a constant - use - which influences, for good or ill, the general psycho-physical functioning of the individual. The acceptance of the need for new "means" of "doing", and the inhibition of familiar ways call for thinking along unfamiliar lines and for a wide range of human experiences indispensable to man's growth and development.

But except in rare instances, man has chosen to think along familiar lines, and his enthusiasm for end-gaining methods has always been in striking contrast to his reluctance to undertake the difficult task of providing the best means of carrying out consistently the decisions necessary to the success of the plan of civilisation. In any situation demanding a reasoned decision as to the best line of action to adopt, he has the habit of reacting according to his unreasoned fears, rather than with any balanced appreciation of his fundamental needs and requirements.

The plan of putting forward ideas, good thoughts and the like has persisted from early times, but its lack of success is shown by the terrible state of world affairs today. This state is the result of man's reactions and attempts to carry out decisions on the trial-and-error plan in the myriad fields of his activities.

I have tried in my teaching to explain the errors involved in this habitual reaction and although I have worked on a great variety of people, I have failed to discover any difference in their ability to carry out a decision demanding an unfamiliar way of reacting to a stimulus to use themselves. This ability develops during the lessons as the habitual reaction is inhibited, while experience is gained in reconditioning the requisite reflex activity for new reactions.

The projection of messages necessary to the carrying out of new procedures is inseparable from previously unknown sensory experiences of use and functioning, and excites unduly the fear reflexes in all people faced with difficulties.

In this and other books, I offer a psycho-physical approach to the problem of translating ideals, theories and beliefs into practice and have shown that this calls for fundamental change in the use of the self in which psycho-physical defects such as fear or any other emotional reactions are overcome. This means psycho-physical reconditioning which cannot be effected by ideals alone, any more than man can live by bread alone.

Emotional appeal is always more or less dangerous because, no matter what it's immediate specific result may be, experience has shown that this result cannot be permanent and that judgment of results by feeling can be deceptive. It also encourages people to rely on instinct and less on thinking and reasoning. This method causes us to react as creatures of impulse and to become ever less capable of developing fundamental control and understanding of oneself and others in this world of crises. Throughout the ages rousing of mass emotion has been the means of inducing people to do what would never occur to them under the guidance of thinking and reasoning.

Until something is done to help mankind beyond this point, it is difficult to see how we can expect any improvement in mass reaction to any powerful emotional stimulus. At present man is at the mercy of any individual who knows how to play on people's emotions. In recent years we have seen some terrible results gained in this way, and used in an attempt to destroy all that is best in men and women. People have been robbed of their most priceless heritage - freedom of thought and action - despite all the suffering and bloodshed by which these sacred rights have been won. Too many individuals prominent in world affairs are "creatures of impulse", and it is in countries where the masses are influenced by impulse rather than reasoning, or have chosen the "easy way" of allowing others to think for them, that these individuals are able to demoralize and rob people of all that makes life worth living, and force upon them a way of life which is nothing more than a degrading and devastating form of slavery.

We urgently need to change thought and action and accept new ideas involving unorthodox beliefs and attitudes, but this urgency does not lessen the difficulties to be overcome. This problem has not yet been understood, let alone solved, in the fundamental sense. Many people will contend that they can change their thought and habitual action, but they are similar to the person who goes to a revival meeting and is "saved", renounces his past beliefs and gives up his bad habits. In certain countries, people are forced by a ruthless armed minority to live under debasing conditions imposed on them by brute force and murder. It is because changes in the past have not been fundamental in meeting man's needs that conditions in human beings are as we find them today. Changes in the individual and in the masses have been made too often by brutal methods of suppression, especially of those ideas and beliefs for which men and women have fought and died for in the past, and which today are still the mainspring of their longing for freedom of thought and action.

CHAPTER 10

A NEW PATTERN AND WORKING TO PRINCIPLE

Few people will deny that the affairs of the world today are "out of shape" and that the pattern of the parts which make up the whole in the scheme of civilisation is a bad one. Yet it is demanded by the "powers-that-be" that any new pattern, no matter how valuable, must fit into the old pattern if it is to receive even the smallest consideration.

In these pages a new pattern is offered to enable man to deal with the new, unfamiliar situations that now confront him. This pattern provides the means of changing and controlling his reactions in face of the difficulties which are inevitable in attempts to pass from the known (wrong) to the unknown (right) experiences essential for the making of fundamental change.

This new pattern is designed for the youth and the adult, but cannot be fitted into any present pattern, orthodox or unorthodox, and the pattern it is to replace must be discarded. For young children the adoption of this new pattern is an easy matter. It takes shape and form through the application of the "means" of the technique and it meets the primary need in education of the child by providing not only new situations, but also the opportunity of developing the potentialities of the child to help him gain the experience of dealing with the unfamiliar and the unknown as the adult adventurer does.

For the adult and the child who adopts this new pattern the "means" of change will be the same in gaining new experiences or preventing the development of some functional trouble by learning how not to interfere with the primary control which restores satisfactory use and functioning.

The child's interest is gradually quickened by explanation and demonstration on simple lines, and increases when he realises that not giving consent to the gaining of an end prevents wrong use of himself. He is taught to recognise that wrong use is habitually impeding him in school activities and stopping it makes possible the employment of new "means" of gaining his end by an improving use of himself. Interest increases even more when he realises that he does not require to give consent to other acts outside of school, and can refuse to "do" some act that he does not wish to do.

When an adult decides to benefit from the technique, this decision implies a full recognition of responsibility for care of the self in the sense indicated in these chapters. "To thine own self be true and thou canst not then be false to any man". Being true to the self in this fundamental sense alone makes possible the end Shakespeare indicates. This responsibility has never before been accepted by man, because it is left unthinkingly to the "curative" agency of Nature, with all the consequences which are now causing distress, pain, discontent and disorder within and without man's organism. Being true to oneself in the sense advocated here presupposes being true to others and if this had once been established, not merely as an ideal, but as a habitual reaction for several generations, the resultant sense of responsibility might lead to a consideration of and the well-being of others, such as has never yet, except in isolated cases, resulted from educational, religious or other means for cultivation of desirable human qualities.

In therapeutics the effect would also be fundamental, because being true to the self implies an acceptance of individual responsibility for that manner of use which would preserve the highest standard of functional well-being, which is the natural antidote to all defects, disease and organic troubles.

But the stumbling block in the way of those who wish to help others are the habits of thought, preconceived ideas, inherited beliefs and prejudices, which have formed in most people who are dominated by orthodox methods of training and education. This causes many people whose reactions are unreasonable in familiar situations to react, when faced with the unfamiliar, as if they were suddenly bereft of their ordinary judgment, common sense, self-control, sense of justice and reasoning.

Galileo was persecuted for confronting his fellow-men with a new belief eventually recognised as a great truth. One only needs to read of the treatment given by orthodox thinkers to the discoverers of other epoch-making truths - such men as Jenner, Semmelweiss, Pasteur, Lister, Simpson, Hunter etc. - to appreciate the importance of educating the child, youth, and adult to react to the unfamiliar with a spirit of inquiry, tolerance and sympathy, rather than hostility. In this way they can employ all possible means for finding out whether or not another valuable discovery has come to light.

In evolving my technique, I was continually led into unknown experiences and in using the new "means", found myself in unfamiliar situations where I experienced impeding and illuminating adventures in dark places. As a medical friend said - "Your book, "The Use of the Self" is just about the most interesting I have ever read. It beats the usual explorer's yarn, because you wandered through a much darker country than any of them did". This was also appreciated by John Rowntree who said that my technique was "reasoning from the known to the unknown, the known being the wrong and the unknown being the right".

This experience of passing from a "known" to an "unknown" use of the self is a fundamental need in the control of man's reaction and he will remain powerless to meet it, unless he accepts an unfamiliar theory and begins to acquire the experience of consistently employing the unfamiliar procedures which are its practical counterpart. This can be done through an integrating process of reconditioning associated with experiences of use and functioning previously unknown. In time the new experience becomes established as a constant in the use of the self in daily activity. This explains why the professional sportsperson who has not experienced conscious guidance and control sometimes plays like a second-class amateur, through varying degrees of interference with the primary control. This is not surprising, because experts in games, arts and crafts etc., are unaware of the primary control of use, and do not realise that by cultivating undesirable habits in their trial-and-error efforts, they are lessening their chances of success.

In attempts to counter these harmful habits people instinctively react in their desire to be successful in the same way as they usually do. This too often results in comparative failure which causes emotional stress and undue anxiety. A degree of composure and confidence is essential to success in unfamiliar situations, and particularly in those which allow us only one opportunity of success, as in games and examinations.

Consider the different effect upon the self of a plan which makes for a maximum of successes instead of a maximum of failures. The first is a builder of confidence, satisfaction, happiness and conscious control of the self, while the second places us more and more at the mercy of the vagaries of emotion and habit, and undermines our confidence, making us irritated and discontented. The time has come for realising that by means of conscious control we can ensure the best possible use of ourselves at all times and in all circumstances, and our psychophysical self can be energized to the best advantage, no matter what our activities may be.

In this way "trying to do our best" becomes a practical reality instead of a pious hope. It means putting the psycho-physical machinery of the self in order on the lines of a scientific engineer who overhauls his engine, so that the particular individual machinery shall be constantly capable of optimum functioning

Learning to "do" by this procedure is not learning to "do" exercises on a trial-and-error plan, but learning to work to a principle, not only in using the self, but in the application of the technique outside the self. A person who learns to work to a principle in doing one exercise will have learned to do all exercises, but the person who learns just to "do an exercise" will have to go on learning to "do exercises" ad infinitum.

CHAPTER 11

STUPIDITY IN LIVING

"It is an irony that man so skilled in learning, should be so stupid in living".

Herbert Morrison

Morrison might also have referred to the irony that man is so skilled in the nature and working of the machines he has invented, but so unskilled in the nature and working of the mechanisms of his own organism. He knows how to keep the inanimate machine in order, but little or nothing about the means whereby of that animate machine - himself.

The great majority of people are so "stupid in living" they have not yet awakened to the great and growing need of such "means" essential to the act of living healthily, happily and in harmony with one another.

Even among people who accept the idea of "wholeness", few are sufficiently skilled in the art of living to put the idea into practice and their failures can be ascribed to the fact that knowledge of the use of themselves - as it affects the guidance and control of reaction - is not part of the foundation on which civilisation has been built: nor is this knowledge part of the equipment of those who undertake to teach and rule humanity. In my own case, the experiences that preceded my attempt to work out a technique - as well as those gained in the process of working it out - led to a gradual realisation that man's most tragic mistake has been his failure to acquire knowledge of himself as an individual functioning as a psycho-physical whole in daily activities. It is useless to urge people to live the full life without the "means" to wholeness in the motivation and activation of the human self.

So man has been content to acquire knowledge concerning activities outside himself, never appreciating that accurate and full knowledge and control of the integrated working of his own self was essential to success in making use of the other knowledge on which he had relied for carrying on activities in the outside world. Neither did he appreciate that knowledge of himself was necessary to prevent him from gradually becoming more and more malco-ordinated and maladjusted.

Had he given due attention to himself, he would have gained experience and guidance and control of his mechanism in activity, which would have led him to appreciate the unity in the working of his organism in use and functioning. Had he also brought the results of these studies to the study of the wonders of the universe, postulated unity as a working principle - instead of separation - he would have inevitably studied everything as a whole and not piecemeal.

The opposite has been done until now, both in the science of humankind and the world outside and many people are beginning to wonder whether - if there is a creative principle - it had any other purpose than destruction. Recently, however, a minority have come to see further than their peers, but are still tied down to orthodox methods of procedure in attempts to gain new ends in their new theories, because they do not have the "means" of putting into practice the principle of unity in carrying out educational procedures. Recognition is widespread that something is wrong with a system that sets youth adrift in a chaotic, confusing world. This is due to lack of knowledge of the self and of the guidance and control of that self in daily activity.

The tragedy of modern youth is strikingly typified in an article, - "On the Record" by Dorothy Thompson, New York Herald Tribune, 4 Oct., 1940.

She tells of the case histories of 4 young men who graduated with high scholastic honours, but the effect of their education on their lives was very distressing. Their stories comprise a serious indictment of American education, so pertinent to the whole theme of this book, that I feel justified in quoting at length from this article: -

"For they testified that what their education had done had been to break down their belief in any positive values, to weaken their faith in their country, its history, traditions and future; to put them, themselves into intellectual and psychological confusion and into inner despair out of which they had sought refuge in various ways at various times: one through casting his lot temporarily with the Young Communists, because 'they alone seemed to be perfectly clear in their minds where they were going'; another, and for a period, into complete scepticism and cynicism; another into 'the only thing that seemed solid - my own egotism and self-interest.'

One of them had come near to a nervous breakdown. He had gone home to be pampered, on the grounds that he had 'been working too hard'. His solicitous family had sent him to a psychiatrist. 'Then one day I had it out with myself and I knew that, unless I pulled myself together, I should be in the hands of a psychiatrist forever. Somehow I managed to tell myself the truth: that I had not been overworking, but underworking and the truth was I didn't have any guts'.

This was the same boy who said, 'When I went college I was full of enthusiasm, particularly interested in history and philosophy. I wanted to find out what made the wheels go round in this world. I wanted to prepare myself to do something - not just make money - not just be a 'success', but achieve something bigger than I am - I wanted to be a part of something. But by my junior year, I had become convinced that there wasn't anything that could be believed. Everything was relative. And I was swimming around in space.'

Another of the boys - the most articulate and thoughtful one - took it up. 'We were told to maintain the critical attitude. We were soaked in historical relativism. I tried to maintain a 'healthy scepticism'. The trouble was that I observed in reading history, that the people who moved this world were animated by a passion for something. I could see that you couldn't write off faith as one of the prime movers of history and when there wasn't any faith pure gangsterism and piracy broke loose. I could see that if I and my generation were going to mean anything in this world and not just be dots and specks pushed around by forces we couldn't control, we had to find out what our convictions were. But meanwhile I had lost my moorings' ". (End of Thompson's article)

In view of all I have written on the unity in working of the human organism and the influence of use on functioning, it should be clear where the educational system had failed to equip these 4 young men for success in living. In spite of high scholastic achievements and high degree of intelligence, as well as their fine physical type, it is tragically clear that they were not in a condition of well- being and their general psycho-physical functioning was seriously lowered. Although unaware of it, they had become victims of a constant influence for ill which adversely affected their reactions to their education and activities of life.

I have always found in people with "nervous breakdown" and other mental disorders sent to me by doctors, harmful use and functioning associated with "intellectual, psychological and physical 'confusion'", leading ultimately to reactions that are concomitants of "inner despair". In the situation of such "emotionally and spiritually unemployed youth" where they recognise they have "lost their moorings", through the breakdown of "positive values" in academic studies, they remain unaware of a fundamental breakdown in the working of the self, as manifested in use and functioning of mechanisms, organs and processes of thinking and reasoning. Knowledge of the integrated working of the organism in use and functioning, which alone establishes and maintains well-being, has not been an integral part of the educative process and has had no part in their preparation for life. These youths have been deprived of the study that could have led to belief in the one "positive value" their academic education could not have broken down, namely, knowledge of the working of the self in its application to living. While acquiring a variety of external knowledge, the influence of harmful use was a constant, lowering the standard of general functioning of the instrument of learning, as well as that of their judgment of "positive values".

Without this knowledge, they were bound from the outset of their education to "lose their moorings". Small wonder then that they developed mental and nervous disorders.

There is an epilogue Miss Thompson calls a "happy ending", concerning the vastly important subject of fundamental change:-

"This story has a happy ending. These young men came into contact with a remarkable teacher who bucked them up and told them they had power and beauty. He opened their eyes to the real world; taught them about the survival values of history; brought to them some intellectual convictions regarding character and thus saved their souls. Their immediate response indicated that this generation is not lost. I concluded it would not take a great deal to undo much of the harm done. But it would take a new orientation in education - and there one is up against the system".

One is indeed up against the system, up against those habitual reactions to stimuli that enslave human beings. Fundamental change involves re-education and re-adjustment of the individual as a whole. A mere change of "mind" or belief does not change the habitual manner of psycho-physical use and functioning. I respect the professor's good intentions, but must ask a few questions. Firstly, in what way do the means he employed embody a "new orientation" in outlook and education? Secondly, in what way does his method differ from those by "remarkable teachers"? Thirdly, if such methods were any more than palliative, why such widespread intellectual and psychological confusion? There has been no dearth of good advice and wise precept. Most of us know what we ought to do - ends - but lack knowledge of how to do means whereby - and are unaware of the dangers of palliative methods that attempt to inspire enthusiasm and belief in ideals which, however admirable in theory, are not based on knowledge of the self as the instrument of the "doing" required for putting them into practice.

The professor failed to consider the influence of use on functioning in "bucking up" these young men and this shows the inadequacy of the educational system itself. Thompson adds unintentionally to her indictment of it: -

"It was out of just such a generation of emotionally and spiritually unemployed youth - left utterly rudderless - that Hitler made the leadership of a movement that plunged a large part of the Earth into destruction. 15 years ago in Germany I saw how easy it was for him - appealing to their confused unconscious longing for a faith - to sweep them with him merely by affirming the barbaric standard of blood and soil. Our colleges are full of youths who think that Hitler or Stalin are great men. Why should they not, when they have no measuring rod by which to test greatness?"

There is no evidence that the young men who came under the influence of the inspiring teacher - any more than those under Hitler - were given any means by which they could evaluate the ideas, convictions, standards etc. presented to them, and therefore, in making judgment, they were forced to rely on unstable emotions and untrustworthy feeling characteristic of their habitual reaction which had blocked off their reasoning.

Thompson writes further: - "Out of this youth should come the intellectual, spiritual and political leadership of tomorrow......But if the intellectually gifted and the relatively privileged are rendered impotent of leadership by their education, then the power will pass to powerful, uneducated persons, who have at least the realistic education of the shops and gutters, the discipline of factories and farms, who have learned that you can't debate with hurricanes or hunger, or with tanks, guns or machines".

A disturbing analysis indeed! And it is because of my awareness of the tendencies which result from the educational system that I have for so long advocated a new orientation in education. My work is in the wide sense educational, but cannot be labelled a "system", for that implies something limited, complete, calling for the employment of direct means in the gaining of ends; whereas in my technique the procedures are carried out by indirect means that lead the pupil from the known - wrong - to the unknown - right - in experience, the first imperative in the employment of these procedures being to provide for the child, adolescent or adult the "means" by which to judge and direct his own psycho-physical mechanism in the activities of life and then using this standard to judge the value of ideals and suggestions put to him in experience. Individuals who are aware of their own psycho-physical tendencies towards unduly depressed or excited emotional reactions, together with that of the means whereby they can hold them in check cannot easily be influenced by others to the extent of becoming mere puppets.

Working with these principles brings one up against the system of both orthodox and unorthodox education. But the individual so re-educated can be developed to the point where he will be able without confusion to inhibit his tendency to be carried away by his desire to gain his end, before he has set in motion conscious impulses in the laying-down of new lines of communication in the use of the self. Even at moments of great stress, he will learn how to "think in activity". This new knowledge of himself will give the modern youth a firm basis for gathering other knowledge and putting it into practice. This will also enable him to make those endless adjustments to his environment which life in civilisation demands of its members if they are to survive.

A typical example of the effort being made by educators to adapt the system to a changing world is seen in a pamphlet by DR. W.H Kilpatrick of Columbia University. He begins with the nature of behaviour and finishes with the theoretical objective - Education of The Whole Child. But his discussion does not advance beyond the academic stage.

Dr. Kilpatrick advances the concept of "the whole organism in each learning act" and uses such phrases as, "Integration of the Self", "Conscious Direction", "Conscious Action" and "Re-making of the Self", and says that "the term 'self' is a very convenient one with which to treat certain manifestations of behaviour". In my book "The Use of the Self", 1932, I made a statement of technique using such terms as those above. This technique was based on the principle of unity in the working of the psycho-physical organism and provided the practice that makes possible the "conscious direction" without which there can be no "re-making of the self" and therefore, no sound education.

Yet here is Dr Kilpatrick in 1935 advocating similar concepts applied to the educative process, but without going beyond mere theory.

It is doubtful if Dr. Kilpatrick fully understands the practice required to support the concepts he advocates. Let's examine a passage from the pamphlet: -

"Where the organism faces a novel situation, old responses are inadequate and a new one needed. If fortunate, the organism will contrive a new response to cope with the novel difficulty. Such a contriving we call 'learning'. A dog is upset at being shut up in an enclosure. He contrives a way out. Therefore, he uses his new-found exit - or more correctly his newly contrived response. He has 'learned' how to meet the situation".

I join issue with the doctor when he contends that it is a "new" response from the dog's organism when he contrives a way out. Animals are the victims of habitual response. This is why the hunter arranges novel situations for the animal he is trying to capture, because he knows it will respond as usual, will become confused and, therefore, easier to catch. Whenever a dog is enclosed it will repeat its habitual tactics - response - of smelling, pressing etc. on a trial-and-error plan to find a weak spot it can squeeze through to gain its freedom - end. The habitual motivation will be repeated as a primary response to its need to contrive a way out. How then can its primary response to a novel situation be a new one, when it is responding as it always does - instinctively? One of the most striking examples of the persistence of habit is that of the tame bird in a situation where there is no danger which, after picking up each seed, looks around instinctively to ensure self-preservation.

Regarding the reconstruction of the education process, Dr Kilpatrick is advocating the trial-and -error method while also stressing the importance of "conscious direction" and "conscious action". There is a lack of concrete knowledge to support his plea for "re-making the self" and nowhere in the pamphlet is there any mention of that use and functioning of the self which determines the nature of "each new way of behaviour" and ensures "desirable structure building" through the "re-making of the self" in living by gradual change and improvement in manner of use of the self. His illustration shows he is only interested in the dog's behaviour in gaining its end in "contriving a way out", not in the use it makes of itself as the instrument in gaining it.

And this is exactly what is wrong with the educational system when it is considered that a child has made a good response when it gains the end set for it by the teacher, although it can be demonstrated that the primary response in motivation of the child's mechanisms, which leads

to a certain manner of use of himself in the gaining of the end, is having a constantly harmful influence on the general functioning of the organism. Dr. Kilpatrick does not take into consideration this habitual, harmful influence of a bad manner of use and is allowing his pupils to remain its victims. It will continue gradually to undermine their psycho-physical energy and potential development in using their thinking and reasoning processes in learning and learning to do, as well as all other responses to the stimuli of living.

Unless children are given knowledge of the use of the self which includes the means whereby - means appropriate - they are enabled to inhibit habitual reaction to the stimuli of daily living, it will not be possible to make the change in educational procedure that is Dr. Kilpatrick's objective.

In view of this, I quote John Dewey from my book, "The Use of the Self", 1932: -

"The technique of Mr. Alexander gives to the educator a standard of psycho-physical health - in which what we call morality is included. It supplies also the means-whereby this standard may be progressively and endlessly achieved, becoming a conscious possession of the one educated. It provides, therefore, the conditions for the central direction of all special educational processes. It bears the same relation to education that education itself bears to all other human activities".

CHAPTER 12

KNOWING HOW TO STOP

The combined efforts of man in many parts of the world have produced the atomic bomb. As a human achievement it is hailed with applause and as a means of destruction viewed with horror. Its advent will force mankind to cry a HALT in many directions - a UNIVERSAL HALT so that change can be made in human reactions and relations, based as they are on an unbalanced way of living, which is becoming more so with increasing rapidity.

Humankind is now faced with new, unexpected and tremendous problems. An allimportant one is the problem of human relations, whose solution calls for knowledge of the means of changing human reactions. Throughout his long career, man has been content to acquire control of nature in the outside world, without acquiring its essential accomplishment, the knowledge of how to control nature within himself, that is, how to control his own reactions to the outside world. Up to now, he has been so engrossed in acquiring what he considered necessary to his needs in inanimate things, that he has failed to think of the means of changing and controlling his animate self. Consequently, as time goes on, his achievements in the control of nature have been discounted by disintegration in his psycho-physical organism, so that he continually makes mistakes in judgment of relative values, and fails in his relations with his fellow men. Meanwhile he is less and less able to change and control his reactions even in using means that he approves and tries his best to put into practice. The urgency of exploring this is obvious, on account of this one-sided development which has led to the creation of this Frankenstein monster, the atomic bomb. Man has not developed enough control of himself to keep control of this monster. He cannot trust himself or his fellow men with the knowledge which led to its discovery. This is a frank admission of the present unsatisfactory nature of man's reaction in general, which could be a "blessing in disguise" if he realises he must change and improve if he is to escape the harmful effects of his past attempts to meet adequately the demands of a constantly changing world, changes which keep accelerating. Such a change in human reaction is essential if mankind is not to remain saddled with frustrating, static and obsolete beliefs, ideas, conceptions and relative values which are useless. The past few years have completely altered the foundations of our previous ways of life, and it is a prime necessity to re-examine the pedigree of all such ideas, conceptions and beliefs.

To succeed in this, we shall be forced to come to a FULL STOP. This will be a most difficult and valuable task because man has gradually been losing a reliable standard of control of reaction, and the ability to take the long view. This is not surprising in view of our craze for speed in all fields of activity and our habit of taking the short view. We are possessed by the non-stop attitude and outlook and are confirmed end-gainers, with no respect for the "means" of achieving our ends.

These habits of reaction which hold man in slavery are the inevitable accompaniments of out-of-date beliefs and judgments. He finds it difficult to take the long view which is inseparable from the ability to STOP when faced with the need of changing habits of thought and action. Man may be an advocate of freedom of thought and action, but he is unable to put into practice that greatest of all attainments - freedom in thought and action. He must first gain knowledge of the "means" of commanding the best use and functioning of himself in activity which is essential for changing and controlling reaction in the basic sense. This demands KNOWING HOW TO - prevention, inhibition - when dominated by impulsive uncontrolled reaction. STOP technique here described can help those who wish to change and improve control of reaction. The first step is an inhibitory one - preventive - that is, refusing to give consent to habitual, subconscious reaction. It is the basic beginning of the means of changing and controlling The next step is a volitionary one, that of consenting to succeeding procedures reaction. through continuous conscious direction in new, unfamiliar experiences, while still refusing to consent to the habitual reaction - first procedure.

By these means, which can be proved by operational verification, we can, in process, bridge the gulf that for too long has separated subconsciousness and consciousness in the control of reaction. Full understanding of the need of these means could change and improve the basic nature of man's impulsive and instinctive reactions which have developed hand in hand with static beliefs and outlook. On every hand we are faced with the impeding effects of "emotional gusts" associated with those failings of prejudice, jealousy, greed, envy, hatred and so on. These are the outcome of reactions which ruin man's chances of establishing such relations in national and international affairs which could lead to a better understanding of what is essential to the spreading of goodwill and peace in a world in which changing conditions and new discoveries make new and ever-increasing demands for increasing change in, and control of, human reaction.

IN CONCLUSION

In this unparalleled crisis, characterized by almost unthinkable human manifestations, there is evidence of a burning desire in a great majority of people to blame someone else or some government. I have failed to meet or hear of a person who realises that he should take his share of the blame.

The desire in man to blame someone else is in line with his innate resistance to selfaccusation, as shown in his habit of attributing personal ills to Nature or some other cause, when he is not prepared to shoulder the responsibility.

If we face the facts, every honest man and woman on this earth today must admit, that each and every one of us is more or less responsible for the crises of 1914 and 1939.

People have been concerned to bring this conflict to an end as soon as possible, but now I want if I can, to direct the thought of every person to a great problem to be solved if, now that the war is ended, history is not to be repeated. This solution is to be found, as is that of all fundamental problems, in the development of the potentialities of the individual by means which will improve the control of human reaction, and the speed of this improvement in control must keep pace with man's progress in the outside world.

Man has not complied with the basic demands in living and this could account in the wide view for his innate objection to taking responsibility wherever and whenever he can escape from it, and also for his many errors of judgment and lack of foresight.

The improvement and control of man's reaction and its influence on the matter of taking responsibility is the premise that needs first consideration in any survey of his experiences and of the "means" on which he has depended for progress in every field of activity. When this premise is examined in the light of man's reaction to the events leading up to this world conflict and those which have occurred since, how can we come to any conclusions but one? There must be a reorientation of our viewpoint on education, culture, religion, politics, medicine, science, industry and, last but not least, upon class and social relations and intercourse. Such reorientation as I envisage is not possible without that fundamental change in guidance and control of the self. This will demand a radical change in the methods of education of the young child right through to adolescence, and also in methods to be adopted in social, business and other activities in the outside world. Man must realise the need for accepting responsibility for all that has made for troubles and difficulties within himself, and the need of some means of ridding himself of these. If and when he accepts this responsibility, the experiences will be the best possible preparation for the acceptance of responsibility which includes being true to himself, and equally so to his fellow man.

In the prevailing conditions of today, people are being driven to a revaluation of the "means" of all that has made up the way of life called democracy, because most people feel it is the "means" that are at fault, not the democratic way of life.

If those who are not prejudiced by past beliefs and ideas can take the wide view, they will find that man's educational plan for development of the individual self has been a meagre one compared with his plan for development outside himself. The knowledge he has of the world outside himself - being out of all proportion to his meagre knowledge of his inner self - has become a Frankenstein monster in that it has led him to bring about the very conditions which are menacing his democratic way of thought and action, but he failed to understand that in order to realise this ideal, he would need to develop to the full, his potential for thinking in activity in the general use and functioning of the self. This is essential not only for individual thought and action which gives, in process, control of individual and therefore collective reaction in the way of life essential to putting into practice the theory of democracy.

My teaching experience has shown me that a person who accepts the idea of freedom of thought and action and consistently advocates it in daily life is not more capable of commanding freedom in thought and action when trying to keep to a well-considered decision to employ procedures which demand, for their successful carrying out, a use of the self which is not his habitual reaction in thought and action.

APPENDIX A

Extract from the Presidential Address, SOME ACCOMPLISHMENTS OF THE CHEMIST, by Thos. D. Hall, to members of the South African Chemical Institute.

"Nature has warned us throughout geological ages that one-sided or unbalanced development always ends in disaster. The world might be better off if the chemist, for some time to come, made no more new discoveries with which to further embarrass our economists and social workers.

The wizard workings of the chemist have changed life in all aspects and altered the habits of man, but not always for the better. There are indications that despite the achievements of medical science in saving life, particularly in its younger years, more diseases of the mind and body are developing in later life.

I have found a philosopher and teacher who has new precepts and teachings, and despite his wonderful original discoveries, also has more modesty than the chemist. Quietly and thoroughly he has pursued his studies scientifically for over 30 years and has proved his theories step by step. He has been studying man, not as dead bones, or physically only, or mentally only, but as a co-ordinated, psycho-physical living being, and has come to the conclusion that man has developed so fast mentally and changed his material environment so rapidly that his instinctive or subconscious control is no more reliable in guiding him in the correct use of his body. So quite unbeknown to himself, man is using his body wrongly, even in the simplest aspects of life, and doing himself untold functional harm.

Alexander thinks there is little hope of the world improving its condition until these fundamental wrongs are appreciated and corrected. When around council tables of nations sit men with slumped and shortened spines, contracted thoracic regions, crowded vitals, unhealthy paunches, poor circulation and breathing wrongly, monuments to instinctive, incorrect use of their bodies and of which they are blissfully unaware, how can the world hope for any solutions of its problems from such sources?

He further explains that the present physical exercise revival, which is an acknowledgement that something is seriously wrong with man, will not help matters, because it is a case of the blind leading the blind, and that while these exercises will correct some physical faults, they will accentuate others.

Some of you will no doubt be thinking, 'What has all this to do with the chemist?' We have seen enough, I hope, to realise that the wonderful achievements of the chemist are perhaps not all as beneficial to the human race as we should like to imagine. As I have nothing to offer you personally, I think it is only intellectually honest to tell you about that man I sincerely believe has the best remedy so far evolved.

Alexander believes that man's evolution will never be complete until conscious control of himself has replaced the instinctive or subconscious. He has given a new outlook and a new hope to the harassed human race. I truly believe that when his teachings are properly appreciated and put into effect for a generation or more, it will be realised that they have done more good even than the wonderful work of Pasteur, which had the advantage that it could be applied impersonally and in the mass, whereas this system is most personal, and will thus take longer to produce visible effects on a national scale.

That Alexander will one day be among the immortals, along with Pasteur, I do not doubt. When the human race has achieved this proper conscious control of itself and is able to adapt itself advantageously to the rapid changes brought about by chemistry and other sciences, in its environment, then the future discoveries of the chemist will be a blessing, but in the present state of the world there are many who think they are a blight." (End of Extract)

APPENDIX B

Excerpts from "The Function of the Sub-occipital Muscles: The Key to Posture, Use and Functioning" by A. Murdoch. Paper read to the B.M.A, 5 May, 1936.

"When I was elected president of the Sussex branch of the B.M.A, I received a letter from the Editor of the Journal of Massage and Medical Gymnastics to write a paper on Posture, with special reference to Alexander's Theory.

I examined the dissection of the Sub-Occipital region in the Edinburgh Stereoscopic Atlas of Anatomy, as well as the one in the Royal College of Surgeons' Museum. With the idea dominant in my mind of the head being a weighty mass, poised on the summit of the vertebral column, the peculiar and distinctive arrangement of the muscles seen in the Sub-Occipital space seemed to be designed purposely for holding the head securely on the joint and for giving it the necessary movements in the delicate function of balancing. These muscles all arise from the first two vertebrae - Atlas and Axis - and their function would appear to be that of moving the head at the Atlanto-Occipital and Atlanto-Axial joints; they are the intrinsic muscles of these joints. The large neck muscles are outside this ring of muscles, their insertions being chiefly posterior to the Atlanto-Occipital joint, while their origins are so widespread as to enable them to function as head, neck and body muscles. They are not purely head muscles like the Sub-Occipital group. It is as if the head is poised on the tips of so many fingers, represented by the Sub-Occipital muscles which act as muscular ties between the head and the first two vertebrae.

I sought the opinion of Dr.Cave the Assistant Curator and he replied in a letter:-

'The skull and first two vertebrae are associated intimately on grounds of development, gross anatomy and function.......Both Atlas and Axis suffer the profoundest modifications in structure and development in consequence of their being handmaids of the Cranial Globe, as functionally they are through life. Special ligaments and specially differentiated muscles maintain this association and the upper Cervical Pole of the X-ray is simply a manifestation of this anatomic physiological entity - the Cervico-Cranium.'

Here then is an association of parts, the function of the combination of which has never been alluded to, or defined. Has this apparatus any special function? Does it contain a mechanism we can direct and use to control ourselves? Has it any relation to Alexander's theory of the Primary Control and his technique for re-educating it?"

Extract from Dr. B.K Wilson's, 'Modern Problems in Neurology':-

The apparatus for the auto-regulation of attitude must be in being if cortical excitations are to effect movements and acts. Winekler has the same idea when he says, 'that with each displacement of the head a given attitude of the whole body is determined and for each voluntary movement the body finds itself in such a position as to enable the appropriate contraction of the muscles to be attained at the moment of production of that voluntary movement.'

This is Alexander's theory in a nutshell, as this dominating influence of the head was discovered by him more than 30 years ago and he called it the "Primary Control", but "the apparatus" and its mechanism were unknown to him. By means of the Primary Control it is possible to condition all known reflexes concerned in the inter-relations between the vestibule and the nerve-muscle systems whenever a change of posture or a complex muscular movement is executed.

This co-ordinating apparatus - Vestibular apparatus - is situated in the substance of the Petrous portion of the Temporal bone and close to the Atlanto-Occipital joint, so that the slightest movement of the head would be communicated to the delicate media of the Vestibular apparatus through the action of the Sub-Occipital muscles. I suggest that although the movements at the Atlanto-Occipital joint are limited, they are enough for balancing and maintaining muscular co-ordinations, which are constantly changing - because of our constantly changing postures - and require movements that are as sensitive as the needles of a compass.

The Vestibular apparatus is situated in bone and not in the soft substance of the brain, to prevent it from being affected by any other stimulus than its own normal one from the delicate movements of the head at the Atlanto-Occipital joint: otherwise the delicacy of the movements of the fluid in the canals would be interfered with by the varying pressures from the varying conditions of the circulation in the brain.

I suggest that the Sub-Occipital group is the appropriate mechanism for moving the Cranial Globe - a passive agent requiring some muscular agency to move it for its special function. I also suggest that these muscles are the primary movers of the Cranial Globe and constitute the primary mechanism used in the control of ourselves.

The small movements at the Atlanto-Occipital joint are the all-important ones for maintaining a proper balance of the head, so allowing the co-ordinating and regulating apparatus - the labyrinth - to maintain proper and correct relationships between the head and the body. Such bringing of the whole of the muscular apparatus into correct co-ordination creates the correct conditions in our external body wall for the functioning of the vital organs and constitutes the Primary Control that Alexander has postulated and taken advantage of.

The control of this function of the Cranial Globe through the action of the Sub-Occipital muscles in the great majority of people has been lost - it never has been consciously learnt - and with it our power to maintain a proper poise and posture and from this loss came many of the disabilities from which man suffers.

It has been impossible to investigate the function of these Sub-Occipital muscles in the usual experimental manner, but Alexander, by a long series of experiments on himself, has been able to devise a technique to re-educate them and bring back their original function. Invariably this re-education is accompanied by the disappearance of maladjustments and their associated symptoms of disease.

To understand the importance of Alexander's discovery, together with the perfection and simplicity of his technique, one has to remember that in no text book on anatomy, physiology or physical culture is there any hint of using the Cranial Globe as the organ to play such an important part as the apparatus for rectifying defects of posture, or to connect such widely differing conditions as asthma, flatfoot or even neurasthenia, with the manner in which the head is poised in relation to the vertebral column.

In estimating the importance of Alexander's discovery of the Primary Control and his manner of directing it to restore better use and functioning, one should contrast it with the barren results - as regards the practical application to our daily needs - of the discovery of the Central Control by Magnus in experiments on animals. The difference is that Alexander's experiments were done on a human being - himself - with all his critical faculties alert, and with the object of finding out the cause of the recurring hoarseness and inflammatory conditions of his vocal organs, which medical treatment had failed to prevent and which threatened to ruin his career as an elocutionist.

On the other hand, Magnus's experiments were made on animals whose postural conditions were always normal and whose use of themselves would always be correct. They could not be made to use themselves wrongly for lengthy periods - as man has done - and so create bad postural conditions, with their accompanying disabilities, which might be investigated as to cause and effect as in Alexander's case." (End of Excerpts)

APPENDIX C

Excerpts from Reorientation of the View Point upon the Study of Anatomy by Mungo Douglas, M.B. (1937)

"Two important discoveries in the last 30 years have led to vantage points from which anatomy can be reviewed. Firstly, the late Rudolph Magnus of Utrecht revealed that the use of the head and neck in relation to the torso conditioned uses throughout the body.

Secondly, and more important than Magnus, F.M Alexander of London, studying living men and women in use, observed that although all human beings were provided with the same mechanism, divisible into anatomical elements, these elements, in use, showed a diversity of structure producing human edifices of bewildering variation. The observation was not of similars varying in magnitude, but of similars directed without law to utter dissimilarity.

Essentially he discovered that usages of groups of muscles lying in the neck, posterior to the spine were those that first must be inhibited before it was possible to permit all groups of muscles to perform movements of the parts about joints and maintain relations of parts to parts, with least friction.

Viewing anatomy in the light of these discoveries, it is seen that the function of muscles is twofold - namely, movement of parts about joints, and directive of part to part.

Basically it becomes essential that anatomy shall recognise that the relationing function of muscle is the primary function of muscle, and that movement of parts upon parts is secondary. Secondly, it must be recognised that the primary relation upon which all more ultimate relations depend is that established by a small group of muscles which comprise the atlas-occipital, axis-occipital, atlas-axis system.

The stupendous importance of the relationing function of muscles cannot be realised by the mere description of its existence. The failure to recognise the conception is charged with a heavy responsibility, since it means an approach to all living and human endeavour with an imperfectly formed knowledge of physiological means."

APPENDIX D

Excerpts from an Address by J. Hilton, Professor of Industrial Relations, Cambridge University, England, at a conference of the Institute of Labour Management, 1936.

SMOOTH RHYTHMS OR SHOCKS.

"Now a word on the physique of the worker of the new generation. The children now coming forward are better cared for, better fed, better housed, better looked after medically than preceding generations. In that respect you will have more promising material. But in another respect they will be more difficult, more fragile, more highly strung and their nerves still more on edge. You had better be aware of that.

Why should it be so? Because of the stress in our lives these days and, more than anything else, because of the extent to which we use - or are used by - racing, throbbing, vibrating machinery.

Has it ever occurred to you that through hundreds of thousands of years, man knew no vibration more rapid or sustained than the jolt of a wheel on the rough road, or the whisper of a taut sail, or the murmur of a scudding hull - no more than that, until as lately as a hundred years ago? The physical frame of man is matched to smooth rhythms. In this last infinitesimal phase of our development, we have subjected that frame to sustained shocks and vibrations of the most intense kind. Do you wonder that our nerves go wrong, that our controls get out of order? And not only vibrations, but also speeds. Have you ever thought that our physical and nervous systems have developed through hundreds of thousands of years, attuned not only to gentle rhythms, but to smooth movements at low speeds, quickened only in moments of stress and danger?

In the last hundred years the power-driven machine has arrived. Almost without our knowing it, the machine has been setting a new pace for our bodily motions. We ape the machine. Our bodies were not made for such movements.

The result of this fantastic mimicry is movements of sharp jerks, plucking, wrenching movements of the limbs. See the overstrung man or woman, child indeed, with tense, rapid, jerking walk. See what the novelist calls "quick nervous gestures". Every movement destructive of nervous tranquility.

But vastly more destructive, the quick jerky movements of the head and body - of the head relative to the body, of the body relative to the head.

Unknown to us, by unconscious mimicry, we set our pace by the machine; and the pace destroys us by destroying our most sensitive and delicate co-ordinations and controls.

Do you wonder we have so many nervous wrecks? Why our madhouses are filling? We are descendents of 4 generations of machine mimics. Do you wonder if the workers of the new generation are touchy, apt to fly off the handle, go down with mysterious disorders and leave you in the lurch? Do you wonder if you yourselves get more rattled, more inclined to daily exhaustion and annual breakdowns than your forefathers were?

Among you are medical men. I'm going to talk to you like an uncle - and make no apology for doing so. All this that I am saying about the co-ordination of the controls of the body that are being dislocated and deranged at almost every waking moment - in our striding, stretching, reaching, bending, sitting down, standing up, looking, speaking - all this that comes to us from the unconscious mimicry of machine speeds and is daily destroying our poise, our power, our health and our sanity; all this has been expounded and explored by a quiet genius of whose immensely important discoveries your medical authorities have decided, in their organised professional capacity, to take no notice.

These things of which I speak are not alas of my discovering, though I have been hunting them all my life, but are the discoveries of F.M. Alexander. If you don't know about his work and his technique of neutralising the errors into which we have fallen, for re-educating ourselves and for restoring the co-ordinations of the body so lately and disastrously lost by civilised man, I beg you to do so at once.

Shortly you will be hearing of the confirmatory discoveries of distinguished men of your profession who have stood out against the ban upon any serious notice being taken of Alexander's work.

If you want to know what effect a series of jerks can have upon the nervous system, jerks that shake the head relative to the trunk, try filing out, with vigour and haste, a rough round hole with a file that jams with every other stroke. Try it. You will know better than any words of mine can tell you, the effect upon the physical and nervous structure, of shocks to the sub-cranial controls of the body. Or if you would like a demonstration of the extreme effects of the displacement of the head, get Max Schmelling or Joe Louis to hit you under the jaw, slightly sideways, just once.

When you come round from this punch, go into the work places and watch the people who are under your medical guardianship or managerial charge. You will see right and left, one and another doing to himself or herself, by overstrained, overtensed and jerky physical movements, exactly what the blow under the chin did to you. In a milder degree, of course, but doing it perhaps 60 times to the hour for 8 or more hours a day.

The workers of the new generation will come to you with already ingrained bad habits of poise, movement and co-ordination. If you don't know these things that Alexander has brought to light, you will not only let the worker keep his bad uses of his limbs, head and body, you will set him tasks that will aggravate them, and then you won't know why he goes sour and sick, you won't know why he can't stand a day's work.

'Ah,' some of you say, "We're up to all that. We encourage our youngsters to join physical culture classes and do exercises.' Do you? I'll only say that the exercises prescribed and taught by most of our physical culturists are popularly known as 'Physical Jerks.' I make no comment. 'PHYSICAL JERKS.' I would add that only the strongest can survive an orthodox course of physical culture. I have read the Report of the Physical Education Committee of the British Medical Association and have seen no mention in it of the crucial matter I am putting to you now. None. Not a word. You say it can't be true but I tell you, not a word.

Will you medical men here make amends? Go into this thing, if you will, collectively; I'll work with you. Alexander has not 100 years to live. We'd better learn from him, get his knowledge and technique, while we can.

I've covered Man the citizen, Man the Being of flesh and blood, living in a machine world for which he was never meant. One last word on Man the creature of imagination, of passion, of honour, of dignity. I'll say it again - there are 4 needs of the human spirit which must somehow be satisfied even at our work. To be looked on as somebody. To use our faculties. To feel that we belong. To respect ourselves for the work we do.

To those who say - 'We can't be bothered with all that,' tell them, you who know better, if they can't be bothered, their schemes, however well built and apparently sea-worthy, will run on the rocks, for the most dangerous of all rocks is frustrated human nature.

APPENDIX E

Tic Douloureux: - The following letters were received from this pupil: -

4 Aug. 1938.been home a weekpain is gradually lessening in the daytime..... eaten several meals without having to mop my eye.....pain still tiresome at nightdoing my best to follow your instructions.....

12 Aug.....pain not nearly as bad in bed now.....left eye is now as wide open as the other.....friends keep telling me how much better I am looking.....

20 Aug.....in a 3-hour journey by car not a scrap of pain apart from 1 minute.....best day I've had.....Miss M. says the difference in me is amazing.....

27 Aug......comparatively little pain now.....quite gone from the back of my head.....left side of my forehead is tender and sore and very painful when touched.....pain only lasts about a minute...... I'm sure you will open your eyes at my improved appearance.....

3 Oct......I do not know how to express my thanks for all you have done for me.....everyone is amazed at the tremendous difference in me.....

22 Oct.....That bruised place in my forehead has greatly improved.....scarcely feel it at all now.....It is a joy to wash my face all over and powder my nose without pain......I am carefully carrying out your instructions and still being complimented on my altered looks.

APPENDIX F

The following has been sent to me by Dr. Wilfred Barlow, and as I have been taken to task for certain statements regarding the incidence of disease, I have his permission to print the matter here.

"There is a tendency in some quarters to speak as if the main battle against disease has already been won and to suggest that an extension of present methods of prevention and cure would solve the problems of health. It is easy to point with pride to declining infant and maternal mortality rates and to the greatly increased expectation of life compared to 100 years ago. It is easy, when considering the mass of statistics which relate to the lives of our people, to be carried away by quantitative assessments of isolated factors and to ignore the common-sense viewpoint which takes into account the quality of these lives. A great number of people spend most of their lives functioning far below their maximum level and it is naïve to believe that increases in height, weight, length of life and so on are an index that the health of the community is satisfactory.

The following extract is interesting from 'Health and Social Welfare, 1944 - 45.'

'The major problem is the incidence of ill health and disabling sickness. NHS Insurance Statistics show that morbidity has been increasing recently. It is not a question of death-dealing diseases. The highly dramatic forms of death - like cholera, smallpox and typhus have been conquered in this country. What remains is the less dramatic but widespread incidence of 'disease'. In this field we shall have to tackle peptic ulcer, gastric disorders and a variety of psychosomatic troubles. All these diseases give rise to a mass of inefficiency and suffering among large sections of the population. Essentially the approach will have to be one of prevention and of building up a concept of positive health. The task is a formidable one. (Progress in Public Health, M.Caston).'

This brings out the point you have made in your writings in the past 40 years, that there is a great amount of dis-ease not being touched by present methods of medical approach: for example, widespread conditions of 'devitalization' characterized by an overwhelming sense of fatigue, sleeplessness, emotional gusts, irritability, nervousness, abnormal desires in eating, drinking and smoking etc. In your work you have demonstrated very definitely certain manifestations and standards that distinguish the individual in 'full health' from the one with no demonstrable disease.

An investigation into these problems of 'dis-ease' and 'devitalization' will have to take into account your demonstration of the constant influence of the manner of use of the organism in every reaction and in every moment of life. Any diagnosis that ignores this constant influence is incomplete: any plan of treatment or re-education that fails to take it into account must leave behind a predisposition to disease and malfunctioning."

APPENDIX G

In No. 20 of "Bulletins from Britain", published by The British Library of Information, New York, 15 Jan., 1941 will be found the following "damning reports from German medical officers" concerning the mental and physical results of youth training in Germany:-

"On the mental qualities:- "the young cadets usually excel in a remarkable lack of logic. Logic and disciplined thinking are replaced by an incredible tendency to using meaningless claptrap."

"The physiological examination of the cadets became necessary because they showed a grave lack of knowledge and have a faulty point of view in regard to mental work. Stupidity and laziness of mind are always defects of character."

This is not surprising when we read in Deutsche Wehr that, "The next war will require the highest degree of brutality. Goebbels demanded that high schools should produce 'tough guys' and stated that 'the intellect is a danger to the shaping of character."

FLAT FEET AND DISEASE:- "Military examinations indicate that an alarming number of conscripts are unfit for service in the German army because of flat feet. More than 50% of those on worker's duty and liable for military service suffer from foot weakness and weakened spines." (From the Munich Medical Journal, April 2, 1947.)

APPENDIX H

Article in the New York Times, Sept, 1940:- UNITY OF THINKING TERMED BIG TASK

(But it is possible and vital to democracy, Philosophers agree after conference)

This was a conference on "Science, Philosophy and Religion in Their Relation to the Democratic Way of Life" and the achievement of the Conference as stated to the Press was - "The conference was unanimous in its conviction that modern civilisation can be preserved only by recognition of the supreme worth and moral responsibility of the individual human person."

Alexander comments; "I quote this with great satisfaction, because of my persistent crusade, in the face of much opposition, on behalf of the individual person, and because, as readers of my books are aware, I have not only persistently contended that the realisation of this ideal implied the need for a new technique in living, but I have succeeded in demonstrating that the "means" of my new technique will enable the individual to consistently develop his potential in his "doing" in daily life. Therefore, I would suggest to the leaders of this conference that if they wish to accomplish their aim, they should at least take into their survey, the evidence accumulated during a lifetime by a fellow-worker, who has employed personally the technique he advocates in teaching others to use it, and in this way has gained for himself and others, the personal experience and realisation of a new way of living in the fundamental sense."

Alexander continues: "Another point of interest to me, in view of what I have written regarding human reaction, is the following from the same conference."

"In the group's judgment, the greatest achievement of this conference was the demonstration that they could come together, not only for the purpose of expressing their individual minds, but also in willingness to change their minds, at least their attitude to each other. There was some delicacy as to whether the sessions should be labelled "Conference of Science, Philosophy and Religion" or "Conference of Religion, Philosophy and Science". Both sides were satisfied when the scientists accepted first mention, on the principle that leaders come first; while the religionists accepted last mention because in religious processions the highest dignitary comes at the end."

Alexander comments: "I point to the significant fact that the general satisfaction did not come from what the order of the words signified, but from an arrangement, which in the process of being arranged, did not call for a change in the habitual reaction of anyone present to the stimulus of individual interest or belief."