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**FIFTH BRITISH COMMONWEALTH
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EDITORIAL

In respect to Physical Education, 1973 is a year for *FIRSTS*, our prediction (April 1972) that 1973 would be a year of disruption in New Zealand sport, has been dramatically forstalled through the Caesarean birth-styled precedent of politics directing sport. It was delivered on April 10th, when the Prime Minister "reluctantly" required that the invitation to the South African Springbox rugby team to tour New Zealand in 1973 should be withdrawn. Moreover, sport and recreation are now being courted by the new Minister of Sport and Recreation, with his introduction (March 14th, 1973) of the Sport and Recreation Bill — not to mention the lure of an estimated \$N.Z.5 million dowry. The aftermath of such significant decisions not only interests us, but could even suggest possible changes in the practice and philosophy of N.Z. physical education.

Two events which concern the profession — both *FIRSTS* — are now in preparation. The 1974 British Commonwealth and International Conference on Health, Physical Education and Recreation will be the *FIRST* international gathering of its kind in New Zealand (Christchurch, 19th-23rd January, 1974.) It is certainly a once in a lifetime opportunity for many of us in New Zealand. And with the setting up of a Review Committee for P.E.P.I. (Physical Education Public Information) the Association is preparing, by means of a modern, high-powered, mass media approach, a *FIRST* in communicating to the people of New Zealand the profession's aims and objectives.

Possibly the most significant *FIRST* for the Journal in 1973 is its "coming of age." Twenty-one years ago the New Zealand Journal of Physical Education made its "modest bow" in the hands of an able

Editorial Committee to meet the "principle of supply and demand for information." For some years prior to 1953, the N.Z. Physical Education Society had circulated a type-written, cyclostyled Bulletin. By 1953 Physical and Health Education had gained a growing prominence in New Zealand and there was need for a more sophisticated publication. Issue No. 1, November 1953 of the Journal made its "debut with all due diffidence," hoping that "with accumulated wisdom it would survive the inevitable criticisms and overcome our present limitations." It entered the field of professional literature with an "unquenchable optimism" and has survived the "slings and arrows of outrageous fortune" these past 20 years. The Journal can be proud of its professional-craftsmanlike history over these first decades, and the profession extends its congratulations and greetings to all its former officers. There have been many outstanding contributions to the Journal over the years and the profession should be encouraged in the knowledge that the Journal is in good heart and good health, despite those "slings and arrows," (Not the least of which are the economics of the business.) The Journal continues to keep pace with modern ideas. It relies on the professions, "accumulated wisdom," and prospers on constructive criticism. It is not fearful of change. It is forever seeking new ways and means to improve, and Jim Hay's (Ed. 1967-70) classic Special Research Issue in November 1968 is an example of the Journal's ongoing improvement, while Bruce Ross's (Res. Ed. 1971-72) technical updating and aesthetically appealing change of format in November, 1972, is the most recent testimony to the health and vitality of the Journal.

And so to the last of our *FIRSTS*.

Editorial continued

The Journal, on behalf of the NZAHPER, congratulates the University of Otago School of Physical Education on celebrating its SILVER JUBILEE. (The first students, 30, 16 women and 14 men, selected from 100 applicants — mostly unsuitable — arrived in March, 1948. This Jubilee year's intake of First Year students was 93, 51 women and 42 men — nearly all most suitable!)

Physical educationists all over the world will be delighted to know that to mark the 25th Anniversary of the opening of the OUSPE, the NZAHPER has awarded the Sir Alexander Gillies Medal for Distinguished Service to Professor Philip Smithells, Director of the School of Physical Education over this quarter of a century. (A history of the School is in preparation and will be published in November, 1973.) During this time there has been a continual growth and development at the School. It has

been 25 years of success and disappointment; sometimes frustration, but always hope. And as the Journal goes to press it is professionally encouraging and exciting to read (Otago Daily Times, 28th March, 1973) that the final proposals for a four-year degree in Physical Education are expected to be confirmed in this Silver Jubilee year of the School of Physical Education. This would surely be the ultimate mark of satisfaction and reward for the School and its Director in its 25th Anniversary year.

"In am confident that what we are doing is academically important, professionally right, and that enough has been satisfactorily achieved at a high level for the struggle, for the means — personal and architectural — to continue, no matter the exhaustion, the misunderstanding, the frustration, and the failure." Philip Smithells.

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EXERCISE AND LIFE

NOEL ROYDHOUSE

The human body is designed for physical work and regular activity is vital to optimal development and function. This activity starts before birth being noticed by the mother from the 16th week after conception, and it is the failure of physical activity in the elderly that leads to a decline and eventually to the end of life. Physical activity, the study of which comes under the title of Exercise Physiology and the carrying out of which comes under the aegis of the Physical Educationists with their knowledge of health and recreation, is an important factor in the functioning of the individual and the community, because healthy adults are essential for the economy of the country and hence its standard of living.

Right from the 42-48th day after conception it is the muscular activity which is the prime factor in human development and this should receive much more attention, motivation and education than it does at present.

By the 48th day after conception limb buds are present with developed digits and the muscle movement which normally occurs is vital for the development and maturation of the bones and joints. Failure of movement as the result of abnormal conditions results in deformities. One of the interesting facts is that by the 16th week after conception, the foetal movements can be purposeful in that the foetus will move into a position of comfort as the mother's position alters, the foetus moving itself away from external pressure.

Mental ability pales into insignificance when compared to physical development. To learn a complete language and in bilingual countries, two languages, a child needs

only two years of listening and then it spontaneously begins to talk, at which stage its physical development has still a long way to go. The inquisitiveness of children and their desire to learn mentally is led easily into the scholastic world, but provision for the child's natural instincts toward physical activity is greatly neglected in the academic environment.

The clumsy child with poor co-ordination, often the despair of the parents, is the natural outcome of failure to allow the child to exercise to its full extent. Co-ordination and balance come about by exercising the vestibular apparatus of the inner ear, the proprioceptives in the muscles and their connections to the cerebellum. It has been shown with baby chimpanzee, deprived of maternal rocking, that they have difficulty in coping with activities in the trees. They need passive physical conditioning before they develop their sense of balance and muscular co-ordination. This type of development, the neuro-muscular aspect, continues through the early years of life and needs its non-specific recreational physical education, and failure of its development can inhibit the full development of intelligent behaviour.

From the age of nine years, however, lasting until about 12 years of age, there is a critical time in the physical development of the child. His neuro-muscular connections are becoming finalised, the muscles are increasing in size and strength and amongst these many physical changes, two further factors with far-reaching effect on the future adult life come into play. These factors are the cardiac muscle and the motivation of the child to continue with physical activity in later life.

Experimental work by Bannister at the Simon Fraser University showed the effect

on cardiac muscle of daily severe exercise. In the early stages, the mitochondria were seen to be ruptured but in the later stages there developed lines of mitochondria in the muscle fibres arranged in rows alongside the intracellular fibrils and in a greater concentration than in the original animals pre-exercise. Adenosine Triphosphate (A.T.P.) is found in greatest concentration in the mitochondria and this is the site of energy release to activate the shortening of the fibrils. The other feature noticed was the increase in the distribution of working muscle fibres to the less strong transitional muscle fibres. Biopsy of human leg muscle under similar exercise programmes shows similar changes.

Elsewhere it has been shown that the concentration of mitochondria, the number of which tend to be constant in later life, build up in the 10-11 year old children as a result of exercise to a greater degree than other age groups. Other studies show that the oxygen consumption of a cell from an exercised animal is less in the resting state than the same type of cell from an unexercised animal.

This shows that there are advantages of physical activity demonstrable at the cellular level.

This age group of 9-12 years then assumes further importance in the need for regular and intensive physical activity especially as it is likely to provide cardiac muscle with more capability for its life long work and increase the reserve of strength required when part of the cardiac muscle dies and degenerates through lack of blood supply following blockage or restriction of the coronary arteries.

Motivation is a topic which provokes much discussion when applied to physical education and recreation. So much importance does it assume that there is an international society of sport psychology with a branch in Australia.

Motivation to continue healthy recreational habits in adult life is instilled into the 9-12 year old group by their liking of the physical education which we hope they will obtain regularly during these school years. In a survey of those members attending the Royal Life Saving Association (Auckland Branch) all were questioned as

to what age they took up swimming and two out of three were involved in organised swimming by the age 14 years and 9 out of 10 had learnt to swim by the age of 8 years. This motivation was obtained by instilling the basic fundamental for recreation into the age group at 8-12 years. There is more to it than just forcing them into physical education in a narrow sense. Advances have been made in broadening academic education and this is being paralleled in certain school by the broadening of the physical education by including more types of games to play.

This is fundamentally necessary because of the wide varieties of somatotypes. Certain pupils are better suited to some games because of individual differences in size, temperament and speed, but above all the crucial factor should be of choice and preference. Physical Education teachers themselves are often at fault because they teach what they prefer rather than giving the pupil the choice. Admittedly, they can often blame insufficient staff or equipment or lack of facilities. To correct these deficiencies Physical Education teachers should become more demanding and more searching for facilities. An example is that of the use of the Papatoetoe Squash Courts for a nominal charge, with equipment thrown in, for those at the Papatoetoe High School whose preference lies in this direction.

In following the evolution of physical education, recreation or the application of exercise physiology, activity can be classed as play, display, games, sports and contests. The passage through play to display, to games, sports and finally to contests illustrates the undersirable feature of modern day physical education. Let competition be the natural outcome of increasing skill rather than the reason for increasing skill. With the change from informality to formality there comes about a reduction in the numbers participating.

Play is considered to be the free running of the child exemplified by the 8.30-9 a.m. activity of the Levin Primary School in the '30's. A football was tossed out into the paddock at 8.30 a.m. and the majority of the children chased it around the playing

field (several acres) kicking it, and if by chance someone was able to pick it up, (considered a major feat), he either kicked it up in the air or was thrown unceremoniously to the ground by hordes of other children. Display is a more organised form of play, the ultimate example being synchronized marching but there are many other less formal activities, such as the various Maori Stick Games.

The next progression is to games which have minor or no competitive element and have minor or no audiences. Harking back to Levin, there was the game, reputedly of Maori origin, named "Tip-Tap" and this was a fast moving skilful game in which even a novice could score well. There were no spectators and the two teams had 2-6 players. Next comes the sports in which formal teams participate in formal competitions. Here comes the crunch and the beginning of the reduction in numbers. At Otago Boys High School a certain person thought he would volunteer for the summer game of cricket which game was under the aegis of K. J. Sheen, well known to those in the education world. The volunteer was eventually allocated to the 13ths (there being no 14ths) and he played a season mostly as long-off, as far away from the action as it was deemed safe to place him. At the end of each Saturday morning game he would rush up to the wicket and seize fervently the cricket-ball so that he could report back to his all-attentive mother that he had touched the magic ball at least once during the game. Never again did he play formal cricket.

Contests are the ultimate in the sports world but are only for the chosen few and they represent the provincial and international games. They fill a great need in the field of physical activity because they provide a goal for achievement. There has been much talk in recent years as to the waste of time and money devoted to the top sportsmen. This type of talk is negative in outlook and destructive to the whole pyramid of physical education and recreation. Human beings need motivation, they need a goal set out in clear unmistakable terms, even if this is never attained. The detractors of our national athletes at the Munich Olympics fail to realise the effect of

these stars on the host of those participating at the sports level. This effect of the top athletes on their fellows at a lower level is amply demonstrated by the impression made in this country by our series of world beating rowing teams. I was privileged to be asked to address the Westlake High School Rowing Club on training for fitness at the end of 1972 and was able to meet and talk to secondary schoolboys due to rise at 5 a.m. the next morning for their daily rowing practice. What was most impressive was not their ability in winning the head of the harbour inter-school race, but their motivation and the way they hung on every word spoken by Douglas Storey, Olympic Gold, Olympic Silver and Olympic Bronze medal winner. Everything he said was listened to intently by these eager, keen-eyed budding Olympic rowers. The impact made by one of the world's top rowers on those at school level was tremendous. This is also reflected in increasing numbers in the rowing community throughout New Zealand and again must reflect further back onto those who volunteer for rowing as a sport.

It is widely held that the average New Zealander gets plenty of exercise. We imagine that we are an outdoor society and that there are plenty of clubs to belong to. It is true that the more enterprising families do encourage their children to join clubs at the weekends but over all, most doctors would agree that we are following the pattern of the United States and Australia and becoming more and more bound to our chairs, television sets, our motor cars, our lifts and unfortunately our rather sedentary jobs.

It is not new that people earn their money with their brains and their hands and not with their legs and their shoulders, and the whole pressure of education is, therefore, directed towards high attainment in the high scoring examination subjects to the detriment of their bodies and their general health.

There are many ways in adult life in which the health, mental and physical, can be improved or maintained by participation in continuing physical activities. We are, in fact, like so many over-developed countries, gradually losing all interest in keeping

our bodies in a physically fit condition and although this is relatively easily carried out in the under-30's, it is only when people reach the age of 45 or so that they suddenly get concerned about coronary disease and they start playing squash or go jogging. These latter two activities do have their casualties because they are taken up at a stage when the body has run down and is not capable of coping. It is at this stage that specialists in Sports Medicine can help by gradually conditioning a person under medical supervision until they are again capable of taking up recreation to the standard they dropped in their youth. The setting up of Health Clinics run by qualified Physical Educationists in Auckland is a step forward in re-introducing the middle-aged person back into the world of recreation.

There is no doubt that the habits of exercise instilled into young people are of vital importance, because of its effect on the heart. Like any other pump, it is required to run at high capacity quite regularly and every day. At rest the heart works at about a fifth of its normal capacity and in many people never really goes beyond double its resting level, whereas with exercise it can go up to five times its resting situation. This regular use of the heart, at nearly its maximal capacity, has already been shown to produce beneficial effects on the young, and recent medical research has shown that beneficial functional effects do occur in those who had had heart attacks associated with coronary artery insufficiency. The National Heart Foundation is fully behind the beneficial effects of exercise and it deplores the run-down in the time and effort spent on physical education in the schools. They also recommend graduated exercises for the rehabilitation of those who have suffered from heart attacks. To add further fuel to the need for exercise in health here is an extract from a letter to the Editor of the New Zealand Medical Journal, December 1972, written by Professor J. D. Hunter, Professor of Medicine, School of Medicine, University of Otago.

"Proposals made about exercise habits and reconditioning have not yet been fol-

lowed with further practical suggestions, but a subcommittee is preparing material relevant to physical training programmes in middle-age. Interest in this area of health promotion is certainly increasing and the NHF has promised some support for a special postgraduate course on 'Exercise in Health and Disease' being planned for February, 1974, by the Wellington Postgraduate Committee. On the question of intensification of physical education in schools, the NHF has made little progress towards collaborative discussions with the Department of Education. Although representatives of the department have expressed interest in the Heart Foundation's proposals, an approach from the NHF has met with only a lukewarm response, which at this stage must be regarded as disappointing and probably of concern to physical educationists."

To round off this description of the need for physical activity throughout life a few thoughts about the elder citizen would not be out of place. There is no doubt that there comes a time in life when a patient or his family should decide, with a physician, when it is time to discontinue prolonging the life of a body when biological death is certain. The right to die with dignity, with the cessation of the employment of extraordinary means to prolong the life of the body is the decision of the patient, his immediate family, and with the approval of the family doctor. But before this stage is reached, there are many ways in which the health of the elderly citizen can be maintained, and included in this, is the area of exercise. It is not put forward that exercise can prolong life nor at this stage can it be said that exercise slows down the known ageing processes of the body, although some people do believe this, such as Herbert De Vries who is working on a programme to demonstrate this one way or the other. What is more impressive is that the continuance of the ability to exercise, to walk about and to care for oneself enables that person to enjoy his life for a longer period. Regular exercise is just important for its effect in old age as it is for the developing foetus.

QUALITY OF LIFE

L. E. Adams

The argument is essentially in three steps:

1. A statement of the necessity for a long term national policy.
2. A suggested LONG TERM PLAN.
3. A suggested STARTING POINT for such a plan.

It is difficult to separate these three considerations as the ultimate cost of a long term policy colours the view of what the first steps should be, and the direction of the first steps influences or projects the end. Hence much of the argument is interwoven and repeated, but, briefly, the LONG TERM PLAN is the full assumption of the Education Department of the responsibility for "Education for Leisure," and the STARTING POINT is the expansion of Physical Education and Craft staffing in two, perhaps three, secondary schools in the Auckland City Council area.

1. *The Necessity for a Long Term Policy*

There can be no denial of the seriousness and extent of the problem. Even the police have warned citizens of the dangers of the streets at night and the increase in violence has prompted newspaper editorials all over the country. The "N.Z. Herald" and the "Auckland Star" of 24 August, 1971, both devoted their editorial attention to the subject. It is well to be reminded of the contents of these two leading articles. Both of them strongly support action of the kind suggested in this report.

"N.Z. Herald" 24/8/72

TO GRIPS WITH VIOLENCE

"No comparable problem of civic security has, perhaps, arisen since colonial days . . ."

"A few claim that, because of his animal beginnings, man is fated to be aggressive and to suffer aggression; others, on firmer ground, place great stock on such formative factors as upbringing, education, exposure to violence — whether actual or vicarious — and general family and community environ-

ment," "feelings of alienation and disorientation seem to contribute to the violent character, as do boredom and the psychology of the mob. Lessening the influence of such factors is obviously a long term social project."

" . . . a great deal of hooliganism which leads to disturbance or crime involves the undisciplined use of motor vehicles."

"No-one will challenge the importance of the longer term hopes for solutions."

"Auckland Star" 24/8/71

TROUBLE IN THE STREETS

" . . . mounting concern felt by all Aucklanders about the activities of the gangs and the constant menace of law-abiding citizens."

"But nobody . . . can hope to come up with a magic formula that will make the city a thoroughly peaceful place in which to live."

"Which is not to say that some effort shouldn't be made to halt the anti-social behaviour, the mindless rampaging, that frightens decent people. Where to start this effort, though, is the big problem. At local authority level?"

"The pity of it is that so many older people, notably parents, give up the ghost. They leave the young people to their own devices —"

"But it is not enough to appoint more police."

" . . . clearly scope for highly trained social workers to mix with gang members at their own level." "Such welfare work should also begin at primary school level in areas where economics and other conditions help to create anti-social behaviour."

NO FINAL REMEDY

It seems quite clear that the problem is both acute and massive; that no certainty of solution exists; that some sort of social programme aimed at root causes, but designed to ameliorate rather than cure the condition of society, is desirable; that an increase to the Police Force, even if immedi-

ately necessary, is a negative, costly solution, really an admission of defeat.

The JOIN A CLUB move has severe practical limitations but it is extremely important because it has originated with a local authority and embodies the general desire that something should be tried. It takes as valid, the assumption that youth, the more it is occupied in healthy pursuits, the less it will be involved in unhealthy ones. It sets a realistic goal by seeking to lessen the problem through creative measures rather than to eliminate the problem by punitive methods.

The plan submitted here begins with all the above premises and leads on from the last one.

2. Suggested Long Term Plan

Schools, particularly secondary schools, should become the focal points in each community area for a national policy of "Education for Leisure."

With the steady approach of the shorter working week, "Education for Leisure" must assume increasing significance. Perhaps the current cut-back in allowances for hobby classes conducted by the evening schools of the secondary education system is a prelude to the development of more comprehensive and better planned forms of education for leisure. It is difficult to escape the conclusion that more should be done about how leisure time is to be filled, rather than less. Yet, good in conception as evening classes and University extension classes may be, they tend to cater for those who know how to fill their leisure, those with positive ambitions of bettering themselves, or those with gifts and abilities, and often for housewives with little other opportunity to escape the chores of home. They do not cater for the mass of school leavers, young people of below average ability, the group from which most delinquents are thrown up.

2. "Education for Leisure" therefore implies:

- * expansion of the school curriculum, as applicable to day pupils, to cover instruction in greater depth and over a wider variety of activities than mere physical education and sport and some craft work.

- * extension of school hours to cater for recreational and cultural "occupation" i.e. practical opportunity.
- * increase in school staffing of physical education, craft and cultural subjects, to cover both instruction and supervision in after-school hours, evenings, Saturdays, school holidays.
- * inclusion also of ex-school pupils, mainly immediate leavers, mainly young but not exclusively young people, to enable a continuity of interest and contact.
- * provision for older age groups, such as hobby classes already do. It is difficult to avoid introducing details. Schemes in different areas would differ considerably.

The broad conception is of a secondary school in a certain area serving as a centre for continuing recreational and cultural activities, whether for pupils or ex-pupils or local young people, providing instruction, space, facilities and supervision by reason of the fact that the school, through its Principal and Board of Governors, has the necessary staff, the backing of the Education Department, and the interest and support of the local community authorities.

The chief aim is the reduction of the causes of juvenile delinquency and anti-social attitudes of a section of youth. Success of a modest nature in that area would seem to offer permanent benefits. In other words a gain by youth in the use of leisure is a form of Education for Leisure, and the wider aim of improving the quality of life in general can be left to voluntary efforts and later planning.

3. *The Present Situation in Secondary Schools*

The secondary school is the main institution within the education system which purports to have staff, the facilities and the age-group of pupils and the opportunity to lead youth in the right direction. The conditions under which secondary schools operate tend to mean that the system does not in fact lead youth into society so much as push him in. Some get pushed in with all the advantages of what our excellent

schools offer — these are the successful citizens, some being successful in spite of a poorish record at school, but most have a satisfactory schooling behind them. A proportion fails to be pushed in the right direction and veers off course with no leading force to guide it back.

A continuing link with the secondary school could possibly provide this leading force, and this link could be provided both through vocation and through leisure. "Work experience" is a parallel issue of equal significance, perhaps, to education for leisure, but not referred to in any detail in this article.

The point to be made here is that the restricted hours of school, the restricted use of school facilities, the restricted availability of skilled staff, leave a vacuum in weekends, evenings, and school holidays for pupils and ex-pupils alike. When school hours are over the pupil is shut out temporarily and when school days are over the ex-pupil is shut out permanently. This may be slightly overstated, but it is broadly true that the youth who has nowhere to go and nothing to do once he is outside the school gates has been pushed into a vacuum for some hours of each day, for some days of each week and for some weeks of each year. He is supposed to be able to find something to do on those times. If he comes from a good home it is usually no trouble, or if his education while at school has stimulated sufficient interests, as it should, he can avoid boredom. Where both things are missing, he is a potential candidate for delinquency, though some delinquents are the inexplicable products of affluent homes and ample opportunity.

A greatly expanded programme of physical and recreational education could offer hope of reducing the problem.

It must not be thought that physical education is poor in the schools. On the contrary it is in very good shape. Not only do athletes and footballers get their traditional opportunities and prestige, but the ordinary physical education programme for the average pupil is varied and interesting. The Thomas Report of 25 or 30 years ago was an enlightened one which established the "common core" requirement of so

many hours per week of physical education, craft and music instruction. Within this requirement Physical Education or "P.E." has thrived.

The Otago School of Physical Education, attached to the University of Otago, produces graduates with a Diploma of Physical Education, most of whom train as secondary teachers at the Christchurch or Auckland Secondary Teachers' Colleges. Their methods are kept up to date by the Physical Education Advisory Service of the Education Department so that high standards are fostered. Recent years have seen a proliferation of gymnasia and the popularity of many indoor sports such as badminton, volleyball, indoor basketball, creative dancing, weight lifting and gymnastics. If there is a serious weakness it is in the loss of trained personnel to other walks of life because of the lack of promotion for physical education teachers in the secondary service. Schools have been left stranded at times. On the whole there is nothing wrong with the quality of physical education offered by those who stay in the service. But there has been no quantitative concession to changing times and changing needs and little carry-over to the school leaver and young adult.

Physical education at present, then, falls short not because of lack of quality, but because of lack of quantity and variety and continuity.

- (a) School facilities cannot be fully used outside school hours because physical education staffing is insufficient to cope with both school hours and non-school hours. Non-specialists, i.e. general teachers, can assist to a limited extent with sports teams, but they are in the same position as the ordinary citizen, already fully stretched in a job and able or willing to do only so much. Indeed the traditional role of secondary teachers as sports coaches and cricket and hockey umpires for two or three afternoons a week and much of Saturday is outworn. It was never an equitable system as the burden fell heaviest on the few, and it is certainly not the answer to a massive problem — how to cater for a far wider youth group than those

interested in team sports under school colours. Furthermore, the new generation of secondary teachers sees itself in a different role from the older generation — which is not necessarily to accuse the younger teachers of any lack of dedication to their profession.

- (b) Physical education teachers tend to be only a short time in the job, either because there is little chance for promotion to positions of responsibility on account of the fact that there are only one or two specialists of each sex on each school staff, or because the active participation of the P.E. teacher becomes less attractive with middle and advancing years so that there is often a transfer to classroom teaching. Many others leave the profession on realising the slow promotion. According to a member of the Otago School of Physical Education graduation group of 8 or 9 years ago, the group, some 20 in number, had dwindled to 4 or 5 still actually teaching within 5 years. He himself found employment as a personnel officer in industry with promotion prospects, despite being a highly successful P.E. teacher and a Maori with fine influence among both Maori and European youth. Losses of this type are tragic in today's situation.

It seems, then, that there could be benefits within the school system and outside it from the upgrading of physical education in the following ways:

- (a) Extension of P.E. training and widening of the hours and duties of P.E. teachers very considerably. This could involve the ultimate creation of another school of physical education in Auckland or upgrading the P.E. section of the Auckland Teachers College to supplement the Dunedin School.
- (b) Provision of promotion opportunities through administration and organisation duties for senior P.E. teachers. They would link schools to local body community officers and their activities.
- (c) Extension of P.E. instruction of pupils to include recreational subjects and education for leisure through an expanded curriculum which looked ahead to

middle age pursuits as well as to a wide variety of youthful ones.

- (d) Extension of P.E. teachers' hours to include after school, evenings, Saturdays and vacations on a rostered basis, with classes comprising school pupils and leavers and young adults or suburban housewives, older people and so on, according to local needs and possibility. Continuity in the school and past-school years¹⁵ is desirable.
- (e) Increasing the responsibility of the senior or administrative staff in this field to embrace supervision of all school facilities and gear, storage, damage, grounds use, gymnasium use and so on. Indeed separate sets of special equipment would have to be acquired and identified.

It is impossible for principals and custodians at the present time to be constantly on duty to see that outside organisations using school facilities do not cause damage, lose equipment and introduce public riff-raff to the premises through their inability to exclude such, having no specific authority. It is also intolerable for school pupils to come to the school they regard as their own and to find damage to the gear such as racquets or nets or gymnasium floors etc. which their own sports fees have paid for, or for a school principal to have to dip into any official or unofficial school fund to repair damage for which no-one takes responsibility. This obvious objection to the use of school facilities results in their denial and is the reason why school grounds and facilities are mostly closed to use except by pupils in school hours or for school games, and why some people feel excluded or rejected. The creation of a "gang" because of this rejection has been observed.

A properly organised Physical Education team of staff at such schools could take over this essential supervision task, instructing those not supposed to be there to leave, preventing damage or fixing responsibility on those causing damage.

- (f) The cost of such a scheme would be considerable in that salaries would be high. The Education Department would have to operate an increased education vote. Government would have to be convinced that the cost of such

an educational expansion could be set against the hidden costs of vandalism, social security payments to unemployed youths, increased police force, and so on. While everyone seems to be agreed that something must be done on a national scale, the suggestion made here is that certain areas, through two or three specific schools, in Auckland, could initially be used experimentally for the purpose, at the cost of only a few salaries, and with a view to expansion as experience and the availability of suitable people made expansion possible. The promotion of this idea by the Auckland City Council, particularly with the backing of the Auckland Regional Authority and other neighbouring Councils might be enough to persuade Government that the Education Department, under the "Education for Leisure" campaign, could be the agency to handle this problem. There is no suggestion here of a "Ministry of Sport" but there is the suggestion that the welfare of youth and of society is possibly best tackled along the lines of a Department of Sport and Leisure. By incorporating this within the schools system the Government would obviate many of the criticisms which attach to the Government sponsorship of sport.

- (g) Local authorities and school boards who are most interested and most involved in the physical and recreational activities within their areas are unable to finance salaries, but may be well able to make space available either within or adjacent to school grounds while local interests could assist with buildings and facilities. There are several secondary schools in Auckland where space is apparently readily available. Hence a major obstacle is removed if personnel can be trained and salaries found as the Government contribution to this major problem. Again the cost must be measured against the cost of mounting violence and vandalism.
- (h) The conditions under which the necessary personnel would be employed are as follows. They would be:

- (i) Paid, like teachers, by the Education Department under a suitable classification and promotion system.
- (ii) They would be appointed by and employed by secondary school boards, again in the same way as teachers, and responsible to these boards and available to the principal of the secondary school for day teaching in full or part.
- (iii) Their duties would be defined by a committee of the Education Department, local authority, school board of governors and principal.
- (iv) Their hours and conditions of service would be defined by the same committee.
- (i) These persons would have opportunity to apply for straight P.E. or other teaching in any secondary schools not involved in such community work, or to apply for positions outside the teaching service, but requiring their skills, or to rise to senior administrative posts created in the schools conducting this community work.

4. *The Reluctant Learner*

It may still be asked how the reluctant learner may be induced to improve his "quality of life." He is not interested in study or improving himself, and, by definition, hates school. He is a potential delinquent. But he might submerge himself in a hobby or pursuit if he had the right experience at the right time.

The right time for leisure education is secondary school age. Early leavers stay $1\frac{1}{2}$ to $2\frac{1}{2}$ years at secondary school, generally leaving about 15½. Very few leave school under exemption provisions before 15. This group must provide most of the delinquents. The pattern is frequent absence, loss of interest in progress, lack of books, absence of homework, group mobility in cars, truancy. Some are curable, but a group like this throws up leaders and some become incorrigible if the home structure is inadequate. Trouble is often worst in the school holidays when groups find little to do and are led to steal petrol or shop lift or sit round bus shelters and get round the beaches smoking

and drinking and even entering garages and houses. School discipline then tends to aggravate the situation no matter whether summary punishment or enlightened "modern" forms of counselling and follow-up are tried.

The development of a larger P.E. and Secretarial/Craft activity within the school could have attractions for some of this early-leaver group, commonly known as reluctant learners, and particularly if available to them on evenings, Saturdays and holidays. It could not only help to break up the long periods of boredom, but could also help to split up the actual groups and to introduce to them some form of continuing interest. They could attend classes either as pupils or as ex-pupils in non-school hours to satisfy their urge to retain contact with the school they hated attending but resented leaving unsatisfactorily. The premature leaving of school at $15\frac{1}{2}$ or 15 (or $14\frac{1}{2}$ in exemption cases of severe difficulty) causes anxiety to parents, teachers and to the Education Department. Exemption is reluctantly given by the Department before the age of 15 in cases of the most intractable kind. The requirement of a continuing attendance till later, at least at certain classes outside school hours, could considerably soften the anxiety which now exists concerning throwing immature youngsters into society with no real control or supervision.

School leavers and young offenders involved in driving offences, theft and less serious misdemeanours could be required to attend certain classes. Unemployed youth, before receiving any social security benefits could be required to produce attendance certificates and this might obviate the arrogance of those who can abuse the boss, lose the job and fall back on social security for another few weeks.

5. Application to Typical City School

There are several secondary schools in the Auckland Metropolitan area ideally suited to the scheme through having available land, or Council land and other facilities nearby.

Two or three schools, best to be unnamed until an approach is made to the Boards of Governors, appear to be ideal ones

for a start to be made with the Auckland City Council area. In these schools it is likely that a good response to the scheme would be received.

The typical position is that a secondary school of say 1,000 has about 50 teachers of which some 6 or 7 or 8 are specialists or semi-specialists in physical education, Art/Craft, and Music in order that the "common core" requirements in P.E., Craft and Music may be fulfilled to the extent set by School Certificate Regulations. This works out at about 15% of school hours and is reflected in staffing at about 15% which in turn means that P.E. and Art and Music Staff are fully occupied in school hours from 8.45 a.m. to 3.30 p.m. like general teachers. They are not available for classes in non-school hours except as to evening classes on one or two nights (maximum) per week. Many of them do take hobby type classes (keep fit, art, pottery, music appreciation) in evening schools. This clearly leaves no room on present staffing schedules for the kind of thing envisaged here.

The existing staffing schedules common to all schools would have to be amended in the case of the two or three pilot schools to allow for a rostered programme and a wide variety of sport, hobby and recreational activities. This would mean an increase from 6 or 7 or 8 teachers in the P.E./Craft field to 10 or 12 or 16 according to need and the development of the programme.

It would be part of the success of the scheme that this team was part of the school staff and that the school itself took pride in the operation of the scheme. All members of the team would overlap in "school" and "non-school" hours of work and aim to preserve a continuum of interest for "school" and "ex-school" youth. In other words a pupil who "left" school having outlived it at say $15\frac{1}{2}$ would be able to find a day job but continue with his sporting craft interest as to 15% of his time, leaving behind the 85% of classroom time which he was reluctant about. In this way he becomes only a partial leaver. (The extension of this idea to work experience is another equally significant matter, not to be argued here.)

6. *Work Already Done*

The Community Activities Section of the Auckland Regional Authority has set out in great detail the recreation patterns in Auckland listing some 50 or 60 different sports and 30 or 40 Arts, Hobbies and Social Activities for all age groups.

Organisation and leadership is the key.

7. *First Steps*

The overall pattern of attack is to build on the existing school structure, beginning quietly and modestly with, say, two schools, but recognising the universal application of leisure education to the whole community and the ultimate idea of the shorter week for everyone.

The steps to be taken initially by the Auckland City Council if it considers the general idea worth promoting, would be:

- (a) Interest the Education Department in Auckland by submitting this report or by a deputation to the Superintendent of Education in Auckland, Mr H. Craig, and the Senior Inspector of Secondary Schools, Mr D. H. Thurston.
- (b) Collaborate with the Auckland Regional Authority and its Community Activities Section.
- (c) Make representations to the Minister of Education for "experiment" at two schools in Auckland with the appointment of certain staff extra to normal establishment.
- (d) Approach the Board of Governors and Principals of the Schools in Auckland selected for this experiment for their help.
- (e) Plan a programme with the help of the A.R.A. Community Activities Section the Community Association officers of other Local Authorities, the school authorities and the principals.
- (f) Take initial steps to measure results. The Justice Department and the Child Welfare Section of the Education Department should be closely consulted in the application of the scheme and in the attempt to stimulate morale by observable and measurable achievements.

8. *Conclusion*

There are aspects of the general plan which cannot, for lack of space, be fully expounded—for example, the training of per-

sonnel. A reason for nominating Physical Education teachers as the basic group from which to draw and on which to build, is the obvious case with which the present satisfactory training schemes could be expanded and made attractive to an ambitious and skilled section of teachers.

Educationists and administrators will have other questions, but the whole idea of linking the plan to the school system is to fix responsibility on paid servants and to obviate the erratic and sporadic effects of voluntary efforts which are the alternative.

The plan outlined is seen as both preventive and creative in that it could prevent a proportion of present youth delinquency, while creating the opportunity in general for an improved quality of living.

Corroboration of the views expressed in this submission is contained in the published remarks of one of New Zealand's leading sportsmen. Mr D. D. Beard, Principal of Te Aroha College was reported in the "N.Z. Herald" on 21 December, 1971 as follows:

EDUCATION COULD HELP TO RELIEVE BOREDOM

"New problems of our urban living now include boredom and loneliness — two factors which can gravely hamper the fulfilment of human potential and happiness.

"It worries me to realise that our college, with all its facilities for art, pottery, music, drama, typing, dressmaking, cooking, engineering, reading, woodwork, gymnastics and sciences, is closed for six or seven nights a week.

"The school day could finish at 5 p.m. — there would be no homework; teenagers and adults would be invited on an optional basis to return to the college at night to pursue activities not possible in the normal college course.

"Obviously this scheme would cost money, but boredom in our modern society is costing not only lives, but also creating a negative and depressed community.

"It is a question of tapping positive human resources," said Mr Beard. "Have we emphasised the 40-hour working week and ignored the other 128 hours in the week."

(This article was written in 1972. A second article on this topic will be published in the July issue of the Journal.—Ed.)



PLAYING WITH MORALITY; OR JUST PLAYING...

MYTH AND MORALITY ON THE PLAYING-FIELDS OF ETON

If we are to take moral education seriously, it is no use supposing it is something to be tacked on to the existing curriculum; on the contrary, it must enter centrally into our concept of what school is.

(Wright, 1971)⁴⁴

The physical educationist rarely claims to "take moral education seriously." Even if he is aware that the public* tends to regard moral training as one of the school's vital functions, he himself is unlikely to see it as falling inside the field of his immediate concern and competence.

This is not to say that the physical educationist would not include moral influence somewhere among his teaching objectives if he were asked to outline the philosophical foundation of his part of the curriculum. He could probably list, as McIntosh (1968)^{27a} has done, many of the stirring claims of soul and character salvation that

have been made, by ancient philosophers and modern committees alike, in the name of physical activity. He might even uphold the view of the Wolfenden Committee** which, after examining the place of sport in the community, reached the "reasonable assumption" that:

... if more young people had opportunities for playing games, fewer of them would develop criminal habits.

(Wolfenden, 1960)⁴³

* In a recent National Opinion Pool (1969) in the U.K., for example, 25% of a large sample considered "moral training" as the most important single aspect of formal education. Only training for a career was judged overall to be more important.

** The Committee included a very prominent physical educationist in its membership.

There are clearly dangers in making such claims. We tread on shaky philosophical ground if we base our beliefs about matters of value on premises which others would recognise as giving no evidence at all

(Foot, 1967)¹³. We are also open to the accusation that we rationalise our actions by presenting "phoney" reasons for what we are going to do anyway (Peters, 1959)³⁶ or by cloaking our professional practices in some supposedly elevating "mystique" (Brailsford, 1969)³.

If we feel, therefore, that we must produce moral justification for games-teaching or games-playing or for any other part of our work in physical education, it seems we shall have to offer valid argument and evidence that physical and moral education can cover common ground. If, furthermore, we intend to argue that the moral effects of physical education are more than incidental or accidental, we shall need to show that the physical education teacher incorporates feasible and well-defined moral aims into his educational strategies and that he evaluates his progress with reference to these aims.

The need for a central theory

We may assume that every teacher, however uncertainly, aims to assist his pupils to acquire a mature moral system that will guide their conduct. We may also assume that there will be some unanimity among teachers that a desirable end-product will be kind, friendly, just, honest, helpful, tolerant, cheerful, considerate and so on. Few teachers would question Wilson's (1967)⁴² observation that the mature ("rational") morality fosters attention to the feelings of others and to "hard" empirical facts like the consequences of one's own actions.

We may not assume, however, that all teachers place morality in the same perspective and there is need for some central reconciling theory of moral development to guide the teacher as he draws up the specific moral aims referred to above.

Unfortunately, no such single theory yet exists. There are, in fact, several to choose from and the only striking common tenet running through all of them appears to be that man is a "rule-following animal." (Peter, 1959)³⁶.

This conclusion comes as no great shock or disappointment to the physical educationist today, but he can no longer afford

merely to infer, as many of his predecessors did, that playing-fields, like battle-fields, make ideal moral-training grounds. He must also examine the various explanations of how children "tune in" to the many sets of rules, on which their social survival may depend, and consider the part he, as a potential moral influence, can play in the processes.

Theories of moral development

Wright (1971)⁴⁴ has identified four explanatory approaches. The first, social-group approach, presents man as a conformist who needs to be accepted into a group and whose behaviour is a function of social structures.

The second, based largely on the work of Freud, is psycho-analytical. It suggests, in effect, that moral development is forced on the reluctant child who acquires moral control as an almost desperate defence against intolerable clashes between the ego, the id and parental influence.

The third approach is allied to learning theory and implies that man is morally good if he is suitably disciplined and set the right examples. The child is susceptible to training, or conditioning, in morality, especially by parents, who are most effectively able to reinforce behaviour and provide models both actual and verbal that will be heeded.

In the fourth, "cognitive-developmental" approach, moral behaviour is conceived as an aspect of the active and intelligent creation of a community with others: a part of a rational process of adaptation to the social environment.

The work of Piaget

This last theory is immediately reminiscent of Piaget's study of the developing intelligence in childhood and adolescence, which is apt, since Piaget too has observed man's tendency to follow rules. Against the background of the development of thinking in children he has traced the changes in attitude towards rules at corresponding stages. It seems that the child even in the late "pre-operational stage" (about 5-7 years), conceives the rules of the game he plays as being drawn from some semi-mystical authority of older children, adults or God. Rules at this stage seem

sacred and inviolable. From about the age of ten, however, the child begins to internalise the rules and to recognise them as his and the group's own, but necessary for inter-child fairness and unalterable without the group's approval.

From rule-governed behaviour in games, Piaget (1932)³⁸ draws parallels with behaviour governed by moral restraints. At the early stage, that of "moral realism," the child's moral rules are external, he argues; they are rooted in authority and are socially insensitive. Subsequently, however, the child develops a morality of co-operation and "reciprocity," as he gradually perceives that moral rules grow out of human relationships and that morality is based on the human need for reciprocal affection.

The four theories discussed are, of course, neither all-embracing nor entirely mutually exclusive and Kohlberg (1964)²², for example, is developing an "ego-development hypothesis:" that there is a gradual integration, with age and favourable conditions, of moral behaviour under the control of thought and reason. It is essentially an amalgam of elements of several theories.

Lorenz and "animal morality"

One final theory deserves mention. Based largely on studies of animals other than human, a fundamental assumption of Lorenz (1963)²⁶ is that morality is a matter of survival. He argues that most of the attributes of human "strength of character" are clearly evident in animal behaviour in those acts and actions which protect and perpetuate the species at its healthiest and which are determined by natural laws.

Lorenz provides abundant evidence of these "natural laws" which are enforced by mechanisms which can bind pairs or groups of birds, reptiles and animals together and over-ride such basic drives as hunger, sexuality, aggression and fear. With but minor modification, "animal morality" might account for many of the moral dilemmas of man, since the survival of all species depends, paradoxically, as much on each individual member's aggressive strength as on his restraint; as much on his greed as on his selflessness; on his heterosexual lust as on his fidelity; on his ferocious rivalry as on his humility in victory.

It is not difficult to see the bearing of such observations on studies of man at sport and play, for man will often go to quite elaborate ends to display his strengths in the face of threat and set up equally elaborate restraints to ensure that he stops short of destruction of a threatening opponent. It is when the balance of power is severely upset that the morality of action is most earnestly debated. It is hard for the vastly superior contestant in inter-personal competition to behave "heroically" since society resents him who has more than a "fair share" of an advantage. One may worthily struggle to achieve equality or even establish superiority but, having done so, one must make some allowance for the escape and survival of the defeated. To wish to crush and humiliate an opponent — especially one from the same species or tribe — should strike us as both unnatural and immoral, if Lorenz's argument is sound. Perhaps encouragingly, there is growing evidence from studies of man at play that he is usually reluctant to exploit advantageous situations once he has established them (Flood, 1958)¹². One wonders, nevertheless, how easily and to what ends this reluctance can be overcome by the preacher-coach who insists that it is the "killer instinct" that keeps the successful on the path to sporting glory.

There is both comfort and gloom to be found in Lorenz's (1963)²⁶ ethological view of moral man: Comfort in the light it throws on the disconcerting ambivalence experienced by those ill-prepared by a "permissive" upbringing for the highly structured, highly competitive adult world: and gloom in the reminder that man, uninterested in the stable (phylogenetic) roots of his moral make-up and "spiritually desensitised by push-pull ideas of material causality," may be moving towards the view that morality is a arbitrary as a stream of consciousness.

Research into "character"

Although the physical educationist will probably be eclectic in his moral philosophy, it is important for him to remember that all of the theories discussed above have grown out of extensive investigation and that the

underlying research may be of value and interest to him even though a particular theory as a whole is not.

One typical investigation was reported by Peck and Havighurst³⁵ (1960) and has directed bearing on that element of personality theory to which philosophers of physical education have long directed some of their loftiest thoughts — character.

Looking at the individual's moral intent, rather than his deeds, the researchers found that they could isolate certain stable and persistent attitudes and ways of relating to others which formed "character structure." This structure*, they deduced, was built up over a series of advancing stages — from "amoral" to "rational-altruistic" — each corresponding to an appropriate developmental period in infancy, childhood or adolescence.

* The structure is not unlike other bio-social and psycho-social models. See, for example, Erikson⁹, 1950; Freud¹⁴, 1933; Loevinger²⁵, 1959; McCord²⁷, 1964; Piaget³⁸, 1932; Wilson⁴², 1967.

Unfortunately, however, Peck and Havighurst showed that the teacher has very little power or opportunity to influence the shape of his pupil's character structure. The patterns of motives and typical actions that each individual shows by the age of ten tend to persist through adolescence and, equally pertinently, the direct sources of children's moral values appear to fall into the following division of influence:

Mother	49.7%	Other adults	2.5%
Father	30.3%	Institutions	2.5%
Peers	5.8%	Vicariously experienced	
Older siblings	5.4%	figures	
Parental surrogates	3.2%	(TV etc.)	0.1%

Even though the population sample in this study was neither large nor cross-cultural, its implications are striking and have been virtually confirmed in another culture by May²⁸ (1972). His broadly-based survey showed that 43% of adolescents still look first to their parents for moral guidance and less than 1% help in this sphere from their school.

One of the merits of the Peck and Havighurst study was that it examined character and personality across several dimensions and over long periods. Eysenck¹⁰

(1960) has warned that partial studies are liable to lead to only partial understanding. If we wish to make convincing comment about character, our concern should be with the total personality: his physique, his physiology, his biography, his family history and all other objective information which might prove equally as revealing as his answers to questionnaires and performances on behavioural tests.

The limits of the teacher's power

It is appropriate now to consider the part the educator, and in particular the physical educator, can reasonably expect to play in the moral development of the children he teaches.

In the light of much of the theory and evidence just reviewed, it might seem that he has virtually nothing to offer: it has been repeatedly shown that the moral influence even of schools devoting special attention to moral training is infinitesimal compared with that of the home. It seems probable that essential character changes little during the years of normal schooling and one can infer from much research that moral growth is sensitive to many factors over which the teacher has very little direct influence. There is some evidence, for example, that honesty and "good" behaviour in school are related to intelligence and social class (Graham and McDonald¹⁶, 1968) and to religious affiliations (Bull⁶, 1969b). Crandall⁷ (1966) reports that girls are more strongly motivated than boys to appear "good," although they may therefore be prone to dishonesty when this is the only way of winning the approval of others.

Both Catell⁶ (1965) and Eysenck¹⁰ (1960) hint that high moral standards come more easily to some personality types than to others. The extrovert, for example, though sociable, tends to be impulsive, unreliable and quick-tempered and the neurotic-extrovert (unless his moral training has been very persistent) tends to be less able to resist temptation than the stable introvert (Eysenck¹¹, 1964). As a third example, neurotic-introverts appear to score poorly on measures of conscientiousness and it is from this group that many of the most successful sportsmen are drawn (Ogilvie et al³⁴, 1967).

The potential of the teacher's power

For all these limitations, however, the teacher's moral task cannot lightly be dismissed. The Newsom Committee³² (1963) were convinced that:

teachers can only escape from their influence over the moral and spiritual development of their pupils by closing their schools.

Strong support for this view has come recently from an extensive research enquiry by Minuchin²⁹ et al (1969) into the effects of schools varying in educational philosophy and practices from "traditional" to "modern."

Bull (1969a)⁴ too, is convinced that all pupils are influenced by the ethos and discipline of the schools they attend and by the attitudes of the teachers towards their pupils as individuals.

Children, he believes, become moral by living in a community in which honesty and generosity are valued; which is just and which, therefore, encourages the individual's protest against any injustice which might occur there.

Ideally, the school can be such a community, providing the teachers are prepared to expose their own characters in the manner of their pursuits and in the regulations they impose on their own conduct. It is, after all, the moral element in the teacher's methods — his concert for the manner and quality of the procedures he adopts and his "respect for persons" — that distinguishes him as an educator rather than a trainer (Peters, 1970)³⁶.

If a child is allowed to see adults having to make moral decisions and to give practical reasons for their principles, he is much more likely to progress towards the rational-altruism and moral autonomy referred to earlier, (Wilson⁴², 1967; Peck and Havighurst³⁵, 1960; Kohlberg²², 1964) and less likely to become a moral replica of someone else.

All this demands much of the moral reserves of the teacher. It pre-supposes that he himself has attained a high level of moral development and is anxious to lead his pupils in the same direction. To his advantage — and this is probably at its

optimum if he teaches in a small boarding-school — he is often in a strong position of influence as a leader figure at some of the critical stages in the course of the child's moral development, especially if his leadership rests on more than his social role and authority. The academically successful pupil often looks to the teacher of his "strong" subjects as his natural leader in more than his academic problems and the athletically-talented child may, similarly, make of the teacher who shares and excels in his own field of active excellence a model of many facets. The hero-teacher's power as a reinforcer of behaviour may thus be more widely applied than in specific subject areas.

The dangers of the teacher's power

Such power may, of course, corrupt. The physical education teachers himself may be the disciple of his own rigid moral code and unable to foster any ideal outside his own realised experience (Laidler, 1971²³). As a victim of his own personality, moreover, he may depend for his own professional rewards on the achievements and admiration of a few of his more gifted pupils. His approach to these may become seductive and will be seen to be so with resentment by the majority; he will be judged "unfair" by that majority, and his influence on the minority, like that of the possessive parent will be morally stultifying, since:

the wider the range of people who influence the child and the less he is dominated by admiration for any one, the more readily his ego-ideal will be transformed from the image of the person he wants to become into a scheme of values he wants to see valued among people generally.

(Wright, 1971)⁴⁴

Catharsis and aggression

The physical educationist, by his very role in the community, holds a privileged position from which to observe child and man in rule-dominated situations. The influence he exerts on others and their attitudes towards rule-formation and rule-observance may well depend on some of the theoretical issues which have been discussed above. His whole approach to his responsibility as an educational mentor may, for

example, be linked to a person spiritual philosophy which equates "moral" with "religious" or which assigns moral "will" to the individual conscience. He may then advocate strongly the control of passion in and through sport, as in all other dealings with one's fellow-men, and place great emphasis on the sub-domain of physical activity which Kenyon (1968)²⁰ has called "ascetic." He may also speak of the "catharsis" of strenuous activity, with reference to the displacement or reduction of an anti-social aggressive drive.

Certainly, physical activity can provide outlets for energy and by so doing may sometimes divert it or allow it to be tapped off until it falls below the aggression threshold; but there are dangers along this line of thought. If we assume aggression to be a primary drive, then perhaps we should also assume that secondary reinforcement will take place when the drive is reduced. If Rugby Football is, in other words, an outlet for aggression then presumably for some players the vicious tackle can acquire reinforcing characteristics, especially if there are such added "incentives" to tackle hard as the "hard man" reputation vaunted by some coaches, spectators and fellow-players.

What should also spur the physical educationist to outcry is the apparent confusion of catharsis with expiation which still exists in the minds of some leaders not only of public and educational thought but even penal reform (The Times, 2/1/72). The parade-ground sentence of "extra drill for misdemeanours" is still alive in some schools, although the belief that the child can expiate his class-room or social "sins" through physical penance is doubly distasteful: it reduces morality to the level of credit-debit accounting and it often sours a child's association with the gymnasium or the games field at the same time. One might just as inappropriately punish a child for failing to perform a front somersault by forcing him to sit through "King Lear" or Beethoven's Ninth Symphony.

Although most of the arguments concerning catharsis are unconvincing (Arnold,¹ 1968) when they relate to vigorous physical "release," the theory of Lorenz, that many

moral tenets reflect biological needs and patterns, is worthy of scrutiny by the teacher of physical education. Most pertinently he demonstrates why it is natural for man to seek out competition and simultaneously to make it clear that his competing is basically a form of co-operation. Through sporting activity man can fulfil a need to show courage and to make self-sacrifice to the group while observing its rules, especially if the challenges and dangers are realistic and demanding.

Physical education for the "normal" child

There are obviously limits to the inferences which can usefully be drawn from animal to human behaviour, and many physical educationists might prefer to seek an explanation in the "social-group" theory of morality for the issues raised by Lorenz. In a simple translation, one might argue that morals are "normal" to human group life; various forms of isolation lead to retardation and abnormality (J. Myrtle James, 1967)¹⁹. If, however, the teacher believes his pupils have a need to conform to group standards and mores, he will still have to decide how he intends to facilitate conformity and what kind of conformist to promote: the boy, perhaps, who "plays the game" according to the unwritten rules of the "gentleman," or the girl, according to those that will make her "lady-like?"

But, whatever his bias, a fundamental objective of the physical educationist must surely be to make each individual child articulate in some of the physical skills which are consistently valued by his group. In this way he enhances social communication, confidence and versatility: the individual is assisted in moving across some of the social boundaries created by age, sex, language and class, without loss of dignity or self-respect. It is possible indeed, as Hume (1911)¹⁸ has shown, to argue that no social man can ever be wholly "normal" or "good" who reclusively shuns social exchange on the physical plane. The argument may be presented from a pragmatic viewpoint: that participation in shared physical activity is a vital contribution to community health and, in the case of boys especially, is essential to cultural and physiological maturing (Lehmann & Witty,

1927)²⁴. Or the argument may be more lofty: that many of man's "natural feelings" spring from the body which through strong, skilful and graceful movement contributes to the beauty and "good" in man's environment (Hume¹⁸, 1911). The production of beautiful movement, like the creation of a work of art, is a social act: It conveys to the beholder a share of the satisfaction it produces in the creator.

"Exclusive" physical education

A problem is presented by the pupil who rejects the pupil-role towards which the teacher is trying to guide him. Murdoch (1971)³⁰ illustrates the dangers in the traditional emphasis in many English state schools on the "instrumental" rather than the "expressive" elements of experience for the large majority of pupils who cannot reach the standards expected of them or do not think them worth striving towards. While the school might venerate preparation (especially of the mind) for the future, deferment of gratification, individual achievement and deference to authority and seniority, what matters much more to many pupils is immediacy of action and experience (especially through the body) in group activity shared by peer members of equal standing. If the school frowns on such emotional and physical "expression" then the children will find it elsewhere, as, for example, in street or "pop" cultural activity in the poorer urban areas.

Clearly, well-designed physical education programmes in the schools could help to bridge such gaps, but the signs, according to Start (1966)⁴¹, are not yet very encouraging: it is the pupils who accept the "instrumental" role and sublimate the "expressive" who find their way into school teams and into the warmth of the physical education teacher's approval. On the other hand, dancing to "pop" music, which the Schools Council (1968)⁴⁰ found to be extremely popular amongst adolescents, which meets all the "expressive needs" listed by Murdoch (1971)³⁰ and which is:

practically the only adult-approved way in which adolescents can experience and express physical abandon and sexual arousal (Blum, 1966)²,
is often cast to the periphery of the physical

educationist's sphere of concern. Quite often it is tolerated on a sacrosanct gymnasium floor only when rain floods the playground and the teacher, sentenced by rota to the day's lunch-time duties, is transferred to "police patrol" indoors.

"Play up and play the game!"

It was noted previously that the customary defence for many physical activities, particularly some team games, has been not that they were comparatively easy to organise or even that children enjoyed them, but that their influence permeates the "moral fibre" of the participant: that sporting "esprit de corps" carries over and broadens from games to a code of moral life*.

There is a little evidence in support of this view. Glueck and Glueck (1951)¹⁵, for instance, have found that, while a thousand juvenile delinquents were superior in such "biological" dimensions as emotional stability, courage and initiative, they were commonly lacking in affiliation to any of the teams — in the home, school or community at large — to which most of their non-delinquent peers showed loyalty.

But as Arnold (1968)¹ reminds us, we cannot teach loyalty in the abstract; we can only assist the child to direct his loyalty critically, not blindly, towards worthwhile ends. Nor can we teach any virtue through games as if it were some finite skill, for the motivational intricacies alone are bewilderingly complex.

Where then do we lay our emphasis when directing the child's moral attention? On perseverance in all problem situations; on fairness and open mindedness towards an opponent; on giving of one's selfless best for the group; or on respect for reasonable authority set up for the common good? There may be no obvious universal solution but Kistler (1957)²¹ has indicated at least one practical starting-point. His recommendation is that one should start moral training with an examination with the child of the "spirit of the rules" which limit the activity; that one should adamantly discourage any intention of "getting away

* For a poetic presentation of this theme, see "The Torch of Life," by Sir Henry Newbolt.

with" unmerited advantage and encourage co-operation with officials rather than the outwitting of them; and that one should set in high esteem "the thrill of playing an opponent at his best."

Such an "inductive" approach to moral education, to use Bull's (1969a)⁴ terminology, would appear to be far more effectual than the abstract or "deductive" morning-assembly morality. Piaget (1932)³⁸ points out that before adolescence and the stage of "formal operations," abstract principles in moral judgment is from specific but varied experience of human relationships to general principles rather than in the other direction.

The learner and the teacher

As we move closer to the ground on which practical teacher-pupil problems of right and wrong are faced, we draw increasingly from learning theory and the "cognitive-developmental" view of moral behaviour. The superficial cues are the same again: we should doubt any claim that

desirable moral and social qualities may be inculcated in the young through the medium of formal instruction.

(Douglas, 1938)⁸

The less superficial implication is that human beings learn to behave by acquiring ways of responding to social situations through their own activities, not because they have been told to behave. From the learning theorist's point of view, moreover, certain conditions are prerequisite if moral attitudes are ever to be transferred between two situations: the learner must, for example, see and identify like and meaningful elements in "meaningful situations" and be shown how to draw generalisations from his specific experiences (Sanborne and Hartman, 1970)³⁹.

If, like Nixon and Cozens (1959)³³, we accept that to be meaningful a situation must be "life-like," and if we intend to influence the moral behaviour of the young through such media as gymnastics, or games, it seems wise to consider, firstly, whether the young see similar elements in "game" and "life" situations and, secondly, whether the school, including the games-field and the gymnasium, represent a

life-like environment. If these conditions obtain, then the child may indeed learn that the "good" behaviour which is rewarded (reinforced) in the game situation by the praising teacher also gains rewards in "real life:" others react warmly towards him whom they assume means well and is able to temper potentially threatening strengths with courage and consideration.

If they do not obtain, however, the teacher's influence diminishes markedly. He himself may appear to the child as a less than real figure: a man amongst boys who has spent most of his life in school and much of it playing unrealistic games.

From this point of view alone, those activities seem valuable which take the physical educationist and his pupils out together into realistically challenging situations. Not only can a climbing expedition show a pupil that his teacher is prepared to trust his skill and co-operation absolutely; it can also show him that the pupil-teacher gulf can be crossed with dignity when there is mutual respect. If more discussion takes place at this level it may well strike the pupil for the first time as meaningful, for while it is crucial that the child should detect unanimity in the staff who teach him, over the importance of commitment to basic moral principles, it is equally crucial that he be exposed to diversity of judgment over their application. The way to autonomous morality lies through separate examination by the individual and separate validation of his own moral decisions, not through reliance on authority and power.

The teacher is poorly equipped to help his pupils find such autonomy in this professional role is so restrictive that he is inhibited from being personal and feels compelled to present an impenetrable, infallible, safe and conservative front on matters like social problems, religion, sex and moral values. Under these circumstances, teachers are seen as "not fully human." (Wright, 1962)

The physical educationist's role allows him from time to time to "regress" to the games-playing level of behaviour where, although he does not quite meet his pupils as an equal, he can at least relinquish some of

his social superiority to the game itself. When, however, he reverts to the "real" world of reciprocal adult relationships, he is frequently unwilling to "take his pupils with him" and his cloak of authority shuts out the social feedback which would normally inform him of the interpersonal offences he commits in the process.

According to Nixon and Cozens (1959)³³, the teacher in a democracy has a duty to "lift" children's play towards the "real perspective" of adult society, by eliminating tyrannical leadership; by arousing and enlisting the interested co-operation of the participants in such a way that they believe they have the responsibility for the successful outcomes and the moral and social tone of the projects of the game, not the leader. In practical terms, this demands leadership by one not too quick to solve the group's problems. It also presupposes a reluctance to force the pace of development of group interaction beyond the level of natural interest, needs and limitations, for, while it may be pleasing to see the enthusiasm with which 7-year-olds enjoy playing football in the "real" colours and inside the "real" rules of the game played by their adult-heroes, it is sometimes quite the opposite to hear the emotionally-charged emphasis from some touch-line coaches and parents on winning, and even on inflicting bodily harm, which is reminiscent of some of the vast arenas of professional and commercial sport.

The teacher and the parent

When one remembers the prepotency of parental influence on the attitudes of children, it is perhaps regrettable that physical educationists, like most teachers in this country at least, share so little with parents in the discussion and execution of planned educational programmes.

It is difficult as yet to foresee any very effective co-operation between parent and teacher in the inculcation of socially-valued ideals of conduct, and, even though the teacher in a Western democracy may find many of the principles of Communist doctrine untenable, moral educational methods adopted in some of the Communist states certainly merit examination. In

Russia, for example, physical fitness is almost universally accepted as a duty of the future builder of the state;

it enables him to work more efficiently for the good of the community.

(Grant, 1964.)¹⁷

And even if this smacks more of ideology than practice, there is at least a net-work of agencies ensuring that the parents are kept well-informed of developments in educational policy and of the implications for them of those developments; a hierarchy of influences extending from the Minister of Education to the Parents' Committee Praesidium shapes the parent's role, as well as the child's, in moral education.

The moral?

It is invidious to argue that the teacher of physical education has any more to contribute to a child's moral development than any other teacher, for every child will interpret every teacher's actions and motives differently (Loevinger, 1959)²⁵.

But he does have a major advantage in that he is dealing for the most part with children in situations which demand practical action inside social limitations and these are the conditions essential for moral growth. Moral development is more than periodic increments in a vocabulary of abstract concepts. It must be:

made real in real situations, for character is a matter of action.

(Neumann, 1923.)³¹

The physical educationist would do well to remember that even the "play situation" is very real for the child, especially for the child who knows he is being judged by those whose respect he needs. It is the "conscious realisation" of practical experience, as Piaget (1932)³⁸ described it, which allows the child to build up a moral theory for himself.

An awareness of factors like these and of some of the other issues which have been raised elsewhere in this discussion should serve to remind the physical educationist that his greatest responsibility is towards the child moving not only in space, time and various degrees of fluency but in a world of human relationships. To ignore this cen-

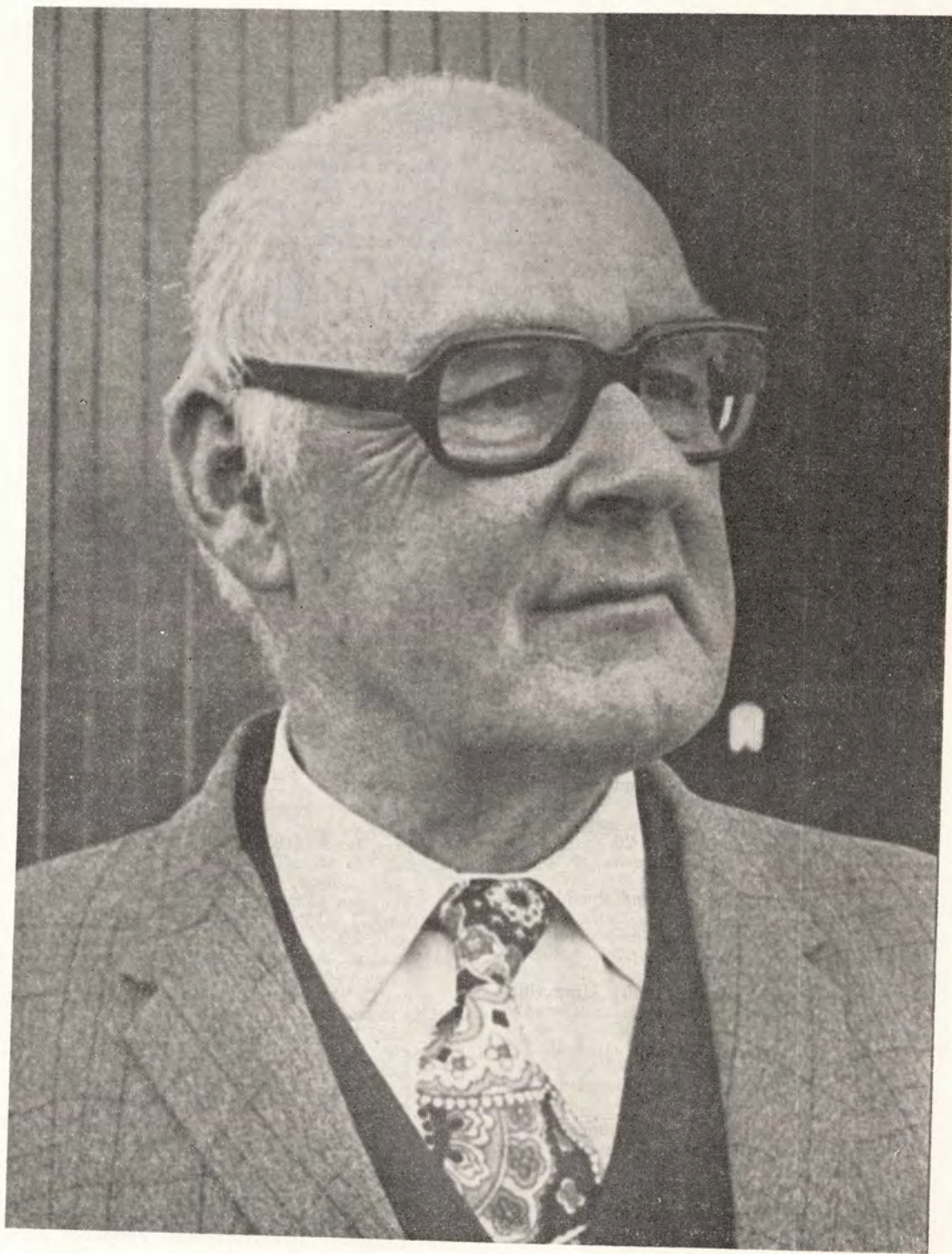
tral fact is to devalue physical education; it becomes:

a subject devoted to strength with no cause to serve, skills with no function to perform, endurance with nothing worth lasting for.

(Sanborne and Hartman, 1970.)³⁹

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N.Z.A.H.P.E.R.
THE SIR ALEXANDER GILLIES MEDAL
FOR DISTINGUISHED SERVICE TO THE PROFESSION — PRESENTED TO
PHILIP ASHTON SMITHELLS

ON THE OCCASION OF THE 25th ANNIVERSARY OF THE UNIVERSITY OF OTAGO
SCHOOL OF PHYSICAL EDUCATION

The members of this Association recognise, and honour your outstanding service to the Physical Education profession.

It was our extreme good fortune that you were so profoundly influenced by Reginald Roper at Cambridge in 1932 that you made Physical Education your life's work. Even before you arrived in New Zealand in 1939 to the position of Senior Inspector in the role of Superintendent of Physical Education your influence had been felt: you have travelled to the U.S. in 1938 on a Board of Education Studentship, and had Chaired the 2nd World Conference on University Physical Education at Zurich in 1939.

Position and responsibility came to you early in New Zealand including appointment to the Sub-Committee on Physical and Health Education of the Thomas Committee on Secondary Education, 1941-42, Fellowship of the New Zealand Physical Education Society in 1939, Chairman of the Examination Panel, 1942-49, N.Z. Delegate of the Federation International D'Education Physique since 1947, and President of the New Zealand Physical Education Society, 1945-47.

But it was in 1947, on assuming the position of Director of the newly founded University of Otago School of Physical Education, that you were to find your greatest professional challenge in New Zealand. Even while guiding your Special School in what was to you academically important and professionally right you were to achieve international recognition for yourself and New Zealand — N.Z. Delegate and Plenary Session speaker at the 2nd World Lingiad in 1949, Corresponding Fellow of the American Academy of Physical Education, Carnegie Travel Award in 1949, and travelling guest speaker for the Canadian AHPER in

1955, Opening Speaker at the World Conference on Physical Education in Melbourne, 1956, Foundation Member of ICSPE, 1956, and many, many other important international positions of responsibility and honour.

In your own University of Otago you have been honoured with a Personal Chair, while your leadership and stature in University affairs generally was recognised in 1972 when you were elected National President of the New Zealand Association of University Teachers.

In addition, and apart from your extensive writing (over 100 publications), you have maintained your interest, and involved yourself at the grass roots of New Zealand educating, including responsibility for 40 Primary Refresher Courses, selection and training of nearly 200 3rd Year Specialists, Chairman of 5 National Secondary P.E. Courses, lecturing in all the Teachers Colleges, visiting nearly all the State and Private Secondary schools in New Zealand, teaching demonstration lessons throughout the country, conducting tented camps for school children and university students for 30 years and even then finding time to serve as Chairman of Kaikorai Valley High School Board.

You have done so much more besides all this. But for all that you have done for education in New Zealand, and in particular Physical Education, we congratulate and honour you. Throughout your 34 years in New Zealand you have dedicated your life's work not only to what you believe in, for Physical Education, but you have set an example to your colleagues and fellow professionals, and in this year of your Silver Jubilee at the School of Physical Education we in the profession salute you. "Thank you Philip Smithells."

The Ideas of Melchior Palagyi Regarding Consciousness and Life

J. W. Postma

Melchior Palagyi (1860-1924) was a Hungarian mathematician and philosopher who worked in Germany for many years. He died in Darmstadt in 1924.

As early as 1901 he published a "New theory of space and time;" this became the basis of the theory of relativity which developed later. He may be called the spiritual father of this theory, but he was nevertheless the man who eventually demonstrated its untenability. (3)

The problem of consciousness and life, of the nature of mental activity and the vital processes particularly claimed his interest. In his "Naturphilosophische Vorlesungen" (Lectures in Natural philosophy) he maintained the unity of the mind and the vital processes of man, in opposition to the Cartesian or Kantian theory of the

duality of soul and body. He also criticised the psychologists' views with regard to these concepts at the beginning of this century. In his book "Wahrnehmungslehre" (Theory of perception) Palagyi developed his ideas further, especially in connection with his theory dealing with imagination.

"Scientists will need decades to assimilate and adopt these discoveries and Palagyi's new approach to them" (4, VII). The English philosopher, Boyce Gibson, writes of him: "There is no mistaking the originality, the penetration and the rare quality of this remarkable thinker." (1, p. 15.)

In this article we will discuss some of Palagyi's ideas which are of special importance for physical educationists.

The main theme of the Lectures in Natural Philosophy, in conformity with the principle of Polarity, is the relation of op-

and the Importance of These Ideas with Relation to Physical Education..

position and unity between life and mind. Palagyi's own conceptions and solutions are here largely determined by his antagonism to the whole "psychologistic" school of British Empiricism, whose way of Ideas rests on the systematic confusion of the vital and the mental. The sensations upon which their theory rests are vital phenomena, but they are treated as mental and made the subject-matter of psychological study; whereas a vital theory belongs not to Psychology but to Biology. It is therefore the essential business of a reformed Biology to reclaim what Psychology has thus misappropriated, and not only sensations but feelings also and the whole life of imagery. (5, p. 104.)

Palagyi differentiates sharply between life and mind — in other words between

vital processes and the activities of consciousness.

We all understand what consciousness is: it is awareness. When a man says "I am conscious" he means that the "I" is the very centre of his personality, of his consciousness and his ways of thought and perception. This Palagyi calls the human spirit or mind.

When Palagyi writes about vital processes he means firstly physiological processes. He points out that a great many of these physiological or vital processes will never, as such, enter the consciousness. For instance we are never, while we are moving about, conscious of the chemical transformations taking place in our muscles.

He writes: "A secret life goes on within the cells, organs and tissues formed by

division, differentiation and specialisation of cells. This secret life is not immediately accessible to our consciousness." (5, p. 7.) He calls these the vegetative processes. "The changes caused by these processes may be made known to the consciousness by vital messengers viz. the sensations and feelings." (5, p. 7.) If something goes wrong with the central nervous system, a headache will result, or if the digestion fails to function properly a stomach-ache may appear. On the other hand, if all goes well there is a feeling of well being, of euphoria. All such vital processes — feelings for instance — which have direct contact with consciousness, Palagyi calls animal processes. And besides feelings he distinguishes two more of these animal processes namely sensory impressions (*Empfindungen*) and phantasies or imagination. Sensory impressions (visual, auditory, tactile etc.) are vital (animal) processes through which we make contact with the world of inorganic nature. In this way we derive knowledge of the world around us. This sounds very similar to the existensialist-idea of being-in-the-world through our body.

"Feelings, sensations, imaginings, these as such are vital, not mental phenomena. They are the three main forms of animal vitality and are closely bound up with the functions of the vegetative life of the organism of which we are not and cannot be directly conscious, and whose neural basis is the sympathetic system." (6, p. 96.)

Sensory impressions of which our consciousness is not aware do not exist for us. For example an impression of light on the retina goes to the brain via the nervous opticus. Only when mental activity has taken place, with the assistance of imagination, consciousness is established and in this case conscious perception.

Boyce Gibson writes: "The factors of organic life stand in organized and graded relations to each other. The primary distinction is between the vegetative processes that can have no immediate contact with consciousness and the animal processes which precisely have this immediate contact (5, p. 221.) Of these latter processes the feelings mediate between consciousness and the

vegetative basis of life and give us the only immediate acquaintance we have with our own vital processes, sensations connect consciousness with the world of mechanical movements, and lead thus to the knowledge of the world as a mechanical order; and the processes of Phantasy or Imagination, rising up on the basis of feeling and sensation, and showing different stages of maturity in its own development, culminating in the "symbolic" that is peculiar to man (5, p. 215), are essential not only for the unifying work of mind, but also for our conscious acquaintance with a world outside us." "It is incomparably wonderful" Palagyi writes, "that life can behave as if the living subject has been moved to some other place in space or some other period of time without, in actuality, moving at all." This is the imagination or the phantasy process, namely the snatching away of the vital processes from the space-time moment in which they in fact are. Life is mechanically bound to one place, but vitally it can free itself from its bonds. This freeing itself by the vital process we call a "flight of fancy." This is the one process, this of imagination, by which life differentiates itself from the mechanical world. The imaginative or phantasy process must be considered as the highest evolution of the vital process.

By means of imagination we can transfer ourselves into the sensory and vital processes of other people, and we may live in our own past or in the future. And the most remarkable aspect of this process is that it is only through the imagination that we can perceive reality and the manifestations of the present.

The virtual or imagined movements play a fundamental part, not only in the realm of imagination, but in that of perception as well.

Palagyi defines a virtual movement as follows: "I call that type of vital process through which we live ourselves into a movement without really making it, imagined movement or motional phantasm." (5, p. 124.)

"Virtual movement must be classed as a vital process. In itself it is neither mental (psychical) nor mechanical. It is not men-

tal, for long before the infants intelligence becomes active, the process is busy, transforming the random movements of hand and eye into movements that are directed and purposive. Even in movements that have become wholly automatic, these virtual movements are still operative. So long as the real movements to be guided by their agency are new and strange to us, their presence can easily be traced, but with repetition and habit the less noticeable does the virtual guiding become, until in the end it passes from consciousness altogether. But as an "automatic imagination" it still guides our movements when the control of consciousness has been withdrawn." (1, p. 165.)

An imagined movement is not an actual movement, nor does it represent a movement in any way; it must also be distinguished from an impulse to move.

Without virtual or imagined movement, an actual movement would have no direction or purpose.

When one thinks about something and is driven along by one's emotions, the intensity of virtual speech leads to union with the impulse to move, and the subsequent soundless movement of tongue and lips. Apparently reflection about virtual speech is the best means to understanding that virtual movements are in an original class of their own. Intense rhythmical music inspires virtual movements, which combined with the urge to move, discharge into actual movements e.g. drumming of the fingers on the table or dancing. And in connection with perception: it is not the sensory impressions (*Empfindungen*) which give us the shape of an object, they are there only to stimulate the imagination which then makes us aware of the shape. For example when I cover the round edge of a glass with my hand, I do not realise the circular form of it by means of sense impressions, but these latter stimulate my imagination and bring about a virtual movement around the edge of the glass so that I then know it is circular. It is an amazing fact that we become aware of the actual spatial arrangement of things, including our own body, by means of our imagination; without virtual movement we should not have the faintest

notion of the arrangement and structure of the actual existing world around us. In other words: "our knowledge both of space and of the external world is mediated through virtual movement. The ability to localize a spot at which our skin has been touched means that we can imagine a movement directed towards that spot, and that imagined movements will guide the real movement thither. Similarly when we claim to perceive a body in space we primarily mean that we can imagine the movement needed to reach and to explore it. Virtual movement is the very basis of all spatial perception. (1, p. 169.)

Not only our ability to move has its own form of phantasy, every sense organ has its own type of imagination, and in particular the sense of touch, of hearing and of sight.

Palagyi ascribes a two-fold function to imagination:

- (i) that of helping to bring about perception;
- (ii) that of liberating life from the fetters of external sense and enabling it to develop a world of its own. The first he refers to as direct, the latter as inverse. (6, p. 99). Direct imagination has its root in the sensory life, inverse imagination in the life of feeling.

Let us now look more closely at Palagyi's views on the connection between vital processes and consciousness, and the nature of mental activity. Vital (animal) processes can penetrate into consciousness, that is, may become aware of them. Consciousness is a state in which the "I" thinks about something. It may for example be thinking about vital events (sensory impressions, feelings or images) or about thinking itself, the activity of thinking or willing. The object of our thinking is to consider mental subjects or ideas; an activity of the will has the purpose of performing some action like lifting an arm sideways. Usually these activities are combined, as for instance when I see an object, I identify it as a pencil and by means of an act of will, pick it up.

Palagyi specifically uses the terms vital processes and mental activity.

"Thought, consciousness, mind, these are essentially discontinuous, and of the

nature of acts, not processes. Acts are instantaneous, and they punctuate the flow of organic life, guiding it and giving it significance without in any way losing themselves in so doing (5, p. 247). Acts are neither spatial nor temporal; they occupy no room in space, and their action is not spread over an interval. Processes on the other hand, are spatio-temporal, and have the continuity characteristic of all that is spatio-temporal and of all that lives." (1, p. 159.)

To elucidate these statements:

1. Our lives are an alternation of sleeping and being awake. During sleep the vital or physiological processes are continued, while we are not conscious. This means that the state of consciousness may be interrupted, but the vital processes go on.

2. Palagyi maintains that if the activity of thinking were continuous, an uninterrupted flow, the meaning of one word could not be distinguished from the meaning of another word, or the contents of a phrase could not be distinguished from the contents of another phrase. In other words: our speech would not be articulate.

3. If our powers of perception did not consist of a limited number of perceptive activities per second or per 5 seconds, but were continuous, even for short periods of say 0.5 or 0.001 second, then we should perceive as much as we wish; there would be no secret of nature hidden from us during that 0.5 or 0.001 second. A slow motion film of a movement would tell us nothing new.

As Palagyi writes: "then natural events would convey all nature's secrets to us at a glance; we would be able to penetrate into the most insignificant detail of any event and should be able to experience whatever happens in a millionth part of a second. In fact nothing however infinitely small, would be hidden from us. Then of course natural science would become unnecessary, for we should need no apparatus to discover nature's secrets. Then Heraclitus would be correct with his "panta rhei," everything is continuous, all is change.

This is certainly the case with mechanical and vital phenomena: rocks break up,

metals oxidise, water evaporates and so on. That is continuous change. We see it too in living organisms, between birth and death.

4. As certainly as humans have a time concept, so they have the concept of a mathematical point of time (e.g. of the present as dividing past from future), and with equal certainty the act of thought through which we mark this temporal point off on the time-line takes place instantaneously in a point of time of ideal mathematical dimensions." "This," adds Palagyi, "is the pure logical proof of the punctual character of our mental acts." (5, p. 249.)

According to Palagyi mind and life are in a state of polarity e.g. they are contrasts which form one whole. He describes this as mind and vitality which make up the "I," or mind and soul. Polarity is not merely a contrast but essentially a mutually complimentary unity.

As we have already seen, Palagyi's view is that the positive characteristic of all mental (conscious) activity is inherent in their intermittent character.

"If we could carry out two mental acts simultaneously, it would mean that the speed at which the two acts followed each other would have become infinite, so that no time at all would be needed to proceed from the one act to the other, and we could therefore carry out as many acts as we liked in an indivisible part of time. There would then be no need for us to drag our weary way from one thought to the other: we could grasp an infinite realm of thought instantaneously. We should be gods. (5, p. 248.)

The vital processes form a realistically visible stream, while the mental acts are invisible and abstract because they are not continuous, but completely momentary and therefore intermittent.

Mental acts take no time, they are merely the terminal points of vital processes or else their starting points.

Vital (animal) processes recast themselves as it were into mental acts, as in the case of perception, or else they flow out of mental activities as in activities of the will. In short: mental acts limit vital processes and give them form and structure." If

mental activities were continuous the world around us would be an amorphous stream, i.e. something quite inconceivable.

Palagyi calls two mental acts which follow each other in time and which are connected through a vital process, mental pulsation or the pulse of consciousness, a metaphoric indication of the discontinuity of mental activities.

Palagyi distinguishes between material consciousness and consciousness of self. In the first we concentrate on the outside world and in the second on oneself.

Our attention may be fixed either on the time spatial, visible world, the outside world, or upon our own mysterious selves, the invisible "I" in us.

During a lecture the attention of an audience repeatedly wanders off among its own images, thoughts or feelings. We all know this see-saw of the attention very well.

"An adult has to change over in seconds, even in part of seconds from material to self-consciousness and vice versa. In short, we discover the polarity of consciousness which gives man his typical human character and which forms the basis on which man builds up his culture." (4, p. V.)

In animals the material and self-consciousness are not separated, which means that the very great contrasts or polarity of direction do not appear. This latter is the characteristic of man. The whole personal development of man, the unfolding of his powers, is carried on in contrasting pulses of consciousness, so that the principle of the polarity of our consciousness includes the principle of evolution as well.

In the preceding article I have endeavoured to present some of Palagyi's ideas which I consider of importance for physical educationists.

An attempt to set out the idea's diagrammatically, gives us the following:

Let us now analyse a few physical education situations and try to explain them with the theory of Palagyi.

1. Correction of faults in the execution of old fashioned Swedish posture exercises.

In order to correct the numerous postural mistakes in the positions of the head, arms and shoulders etc. the student had to

take up a certain position for a short time, before he could go on to the next. This could be explained as follows: seeing that we can perform so limited a number of perceptions per second, it is impossible for the teacher to see all the mistakes made during a movement which lasts for such a comparatively short time and introduce the necessary corrections. The logical outcome was that the student had to remain in one position for a short time, before he could change to another.

The same holds true for the student. It was impossible to register the positions of head, arms and shoulders etc. at the same time. Necessarily therefore the exercise had to be performed as a number of positions.

2. Slow motion films of movements make it possible for us to pay attention to details which escape us without that visual aid. Our powers of perception allow of only a few perceptive acts per second, with the result that our unaided sight perceives any movement incompletely.

Why then does this series of momentary surveys seem to be complete and why do we imagine that we are seeing all of the movement? The answer is that perception arouses in us images of movement; in other words we perform the movement spontaneously in our imagination and for this reason the separate acts perceived acquire cohesion and the movement acquires sense and meaning.

3. Attainment of skill in sport.

As an example we take the practising of a tennis stroke. After a demonstration of the stroke, the coach analyses it (grip, stance, swing, etc.) in order to give the student a mental "picture" of the shot. Subsequently the pupil learns to perform the movement, while he is encouraged to control and correct his movements consciously. The pupil will experience the difficulty of dividing and shifting his attention during the (slow) performance of the movement and the coach, in order to make the necessary corrections, will have to interrupt it for the same reason as has been discussed in examples 1 and 2.

When the basic strokes have been mastered in this way, that means, when the

pupil is able to execute them in the favourable circumstances of the coach throwing or hitting the ball on the spot which is the easiest for the pupil to return it, they are applied in play. However, it happens that in the emotional atmosphere of the game the consciously acquired technique is forgotten to a great extent. The player's pattern of movements changes completely.

In a specific situation when the ball has to be hit, the pupil spontaneously and unconsciously creates a virtual movement which he puts into practice and which often deviates altogether from the studied pattern. The average pupil is attempting to solve his problem in his own way, usually without much success, because his manner of hitting the ball which has become intuitive, is a weaker solution of his problem kinesiologically, than the one he has been taught. Similarity between what he has been taught and his spontaneously applied movement image is very much greater in a student who has great natural motor talents for tennis.

An explanation of this is that all consciously formed ("induced") images are less clear than, for example, images in dreams. The induced images of movement which the coach has tried to create for his pupils, are less intense and vaguer than the virtual movements which appear during the emotional atmosphere of the actual game. These last images drive out the first mentioned altogether. This example is an illustration of the problem in the methods of physical education, namely: what is the best way to learn certain movements.?

Rather than through the understanding, that is via the intellect, consciously, is there any other way of arousing or producing in the child spontaneous movement images which will be similar to patterns which satisfy the kinesiologic principles of total body movement, flow through the whole body, of the use of the centre of gravity of the body, of the building up of sufficient momentum and of the economical use of energy? To learn a movement is, according to Buytendijk (2, p. 426, 434), a functional

process, i.e. the activity of the individual is intentional, aimed at a certain goal. There is always a movement plan, a pattern, a scheme, a movement gestalt. The individual adapts the gestalt to the situation. One learns a way of moving. When we have learnt to write by hand, we are able to do so with a foot. At the moment we "write" with the foot for instance our initials, we adapt an inverse image of a movement, a virtual movement to the circumstances. The learning of movements is therefore a development of virtual movements.

When we teach a movement which is new for the pupil, we try to create a movement image in the pupil, by means of a demonstration. People with motor talent will imitate the movement easily; for the great majority, the process is difficult. Another way of creating certain movement images in pupils is by means of comparisons which call up images, e.g. bounce like a tennis ball, land like a cat or as serving in tennis, hit the ball as if you were throwing a stick over a hedge etc.

Developing the movement image could be done by the setting of tasks like throwing a ball to a figure of concentric circles, or in cricket, bowling onto a mark on the ground. The difficulties encountered in the learning of movement by analysing it has already been pointed out. These consciously aroused, induced images are not clear or alive. They are vague and weak and this method is open to criticism.

An interesting situation is the clash of two virtual movements. When we try to describe a circle with the foot and at the same time a figure eight with the hand, the two movements disturb one another. It is a clash between two induced, inverse images of movement (8, 71). We may try to do the movements slowly and switch our attention quickly from one to the other pattern. But because the pulse of the consciousness is limited, the conscious guidance of these two movements will have little success. In particular when the movements are done quickly the induced images of the movements will not be alive enough to be realised by themselves.

Other examples of the clashing of virtual movements we find in certain situations on the tennis court:

a. If, a player has decided to "cut" the next shot, but at the last moment changes his mind and plays a topspin shot, the clash of these two images of the shots he means to make usually result in a mishit.

b. The warning of the coach: "Keep your eyes on the ball" may be interpreted in this way: that by means of the sensory impressions made by the approaching ball, and a complex process of estimating the speed of the ball, the height of the bounce and the timing, a virtual movement is created in order that the movements of the body and ball will coincide, are adjusted and synchronized, so that the racquet and the ball will meet at the right place at the right moment.

But when a player allows his attention to wander and for an instant considers to place the ball somewhere else (which requires a different movement) although he keeps his eyes on the ball, then the inverse image involved will disturb the direct image of the movement and the result will be a weak shot.

4. When you have been asked: touch your right cheek with your left hand around the back of your head, your first reaction may be: "I have never done that before," or "shall I be able to do this?"

This shows that at that moment you have no virtual movement at your disposal to guide you and it is difficult to imagine what you have to do.

After a demonstration the image of the movement will appear but only becomes clear and alive when the movement has been carried out. The peripheral impressions received during the execution affect the (developing) movement image. It feels as if it is someone else's hand touching our cheek. How do we know that it is our own?

Palagyi points to the kinetic feelings which arise in the moving arm and hand and maintains that they give us the assurance that our own hand is moving over our cheek. In this connection he makes an in-

teresting remark. Descartes found the certainty of his existence in the fact that he was thinking: "Cogito ergo sum." Palagyi says this means "I am sure I am conscious, therefore I experience things (like sensory impressions, feelings, images). Instead of: cogito ergo sum, we may just as justifiably say: vivo ergo sum, I live therefore I exist. (6, 55.) The movement of the hand stroking the cheek gives us the assurance that it is our own hand. In other works the kinetic experiences of our own body is as strong a basis for the certainty that we exist, as our consciousness.

5. Expression and portrayal.

Feelings appear in bodily movements. The most subtle field of expression is the human face with its extremely delicate and varied muscular system. Then come the hands (and the handwriting) and finally the rest of the body. Feelings of joy, happiness, fright or rage are shown in quite different appearances and images of expression in different individuals, but, and this should be stressed, the expression appears unconsciously, it is the immediate appearance of the vital process, the soul.

It remains, however, the function of an individual, of a doer (subject) in contrast to emotional reactions such as blushing, becoming pale of fright or getting goose flesh. Expression and portrayal or transmitting of meaning must be distinguished from each other. In Dutch the difference is termed "uitdrukking" and "uitbeelding," in German "Ausdruck" and "Darstellung."

Portrayal is a purposeful form of symbolic movement communication such as gestures, pantomime, ballet, fashionable movements or imitations. In these interpretations the emotional states are more or less incidental, and in the case of acting, pretended. Only an actor who has great imagination can enter into the situation of the character whom he is portraying and presents movements which are full of expression and which appear adequate. A poor actor will only produce ridiculous movements, which are poor imitations of the real expression movements.

Another form of portrayal is to suppress the expression of feeling by, for example,

increasing tension of the muscles and in that way avoiding movements. In other words the spontaneous expression image is exchanged for an image, often highly valued socially, namely indifference or self-control. The behavior is then in accordance with an accepted norm or value, it is an imitation of a person with complete self-control, for example to be a good sport. The person plays a selfappointed part which may be altogether in conflict with his actual feelings, as in the case of "keep smiling." According to Klages (4a, p. 242) expression need not to be learnt, it flows "without knowledge and without will" from the soul. Portrayal however, is bound to the spirit, to consciousness and will, to convention, style or fashion, e.g. the way people shake hands, bow or dance.

An animal makes expressive movements too, but only a human being can mimic or pretend something. An animal that can make a gesture, a dog that can wink an eye, must be a bewitched human being, according to Buytendijk.

The understanding of expression images, e.g. the joy of an innocent, unspoiled child, is a process that takes place outside the mind, but must be regarded as an irreducible faculty which every human being and every animal possesses. It is a kind of attunement, a co-execution of movements, an intuition.

If a person is bound emotionally to his environment, and is therefore in an "emotional attitude," he is moved by the image of the expression movement and there appears in him the same feeling as that which gave rise to the expression movement. His being moved is actually an invitation to participate in the movement. When this happens, he experiences the same emotional state as those who carry out the expression movement. It is not even necessary to participate completely in the movement. It is enough to do it virtually, that is, in the imagination. (7, p. 229).

In physical education it was Dr. Rudolf Bode (1881-1971), the most important representative of rhythmical gymnastics on the continent of Europe, who stressed the point that only naturally executed movements, in

games, by labour, daily movements or otherwise, are full of expression. He considered the faculty of expression the very centre of the human being. And as Bode was convinced that his contemporaries had lost the ability to move naturally, on account of our artificial way of living with the over accentuation of intellectual development, he created a system of "expression gymnastics," in order to restore the natural movement and to reopen the "clogged channels." No wonder that he based his theoretical background on the ideas of Palagyi (and kindred thinkers) about the vital processes and consciousness.

6. Jumping over a ditch in imagination.

Palagyi writes (5, p. 124): "The performance of a movement is bound up with living in, entering into the movement. Without the ability to transfer oneself in imagination into the movement that has to be performed or has already been executed, no man would voluntarily be able to perform any movement at all.

The expressions "imaginary movement" or "an image of a movement" do not indicate clearly enough that these are actual vital processes and not thoughts or ideas or representations of movements. "Vital movement" may be a better way to distinguish it from mechanical movement.

Practically nothing can be comprehended or grasped of the vital process if its chief characteristic is diverted to sensory perception, and if there is no realisation that sensory perception is only the condition and basis of this vital ability or power, possessed by living creatures, of being able to transfer themselves vitally to places far away from where they are at the moment.

It is a miracle of higher animal life that man can do this without any mechanical or actual movement at all.

Let us take the example of a man standing on the bank of a ditch. In imagination he jumps over it. This image of a jump which might for instance have to be made to save his life, is from a practical point of view, not a jump at all. It is therefore understandable that in every day life which is mostly practical, the processes of the imagination are regarded as non-existent and entirely fictitious. But the man who

realises that a jump performed in his imagination, requires a nervous process as much as the actual jump, understands that imaginary perceptions also react to nervous processes. For instance, in the imaginary picture of the man trying to get over the ditch, appear either such inward perceptions as will see him reaching the other side, or else a predominating picture appears of his inability to get over, or of his falling in the ditch. This is a useful example, because the changing over from the imagined perceptions can now better be understood.

One notices too that the processes of the imagination pin-point their reality clearly when they become "involved with intense emotions." (5, p. 170.)

This kind of process described by Palagyi, appears repeatedly in physical education lessons. It makes no difference whether a student has to learn a handspring on the mat, a roll over the vaulting box, or a dive from the springboard, he will always imagine dangers or injuries because explicit virtual movements are missing, and in addition come feelings of fear, weakness and lack of confidence. On the other hand, if by methodical teaching and suitable assistance to overcome these difficulties, clear virtual movements are developed, feelings of joy, satisfaction and selfrespect will drive out his fears.

All dexterity, skill and quickness of movement depend on the development of movement imagination. If the virtual movements are not fully developed, they are diffuse and ambiguous; in other words they react to and are connected with a whole complex of related actual movements. Continued shaping and development make the images of movement more clear, more specific and the movements more accurate.

Eventually they become automatic, that is, performance hardly penetrates to the consciousness at all. Technical virtuosity depends on this automation.

Instead of automatic movements, Klages talks of vitalised movements, and he means by this therefore, that the images of studied, voluntary movements gradually become part of the "flesh and blood" and are consequently absorbed by the totality of vital processes.

Palagyi's views explain the vital nature of motor phenomena. With his keen insight he has thrown light upon the connection of practical life and our imagination.

One of the great obstacles to the acceptance of his leads, and consequently the reason why these ideas of his, which he published 50 years ago have not yet been adopted, is the fact that such adoption and acceptance means the discarding of the old idea of the dualism of body and soul, or of mind and matter. This dualism is deeply rooted in Western thinking, and accepted as being obvious. It actually needs courage and a great deal of mental effort to discard it. The difference between the dualism of mind and matter on the one hand and vital process-consciousness on the other hand, seems to be small. This is deceptive! Compared with the traditional point of view, Palagyi's conception means a completely different philosophic-anthropological approach. I am convinced that a study of his ideas will bear fruit in our thinking on and approach to physical education.

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Physical Education For the Intellectually Handicapped as Conducted at Kamo High School...

K. M. Shanly and Kathy Kain

As part of its extra-curricular activities the Kamo High School Physical Education Department runs a weekly programme for intellectually handicapped people.

Each Friday a group of about 20 adults from the Blomfield School and Workshop in Whangarei travels to Kamo to take part in activities which are designed on a socio-educational basis.



Photo: General body movements come at the start of the programme.

Photo from Northern Advocate, Whangarei

The mere fact that these handicapped people are welcome at Kamo High School does a great deal for their self confidence and dignity as human beings.

As well as providing a social experience for these people their presence in the High School is an exercise in acceptance, understanding, and tolerance for Kamo students.

The system of bringing the group into the High School is of much greater benefit than attempting to teach a physical education programme to them in their regular surroundings.

All the facilities of the gymnasium are made available, and Kamo students have been encouraged to watch, talk with the visitors, and assist with the general programme.

Activities include general body movements, rhythmic exercises, target training, and obstacle course, weight training, minor games, trampolining, and other developmental activities.

Because of the open acceptance of this group by the students, a healthy basis for active participation has developed. Those who are reluctant to take part are allowed

Right: Demonstrating an exercise to one of the students. (Note it is often necessary to stand with your back to the class.

Bottom: Karen Spehr from Otago University gives a little assistance on the obstacle course.

Photos from Northern Advocate, Whangarei



to sit and watch until they gradually condition themselves to becoming active in the group.

When an individual becomes sufficiently motivated, they indicate their desire to take part. Assistants are always nearby, and immediately help them to become absorbed into the group activity.

When this scheme was first mooted it was decided to experiment with a group of 12 not too difficult cases, 6 men and 6 women.

We were cautious at first, sticking mainly to tried simple exercise routines, weight training with the men and ball handling with the women. As we discovered more about the capabilities of the group we extended our activities to include minor games, added some music to the exercises, and increased the weight and repetitions in the weight training.

With a routine established we found we were able to increase the size of the group and allow spectators from both the Blomfield School and Kamo High School. At this stage there were still only two physical education specialists and a nurse from the I.H.C. working with the class, but it wasn't long before a number of senior students with free time volunteered to help, and so reduced the ratio of pupils per instructor.

A wonderful feeling of comradeship has developed between the High School students and the Intellectually handicapped with the students looking forward to greeting their guests each week, and the people from the I.H.C. Workshop eagerly waiting for Friday to come around.

The students greatest contribution comes prior to the commencement of the timetabled programme. During this time they mingle freely with the class in a friendly social atmosphere playing catches, skipping alongside someone, or bouncing a ball. Conversation is encouraged and bridges of communication established.

The other important role played by the students is that of helping members of the group through their exercises, in some cases moving limbs which refuse to go by themselves, demonstrating activities, helping to make up games, and offering continual encouragement.

We have found it increasingly necessary to maintain a regular pattern of activities right from the moment our Intellectually Handicapped friends step off their bus. They arrive about 11.00 a.m. (our interval) and walk through the school to the gymnasium where they are met by students who assist with the programme.

After changing, they enter the gym proper where some time is allocated for free activity. The planned programme starts with the group being led through a number of static positions, followed by locomotor skill, then a short rest. Next they go into a series of general body movements, strengthening, stretching and relaxation exercises; this is followed by the games part of the programme and finally a short cooling down period. When changed they are farewelled individually and seen safely to the bus which takes them back to Whangarei for lunch.

This routine of events is of the utmost importance, as the group come to expect certain things to be done in an order which they memorize. In providing the opportunity for physical activity we not only aim to help improve standards of physical health but are also sharpening the handicapped persons memory.

Many of the intellectually handicapped in our class suffered from muscle tension which had become a patterned response. A great proportion of time was therefore devoted to consciously controlled techniques to try to remove the muscle tension. We found that rhythmic exercise of fairly slow tempo had a good response from the class as a whole, and as the muscle tension was well established we found it beneficial to introduce these periods of rhythmic exercise into each session.

Another type of movement that encouraged neuromuscular relaxation was muscle stretching which tends to pull tightness out of muscles, and counteracts residual tension. Most of these exercises are done from a horizontal or sitting position on the floor, the class following the teacher's actions and words. The teacher's own ability to move and speak in a relaxed manner throughout this section of the activity is

extremely important. Many of the intellectually handicapped whom we dealt with were extremely attentive but any irregular movement or sound tended to enhance the return of tension. We believe that for those who attended workshops this period of concentration on relaxation of muscle groups would be beneficial.

An activity that proved enjoyable to the participants was that of different patterns of sound and motion that were required to be remembered by each individual. Again, this activity was done mainly from a sitting position on the floor and involved the use of arms, fingers, legs, heels, toes and faces. It must be remembered however, that even though enjoyment plays an extremely important role, the class must not be allowed to become over excited as this tends to hasten the return of nervous as well as muscular tension.

At the end of each class we incorporated a short period of conscious release of tension during which each individual concentrated on "making heavy" different parts of his body under the direction of the teacher. Again it is important that the teacher has the ability to use association words.

Even though relaxation was a major part of our programme it is very difficult to measure in a class such as this, where any outing or change in environment is reason for extreme excitement and this accentuation of nervous and muscular tension.

The following exercises have been compiled in the hope that they may help those who are interested in the field of physical education of intellectually handicapped. At the same time we do realise that this approach depends on the rapport established between the teacher and his class. These exercises are only representative of the programme. They are intended to be starting points from which you can build your own programme.

STATIC POSITIONS

SEQUENCE: Stand at attention, squat, kneel down on hands and knees, press to front support, roll round to back support, sit down, lie flat on backs, knees up, shoot feet forward and sit up, roll round to kneel and stand up.

NOTE: It has been found that students mirror a number of activities. For this reason it is often necessary for the teacher to demonstrate exercises with his back to the pupils. In this situation it is essential to have assistants helping the students simulate the positions demonstrated.

RHYTHMIC EXERCISES

1. Walking in time with music of two or three different tempos. Use different styles of walking, e.g. small steps, big steps, forwards, backwards, sideways. Associate moods or occasions with different types of walking.
2. Running.
3. Skipping.
4. An exercise for arms }
5. An exercise for legs } at each class
6. An exercise for trunk }

Motor skills can also be performed through the enactment of a story: which involves many activities such as climbing over a log, walking through long grass, opening a door, splashing through water, walking over a narrow bridge. This kind of imaginative spontaneous activity can be used to establish the mood of a lesson.

MUSCLE STRETCHING:

1. Sitting on floor, legs stretched out in front. Bounce body over legs to get head over knees. This exercise can be done initially with toes stretched to the floor throughout, and then with toes pulled back towards the head throughout.

Other variations: Spread legs apart, bounce over left leg, into centre, and over right leg.

2. Sitting on floor with knees bent so that whole sole of the foot is comfortably on the floor with hands on floor beside hips and fingers pointed forward. Push up onto toes and taking a good proportion of weight onto hands, elevate hips until trunk is parallel with the floor.

Variation: From the position where trunk is parallel to the floor push knees over to touch floor in front of feet. (This is difficult but any effort in this direction is beneficial in stretching muscles around the shoulder joint.)

3. Sitting on floor, put soles of feet together as far away from body as possible.

Let knees fall outwards. Grasping ankles slowly pull head towards feet.

Variations: Gradually bring feet in closer to the body until they are in as far as possible.

4. Finger stretching. Spread fingers out. Wrist stretching.

5. Head movements involving relaxation and stretching of neck muscles.

(Use of voice is extremely important when taking this exercise. Exercise should be taken very slowly.)

Lay head on one shoulder, then the other shoulder, drop head forwards and backwards, roll head in circle. Emphasise "heaviness" of the head.

SOUND AND MOTION PATTERNS:

Finger clicking, tongue clicking, clapping, rubbing, stamping, vocal sounds; these should be put together very simply and at the beginning using only two different sounds, then gradually building up until four or five sounds are used in a pattern. When some sort of order has been practised and established, static body positions can be included and finally motion with a particular sound, e.g. stamping on spot to stamping moving forward.

RELAY TYPE ACTIVITIES:

These create an ideal opportunity for assistants to show imagination; and using such things as ropes, benches, balls, bins, develop activities, which, though simple, give cause for some thought while being performed.

While carrying a ball jump across the gap between two ropes, climb through a hoop without dropping the ball, step over a bench, bounce the ball twice in a hoop, bounce it three times against a wall and return to the start placing the ball in a bin.

THE OBSTACLE COURSE:

This kind of activity is both exciting and beneficial. It presents plenty of opportunity for general body movement; motor co-ordination, and has a certain touch of glamour about it. Once again with a little imagination and sufficient equipment, one can create a challenging course, dangerous enough to give the more adventurous students a sense of pride from completing it, yet easy enough for the less mobile students to participate with some assistance.

MINOR GAMES:

Many popular minor games can easily be adapted for use with the I.H.C. One game we used to advantage was:

SCATTER BALL

A game for 6 to 8 players divided into two team.

Apparatus:

4 tins of different sizes.

1 paper bin.

1 softball.

Positioning:

1 X	O 1
2 X	O 2
3 X	O 3
4 X	O 4

METHOD:

Player 1 X throws the ball at the tower of tins. If he succeeds in knocking them down he retrieves the ball and tries to place it in the bin before the opposing player O 1 can rebuild the tower. The player achieving his goal gains a point for his side. When each player in Team X has had an attempt to knock the tins down, then the other side have their turn. When all 8 players have completed their throws the points are added up and a winner found.

Remember to keep everything simple and you will get a thrill seeing your intellectually handicapped students able to complete a simple task — their expressions will tell you if they are benefiting from your effort.

"They will care when they know."

A quote from the I.H.C. Magazine — 1972.

We don't ask people to care about our kids, but to know about them. They will care when they know.



Everybody joins in for a game of Scatterball.

Photo from Northern Advocate, Whangarei



AGGRESSIVE RESPONSES OF RUGBY PLAYERS

BRUCE HOWE

Few psychological variables have more importance for man than that of aggression. For the first time in history, man has the capacity through his aggressive impulses to destroy his own existence, yet the causes and control are largely theoretical and highly controversial.

Many theories have been proposed for the cause of aggression but may be summarized generally as fitting into two broad categories, either a biological or social learning framework. Most influential of the biological or instinctual theorists has been Lorenz (12) who sees aggression as the release of an internal capacity. Such theorists make much of the analogies between man and animal behaviour. However, these comparisons are generally simplistic and as Berkowitz (4) points out do not imply that the reasons for aggression are the same.

Most researchers concede some biological involvement particularly related to hormonal and chromosomal influences. Representative of these studies, Edwards (7), showed that the addition of testosterone to female rats increased fighting responses. Some of the most interesting and recent biological evidence relates to chromosomal anomalies and aggression. Several studies including Telfer et al (14) showed a high percentage of male criminals possessing an additional XYY chromosome.

Despite the acceptance of such evidence, social psychologists have claimed that while

some capacity for aggression may be biological, it is generally necessary for it to be triggered by some social experience or learned through conditioning or modelling. A classic study by Bandura, Ross and Ross (2) demonstrated the effective modelling of aggressive responses by nursery school children after viewing an adult carrying out aggressive acts through live observation, films and cartoon techniques.

The frustration-aggression hypothesis proposed by Berkowitz (3) and others suggest frustration will increase the likelihood of aggressive responses. Bandura (1) claims that the responses drawn may not necessarily be aggressive but will be those for which the individual receives some reward by his action, for example, class leadership. Both of these consider it highly possible to restrain or modify responses and that aggression is neither inevitable nor uncontrollable.

One relatively consistent finding in studies involving aggression is that contrary to earlier thoughts, aggressive acts are not necessarily cathartic but indeed may stimulate further aggression. This cathartic effect has been one of the justifications of team coaches for aggressive contact sports such as rugby.

Rugby is one of the oldest yet fastest growing games in Canada. A game that spawned Canadian and American football, it is achieving a new popularity within the greater sport community of Canada. The city of Victoria has maintained regular rugby

competition from 1873 as determined by a recently completed thesis by Burgess (6). At present approximately 25 adult teams compete in three divisions, representing over 500 active players who participate each week. The present study considered players from the first division only.

As a sport, rugby retains much of the physical and psychological demands of football. As a rugged physical contact sport, one personality characteristic often associated with such sports is aggressiveness. Several studies have shown individuals who are successful in football show aggressive responses in generalized personality inventories. However, some dispute remains between researchers as to the stability of personality traits across different situations. The present study attempted to analyse the individual's aggressiveness within the game situation only. Each subject was required to complete responses relating to specific game situations and these were analysed in terms of his rugby experience and level of ability.

Several studies have evaluated aggression in other contact sports, noticeably football. The following are representative of these studies. Harmon and Johnson⁸ found that of 42 players at Boston University all but one fluctuated in emotional level according to game importance. Kroll and Peterson (11) showed winning football team members were more outgoing, socially aggressive, dominant, and leading than losing teams. These findings were generally supported by Werner (16) with 270 West Point cadets. Booth (5) utilizing the M.M.P.I. found athletes to show less anxiety and higher on dominance and depression scales. Using projective tests, Johnson et al (10) concluded athletes were more aggressive but likely to have less control over their aggression. Tutko and Ogilvie (15) in their analysis of the characteristics of athletes concluded that successful athletes were somewhat different in several traits including need for achievement, setting high but realistic goals, dominance, and ability to express aggression.

Fewer studies have been completed in rugby. Sinclair (13) using Catell's 16 P.F.I. examined rugby players of different achievement level. He found only two

differences in levels of players; better players were outgoing and less calculating and worldly than low level players. Using the C.P.I. Howe (9) examined students who selected rugby and badminton in a service course program at the University of Oregon. He found one difference in that rugby players differed significantly less on the femininity scale. No other differences were found.

Research Procedures

Subjects were 25 volunteer first division players from the local Victoria league. The group was widely representative of different experience from two to twenty-eight years, ability from first year in the first division to Canadian national representation, and with and even distribution of club and University players.

All completed a questionnaire determining their level of attainment, interest, experience, and personal assessment of their ability. In addition, responses were elicited to 25 game situations at one of three levels. One point was scored for a non-aggressive reaction, two for a mildly aggressive response, and three points for a highly aggressive response. An aggressive score was determined by summing these points.

Differences between means tests were calculated between sub-groups formed in the following manner:

- (a) Between players who considered themselves at their final level of achievement and those still improving.
- (b) Between players with Canadian experience only with those who had also played in other countries.
- (c) Between players who had reached representative level with those who had 1st Division club experience only.
- (d) Between those who considered their interest to be mainly competitive with those whose interest was mainly recreational.
- (e) Between those who considered themselves better than average with those who considered themselves average or below.
- (f) Between those who played on a University team and those who played on an outside club.

The hypothesis to be tested for all these comparisons was stated in a null hypothesis form that no difference would exist between sub-groups. A .05 level of confidence was set as the appropriate level for acceptance.

In addition two product moment correlations were computed between the length of playing experience and the aggressive score and high level aggression responses.

Results

Table I includes means and t-ratios for all comparisons.

Table I
Means and t-Ratios
of Aggressive Scores

a (i)	Attained final ability level	M=47.7 n=8
(ii)	Still improving	M=48.4 n=17
	t-ratio	= .38 (non-significant)
b (i)	Canadian experience only	M=48.5 n=12
(ii)	Overseas experience	M=47.9 n=13
	t-ratio	= .83 (non-significant)
c (i)	Representative player	M=48.8 n=12
(ii)	Club player only	M=47.6 n=13
	t-ratio	= .83 (non-significant)
d (i)	Competitive interest	M=48.6 n=16
(ii)	Recreational interest	M=47.3 n=9
	t-ratio	= 1.7 (non-significant)
e (i)	Better than average player	M=49.0 n=15
(ii)	Average player	M=47.1 n=10
	t-ratio	= 2.7 (significant at 0.5 level)
f (i)	University player	M=50.3 n=12
(ii)	Club-player	M=46.3 n=13
	t-ratio	= 2.5 (significant at .05 level)

Only two comparisons reached significance, those players who considered themselves to be better than average in the league demonstrated a more aggressive set of responses while those involved on a University team also responded more aggressively than the club player.

Two correlations were made with the players years of experience with the total aggressive score and also with the high aggressive responses. Correlations obtained were .02 and -.01 respectively, thus years of experience was not related to the aggressive responses.

Discussion

The study attempted to analyse aggressive game behaviour through the subject's written responses to typical game situations. Comparisons were then made between sub-groups of athletes. Few differences were noted between the groups. However, those students who considered themselves above average players were rated significantly more aggressive by their responses than the average player. Similarly, University team

members were more aggressive than club players. It is probable that these players had formulated opinions about what constituted a high level player and responded in this manner. No attempt was made to rate aggressiveness in the game situation. This factor and experiments to determine aggressiveness outside the game situation are at present being researched by this investigator and colleagues.

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BOOK

EDUCATION IN MOVEMENT - GYMNASTICS

by W. McD. Cameron &
Peggy Pleasance,
published by Basil Blackwell,
1969 (pp. 53 illustrated)
\$1.45

The authors believe that the gymnastics lesson should be centred on the child rather than on the exercise or skill. They suggest, therefore, effective ways of teaching gymnastics in the belief that children differ in physique, in ways and rates of learning and in their interests and abilities. Using Rudolf Laban's analysis of movement as a basis, they show how the teacher can create situations which will give the child an opportunity to improve his co-ordination, skill and agility, as well as make him think. They believe that it is as important for children to understand what they are doing and how they are doing it as it is for them to develop mastery over their bodies.

Themes are outlined in the order in which they could be presented to children. The clear setting out of six sample lessons to show one way in which three themes can be developed should be particularly useful for students or inexperienced teachers. Teach-

ing points are given and the placing of equipment shows how maximum use can be made of the space available. Further sample lessons are not given, because the authors feel that teachers should be made to think about how the work needs to be developed. If the teacher applies the fundamentals of movement, tabulated as well as described in this book, to any skill or theme, the child can increase greatly his experience of movement. Examples of appropriate tasks are given, and the photographs show the high quality of work that boys and girls will produce if the teacher demands it.

The value of teaching gymnastic skills is acknowledged, provided that the teacher feels that this would fulfil a child's particular need at that time, and provided also that it is within the limits of his ability. No attempt is made, however, to show that it is possible to use direct, indirect and limited methods of teaching even within one lesson, and yet still achieve the aims of this approach to gymnastics. The authors give suggestions which help teachers to alleviate the difficulties which can arise when children who are used to working formally are asked for the first time to think for themselves during a gymnastics lesson. The sections on the use of demonstration and

observation as well as the suggestions on evaluation should also assist them.

M. Jean Silver,

PHYSICAL EDUCATION: A DISCUSSION OF PRINCIPLES

By A. D. Munrow
G. Bell & Sons. (254 pp.)

This is an important book in our field; probably the most important to come out of Britain. Dave Munrow has used the first part of his retirement well in producing a provocative, honest assessment as to where our profession stands, has been, and is going. He has been at the centre, geographically, practically and intellectually, of British Physical Education for more than 30 years. Birmingham is about as central a place as can be found in England, but Dave Munrow has ranged far and wide forming his philosophy. The result is a book to make one think, re-examine one's pet enthusiasms or prejudices and it is to be hoped, at least consider changing one's point of view.

Although it is written in a British context, with built-in British problems, this book is as important to a New Zealander, Australian or Canadian as it is to British readers. The book is

REVIEWS

divided into three parts: 1. "Education of the Physical;" 2. "Education through the Physical;" and 3. "Special Problems." These are subdivided into: 1. "The Body Systems," and "The Acquisition of Skill;" 2. "Aesthetic Considerations," "Intellectual Education through Physical Education," and "Good Behaviour;" and 3. "Physical Education and the Sexes," "Dance in Education," "Awards, Examinations and Testing," "Standards and the Pursuit of Excellence," and "Principles and Programmes."

The book draws on an amazing width of literature, and includes a fair measure of history. In fact the chapter on "Dance in Education" is basically historical and shows the usual British unawareness of the diversity of both American and Central European Modern Dance, though it examines many fundamental questions. The section on "Aesthetic Considerations" is a very valuable contribution — in fact one of the joys of this book is its readability. My impression is that it is a book which the maturer members of our profession in particular need to read and discuss, for anyone is sure to find themselves provoked. One's shelves are full of non-books, churned out to get "tenure" of a position in an American University. Most of these are entirely un-

original derivative books. One cannot guess from them what the authors are like, or even whether they have a point of view. In a long professional life Dave Munrow has produced two, relatively small thought-provoking books: his "Pure and Applied Gymnastics," still of its kind a classic, and this one, each of which is original, has his own unmistakable style, his own sense of humour, and takes a slightly provocative stance.

I could not agree with all the things he writes, but I admire the way he puts his point, and only wish there were time and space to argue the points where we differ. It would give me joy to think we could have an extended seminar in the profession, having first all read this very stimulating book. It would help us to understand ourselves, each other and our vocation better.

P.A.S.

"TEACHING SOCCER TO BOYS"

By Alan Gibbon and John Cartwright
Publishers G. Bell & Sons Ltd.
London.

This book is specific in its intent in that the authors set out to provide a "coaching framework" to assist teach-

ers, parents and coaches in imparting soccer skills to the 9-15 age group. Although restricted in its objective it sets out valuable guide lines in group organisation, coaching method, and use of facilities and equipment which will be of assistance to coaches dealing with all age groups.

The book is divided into two parts. In part one the authors deal with the background to effective soccer coaching and cover the lesson plan, its presentation and the rationalisation of equipment and facilities. Their ideas are based on modern educational thinking and the concept of the game being the vehicle for the educative process is apparent.

The second part shows how to develop the techniques of the game with excellent photographs of boys in action and with practices developing from individual to fully opposed group situations. The authors have shown concern for the layman without a background to soccer by including a section on "common faults" for each technique practised.

There is a great need for a book of this type in New Zealand and one hopes that the authors will produce another book of similar quality to give a comprehensive coverage of schoolboy soccer coaching.

J. B. Truman, D.L.C.

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