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OF THE

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THE PSYCHOLOGY OF THE ORGANIZED GROUP GAME

WITH SPECIAL REFERENCE TO ITS PLACE IN THE PLAY SYSTEM AND ITS EDUCATIONAL VALUE

BEING A THESIS APPROVED FOR THE DEGREE OF DOCTOR OF SCIENCE IN THE UNIVERSITY OF LONDON

BY

MABEL JANE REANEY

PREFACE

BY

DR KIMMINS

Chief Inspector of the Education Department, London County Council

Cambridge:
at the University Press
1916

PREFACE

DR REANEY'S important investigation of the psychology of the organized group game with special reference to its place in the play system and its educational value should be received by the teaching profession with feelings of gratitude.

Play has, of recent years, taken a very prominent place in school life, and, whatever changes may occur in other elements of the curriculum, its position is regarded as absolutely secure. Possibly this consciousness of security of tenure has been the prime cause of the remarkable and unpardonable want of attention play has received at the hands of the educational expert.

The patient and scholarly investigation by which Dr Reaney establishes the correlation between general ability and play ability for group games is in itself of very great value. Full details of the different steps in the research are given in the *British Journal of Psychology* for September, 1914. This investigation will form an excellent starting point for a still more important research to discover whether playing the group game improves the intelligence of the players. This and other important questions which have arisen during the enquiry are necessarily reserved for future investigation.

Teachers will welcome the very interesting and impartial weighing of evidence in the sections which deal with the meaning of play and the various play theories. In this connection, the summary of the suggestions which have been advanced to account for the play impulse is of special interest. The discussion of the appropriate games for the different stages of childhood will give valuable assistance to teachers in arranging the play of the school on a safer and more satisfactory foundation.

In the general account of the psychology of the organized group game, Dr Reaney deals with difficult problems with great ability and has contributed a very valuable and interesting addition to the literature on this subject.

Throughout the thesis full references are given to the work of other writers on play and the comprehensive bibliography at the end is of special value.

C. W. KIMMINS.

LONDON,
August 10, 1916.

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INTRODUCTION

The chief reasons for this investigation are pointed out in the introduction to 'The Correlation between General Intelligence and Play Ability as shown in Organized Group Games,' *British Journal of Psychology*, VII, Part 2, Sept. 1914.

I have there shown that the 'organized group game' is a type of play activity which seems to appeal paramountly to the Anglo-Saxon races. It is certainly the highest form of motor play and has only reached its latest stage of development in this race.

Furthermore the present war has shown us very clearly that this form of play activity has produced in the English race a cult of thought which cannot be understood by our Teuton rivals who look upon our sporting spirit, our views of 'playing the game' with disdain.

A type of activity which has produced a definite characteristic in the race that makes use of it most fully is certainly worth investigation.

I have endeavoured to analyse the psychological factors involved in the 'organized group game' and to discuss its value educationally.

In order to achieve this end I have approached the subject from two distinct standpoints:

(1) The purely psychological and philosophical.

(2) The experimental.

From the philosophical and psychological point of view, I have enumerated the chief theories which have been advanced to account for the Play Impulse and discussed them in their bearing on the group game. I have also considered the types of play found amongst animals and children, and the place the organized group game occupies in the play system. I have discussed the psychological factors involved in this special type of play activity and the significance of these in the education of the child and the adolescent, and finally I have advanced a theory to account for this latest development of the Play impulse along the motor line.

From the experimental point of view I am investigating two definite problems:

(1) whether there is any correlation between ability to play games and general ability,

(2) whether prolonged training in these games definitely affects mental development.

I have been able to answer the first question in the affirmative and to prove that there is a definite positive correlation between ability to play group games and general ability[1].

The second enquiry will need long and careful investigation before any definite answer can be given.

I am only at the beginning of this research and I shall hope to bring forward the results later.

As a preliminary step a questionnaire on "the educational value of the organized group game" was sent out to 1000 of the leading public and secondary schools in England. A synopsis of the results obtained is given in Appendix I[2].

In Appendix II I have enumerated the results of the chief researches on the Play Periods, reviewed historically the opinions that have been held on the value of Play as a factor in education, and given a short account of the Playground Movement in America and England.

The Meaning of Play.

The difficulties which surround the investigation into the phenomenon of play are largely due to the vagueness of the terminology and the variety of aspects from which the subject is approached. In popular language the term 'play' is applied to practically all the activities of childhood and to those of adult life which cannot be classed under the definite term 'work.' From the common sense point of view 'play' is distinguished from 'work' as being without serious intent. It has also been defined as "action for its own sake," as opposed to 'work'—"action with an ulterior end."

A very cursory glance at the later plays of childhood will show that neither of these statements can be accepted as it stands. Play is essentially serious. The child in his imaginative play, the boy in

[1] See M. Jane Reaney, 'The Correlation between General Intelligence and Play Ability as shown in Organized Group Games,' *British Journal of Psychology*, VII, Part 2, Sept. 1914.

[2] Synopsis of results obtained from answers to a questionnaire on the Educational Value of Group Games. Appendix I.

his team game, are devoting the most concentrated and serious thought possible.

Again, when the enjoyment of a playful action becomes conscious it ceases to be playful. The child builds to achieve a castle, not for the enjoyment of building, the boy kicks the ball to get it through the goal, not for the love of kicking.

It is also important to consider the aspects from which the subject is approached. Do we define 'play' from the active or the passive standpoint? Is it the objective behaviour of certain individuals as presented to the observer that is termed 'play' because it arouses a certain type of interest in the observer, or is it rather the subjective experience of the individual performing the action which gives to it its significance as play?

It is probable that before any satisfactory definition of 'play' can be reached it will be necessary either to widen largely or considerably curtail the meaning given to 'playful activity.' Either we must include the whole activities of childhood and much of adult life, which are essentially of serious intent, under the term 'play,' or we must limit it to certain forms of activity in which the end in view is apparently of little vital importance.

It will depend on which standpoint is taken as to whether 'play' is looked upon as one of the most important phenomena of life, or as merely a limited group of special activities.

The former view is taken in this thesis.

Further analysis is certainly needed before we can discover the attributes which characterize this phenomenon of 'play.'

Before attempting this psychological analysis we must consider the forms in which play makes its appearance.

Classified roughly we may divide the play of animals and children into two main groups: play based on experimentation, and more or less organized play. The baby who continually throws his spoon on the floor, the kitten flying round after its own tail are well known examples of the first type of play, which owes its attraction to the continued use of similar and allied muscles. This form of play is the one usually found amongst animals, while the more or less organized type is prominent amongst all but very young children.

Romanes[1], however, quotes examples of apparently organized play amongst ants, while Groos[2] in his exhaustive study of the Play of

[1] Romanes, *Animal Intelligence*, chap. III, 87–89.

[2] Groos, *The Play of Animals*, chap. III.

Animals gives many instances of such amongst birds and the higher vertebrates.

Play, whether in the case of animals or human beings, seems to make use of a large number of instinctive tendencies necessary for adult life. These include curiosity, pugnacity, the tendencies for constructiveness, destructiveness, hoarding. Many forms of play both amongst animals and men seem to be connected with the instinct of sex. Groos gives a very full account of the courtship plays of birds[1]. Imitation is an important factor in all forms of play. It may be said that the plays of children reflect the mental atmosphere of the times most truly. To-day when European war stands as the most prominent thought of the adult mind every child is playing at soldiers.

Lady Gomme in her comprehensive work on National Games[2] has traced back many of the popular games to tribal customs. 'Nuts and May' is probably derived from the early custom of marriage by capture; while 'Oranges and Lemons' owes its origin to friendly contest between members of the same tribe.

Play certainly seems to be the prerogative of youth, although by no means confined to this period of life, and the significance of this fact has been brought out most strongly by Karl Groos in his suggested explanation of the play impulse[3].

Many writers from Groos onwards have shown as a result of observation that the play of children follows a definite course in its development, from the purely experimental plays of early childhood through the markedly individualistic stage of the eight-year-old to the co-operative stage which finds its expression in the group game, such as football, a type of game which may be regarded as the highest evolution of play along this line.

Again the dramatic element in play seems to make its appearance at a definite age, reaching its highest level between eight and ten, gradually losing its interest as the co-operative spirit develops. Some writers regard the dramatic element in play as the most significant and look upon it as the nucleus of all artistic achievement. The drama in its appeal to the adult mind brings into prominence the 'make believe' factor which is an essential in all dramatic play. The enjoyment of the amateur actor certainly correlates with the dramatic pleasure of the child in his play, but the passive side of enjoyment exhibited in

[1] Groos, *op. cit.* chap. IV.

[2] A. B. Gomme, *Traditional Games of England, Scotland and Ireland.*

[3] Karl Groos, *The Play of Animals,* Author's Preface, xx.

the spectator seems to involve another factor, that of inner imitation. It is probably this also which accounts to a large extent for the fascination which exists in watching a football match or a competition of any kind.

This factor of inner imitation appears to be confined to adult play, and seems to suggest that the play of adults may differ essentially from that of children.

Little has been done at present in the study of play from the purely psychological point of view. It has been left to the philosopher, the biologist and the educationist to deal with the subject. It will be well therefore to consider the various theories that have been advanced to account for this widespread phenomenon.

The Play Theories.

Several theories have been suggested to explain the Play Impulse in the life of animals and man.

Two of these tend to give a physiological explanation and two a biological one.

1. The Physiological Theories.
   - (*a*) The Surplus Energy Theory.
   - (*b*) The Recreation Theory.
2. The Biological Theories.
   - (*a*) The Practice Theory.
   - (*b*) The Recapitulation Theory.

The Surplus Energy Theory owes its origin to Schiller, was further developed by Spencer and Gutsmuth, and has been supported in recent times by Colozza.

The Recreation Theory has as its most noted exponent Lazarus.

The Practice Theory is advocated by Karl Groos, while the Recapitulation Theory is held by James, Wundt, Stanley Hall, Gulick and Lee.

Certain modifications of these theories have been suggested more recently by Appleton, McDougall, Claparède, Carr, Patrick and others, and a further theory has been advanced by Shand in his book, *The Foundations of Character*, 1914.

The Surplus Energy Theory.

This theory is generally attributed to Schiller[1] as its originator but it had been foreshadowed by Henry Home in his *Elements of*

[1] Schiller, Letter 27, 'The Aesthetic Education of Man.' 1794.

Criticism. It was elaborated by Spencer and Gutsmuth, and claims as its most modern adherent Colozza.

In the 27th Letter on *Aesthetic Education*, published in 1794, Schiller suggests as the origin of play the superabundance of energy in the creature, and puts forward the doctrine that all the higher aesthetic feelings originate from the play impulse. He says: "Nature has indeed granted even the creature devoid of reason more than the mere necessities of existence and into the darkness of animal life has allowed a gleam of freedom to penetrate here and there. When hunger no longer torments the lion and no beast of prey appears for him to fight, then his unemployed powers find another outlet. He fills the wilderness with his wild roars, and his exuberant strength spends itself in aimless activity....The animal works when some want is the motive for his activity, and plays when a superabundance of energy forms this motive, when overflowing life urges him to action."

Schiller further works out his theory of the play impulse as acting only as a result of freedom from care, harmonious development culminating in the evolution of the aesthetic sentiments.

This view is elaborated by Spencer in his *Principles of Psychology*[1]. The fact that he was influenced by the poet, although at the time ignorant of it, is shown in the opening of the last chapter on the aesthetic sentiments. He states: "Many years ago I met with a quotation from a German author to the effect that the aesthetic sentiments originate from the play impulse." He shows that the higher the animal is in the scale of life, the greater its tendency to play. In one point Spencer goes beyond Schiller; he connects the idea of imitation with that of the overflow of energy. He points out that as we ascend the scale of life, the young of the higher types become more and more dependent on their parents. Their energies are not completely used up in the fight for life and hence find expression in play, and this play tends to take the form of imitation and repetition of those efforts which are necessary for the maintenance of life.

Spencer explains this overflow of energy physiologically as a reintegration which more than balances the using up of the brain cells, thus producing in the cells an excessive readiness to decompose and discharge.

Gutsmuth, known as 'the father of play' in Germany, evolves almost independently the same theory though he may have drawn some of his inspiration from Schiller, for he refers to *Die Horen*, a

[1] *Principles of Psychology*, II, chap. IX.

periodical to which the latter contributed. He brings out strongly the feeling of freedom in play. "In play, strictly so understood, the player has no other object than the satisfaction of the free operation of his activity....Play is the first and only occupation of our childhood and remains the pleasantest our whole life long....Take away from life what is the enforced service of iron necessity, and what is left but play?[1]"

Gutsmuth also recognizes the rôle of ennui and fatigue in the stimulation of play, and in this foreshadows to some extent the recreation theory.

He recognized the universal necessity for play and the widespread character of the different types of plays all over the globe. In his writings on the educational value of all sorts of plays he anticipates much that has been done in modern times in this subject.

The most recent supporter of the Surplus Energy Theory is Dr C. H. Colozza, Professor at the Royal School for Women Teachers of Gymnastics at Naples. His book *Il Giuoco nella Psicologia e nella Pedagogia* has been translated into German for the Internationale Paedagogische Bibliothek by Chr. Ufer, but as yet there is no English translation[2].

Colozza looks upon play as the "superfluity of energy over and above the essential needs of life"—at once the equivalent of accumulated energy and the means of its augmentation. In the little child the need to play increases in proportion as it plays, the more it plays the more it wishes to play. But the excess of energy is not alone sufficient to produce play. Besides this there must be also a more or less high degree of psychic activity.

Those animals play most who have these two combined—the reserve capital and the psychic activity. He points out that complexity in play varies directly with complexity of development and that a gradual evolution of play from the simple to the complex can be traced from the lower animals through the savage to the civilized child.

The Recreation Theory claims as its chief scientific exponent the late Moritz Lazarus, Professor of Philosophy at Berlin University[3]. It may be regarded as supplementary to the Surplus Energy Theory although at first sight it appears to directly oppose it.

[1] J. C. F. Gutsmuth, *Spiele zur Uebung und Erholung*. 1796.

[2] A translation is in progress by W. Wood.

[3] M. Lazarus, *Die Reize des Spiels*, Berlin, 1883.

Lazarus argues that when mental and physical powers are sufficiently tired, man turns to play to recuperate. When subjected to thorough investigation we find that the apparent opposition to the former theory disappears. The clerk tired from his day on the office stool, when turning to tennis for recreation, is at once discharging his surplus physical energy and at the same time restoring his mental powers.

The recreation theory however goes further than this. When the conditions point to active recreation, surplus energy seems no longer an essential, and it is interesting to note that new recreational activity is often closely associated with the source of fatigue. Steinthal[1] points out that change of occupation involving the use of the same limbs often rests them. In many cases we get rest by turning the mind towards new circumstances connected with the type of work which has fatigued us, while it would be impossible to concentrate attention on any other subject. The business man and the diplomatist, whose whole life is given up to hard mental work, find relief in a game of chess or cards, games which call for more or less intellectual effort, but would be unable to obtain equal relaxation in a purely physical game.

The Physiological Theories have much in them which appeals to the unscientific mind and are accepted widely. On further investigation however they seem to fail to explain many types of play and have received severe criticism.

The Surplus Energy Theory certainly accounts for much of the play of young children and animals, in so far as it is aimless, while the recreation theory well explains many kinds of adult play.

They both nevertheless fail entirely to give any explanation for many of the different types of play existent amongst animals and children, nor do they account for the fact that play is often participated in when the individual is in a marked state of fatigue.

Karl Groos in his *Play of Animals*[2] devotes the first chapter to the discussion of these two theories, a discussion which he further elaborates in Part III of his second book, *The Play of Man*[3].

We may well quote his admirable review of the essentials of the first theory.

[1] H. Steinthal, *Zu Bibel und Religionsphilosophie*, p. 249. Berlin, 1895.

[2] Karl Groos, *The Play of Animals*. Appleton, N.Y. Trans. by E. L. Baldwin. 1898.

[3] Karl Groos, *The Play of Man*. Heinemann, Lond. Trans. by E. L. Baldwin. 1901.

"1. The higher animals being able to provide themselves with better nourishment than the lower, their time and strength are no longer exclusively occupied in their own maintenance, hence they acquire a superabundance of vigour.

2. The overflow of energy will be favoured in those cases where the higher animals have need for more diversified activities, for while they are occupied with the one, the other special powers can find rest and reintegration.

3. When in this manner the overflow of energy has reached a certain pitch it tends to discharge.

4. If there is no occasion at the moment for the correlative activity to be seriously exercised, simple imitative activity is substituted, and this is play."

While admitting that this theory might account for play such as the skipping of lambs, the wild spontaneous running of children, Karl Groos points out that much of the instinctive elementary play of both animals and children, involving as it does chasing and fighting, cannot be explained as an imitation of the more serious occupations of life. Again, the fact that the young of different species show special tendencies —the bird flutters its wings in the nest, the antelope practises leaping at an early age, the kitten rushes after anything moving—can find no explanation in either of these theories. He maintains that, although many plays can be traced to imitation as their source, the most powerful and elementary forms seem to be produced by the action of a strong impulse.

Groos goes on to discuss the cases in which animals tired out with activity will yet resort to play, as when two dogs chase each other until they are forced to rest from fatigue, but at the slightest sign will once more continue their sport. This goes on with endless repetition and seems to show that the dog only waits to collect sufficient strength to continue his play and not until superfluous vigour urges him to activity.

Even the case which appears to fit in with the Spencerian theory most fully—the ceaseless activity of confined animals—has been shown by Lloyd Morgan[1] to be more probably due to thwarted instincts than to superfluous energy.

Groos regards the surplus energy theory as unsatisfactory. He admits that a certain amount of superfluous energy is a favourable but not necessary factor of play and that some of the plays of adult human beings are undertaken purely for recreation, but the suggestion that such a far-reaching and significant phenomenon can be accounted for

[1] Lloyd Morgan, *Animal Life and Intelligence*, p. 430. 1891.

by assuming it merely a means for getting rid of unused energy fails to appeal to him.

The Biological Theory—the theory of practice or preparatory exercise—was advanced by Karl Groos in 1896 in *The Play of Animals*, and further elaborated in *The Play of Man*. He defines play as "instinctive activity exerted for purposes of practice and exercise, and without serious intent." In recognizing the inadequacy of the physiological theories of recreation and surplus energy, Groos reached the conclusion that to solve the problem of play it must be considered from a biological standpoint.

Play, according to Groos, is preparatory exercise for life, and the more complex the life of the animal the more need it has for play. According to this theory, the origin of play is instinctive, and he finds a strong instinctive driving force present in all types of play. Thus all creatures possess certain innate capacities which are essential for the preservation of the species. In the lower animals, because of their simpler experience, these develop as well marked impulses and reflexes, needing but little if any practice for the fulfilment of their function. With the higher animals, especially with man, it is essentially otherwise. Although the number of his hereditary instincts is considerable, in infancy he is the most helpless of all animals. The period of youth under parental protection is the period during which his instincts appear and are modified by intelligent action to fit him for future life. Play is the agency employed to develop these crude powers and to modify these instinctive tendencies by the action of intelligence until they are fit to respond to his ever-varying environment. In fact youth is an adaptation to make this possible. Children do not play because they are young but they are young in order that they may play.

Groos, although regarding the origin of play as instinctive, does not agree with Schiller in assuming a single-minded play impulse. Rather he suggests that various instincts appear and need to work themselves out before the real necessity for them arises. Hence these tend towards play as a means of exercising them and training them. Thus man by this system of practice has the power of improving his inherited capacities far beyond the stage of the most perfect instinct.

In his latest work on the subject, Groos accepts the view which has been advanced by several writers that 'play' has a 'kathartic' action[1],

[1] Karl Groos, *Das Spiel als Katharsis.*

Harvey Carr, *Survival Values of Play.* Investigations of the Department of Psychology and Education of the University of Colorado. 1902.

G. W. Patrick, 'The Psychology of Football,' *Am. Journal of Psychology*, XIV. 104–117. 1903.

and helps to carry off undesirable instinctive activities which are inherited but are of little use to man in his present state of development.

A very interesting modification of the Practice Theory of play is brought forward in a monograph by Miss Estelle Appleton on the play activities of adult savages and children[1].

Miss Appleton as a result of her investigation finds that there is no direct parallelism between the play of savages and children, although in certain respects the savage mind expresses itself in play activities in similar ways to the child mind.

She suggests that the development of the 'soma' may account for the definite types of play seen in children of different ages: "That the most rapid growth within the body should stimulate the particular type of play which the particular child delights in is quite in keeping with the biological law that growing tissues as well as growing mental powers must be exercised if they are to reach their full development. Thus the shifting emphasis in physical growth may be sufficient of itself to account for the shifting intellectual interests in play."

Studies are in progress to test the truth of this suggestion, which opens up very interesting fields of enquiry into the relationship existing between phylogenetic and ontogenetic development.

One of the latest theories of play is the Recapitulation Theory.

The chief exponent of this theory is Dr Stanley Hall, who is supported by many modern writers who have investigated the subject experimentally, including Gulick, Lee, Arrowsmith. Dr Hall in his book on Adolescence refers to Groos' biological theory as "partial, superficial and perverse[2]." "I regard play as the motor habits or spirit of the past of the race persisting in the present, as rudimentary functions sometimes of and always akin to rudimentary organs. The best index and guide to the stated activities of adults in past ages is found in the instinctive, untaught and non-imitative plays of children, which are the most spontaneous and exact expression of their motor needs. The young grow up into the same forms of motor activity as did generations that have long preceded them, only to a limited extent; and if the form of every human occupation were to change to-day, play would be unaffected save in some of its superficial imitative forms. It would develop the motor capacities, impulses, and fundamental forms of our past heritage, and the transformation of these into later acquired

[1] L. Estelle Appleton, *A Comparative Study of the Play Activities of Adult Savages and Children*. (Monograph.) Chicago University Press, 1910.

[2] Stanley Hall, *Adolescence*.

adult forms is progressively later. In play every mood and movement is instinct with heredity. Thus we rehearse the activities of our ancestors, back we know not how far, and repeat their life work in summative and adumbrated ways. It is reminiscent, albeit unconsciously, of our line of descent; and each is the key to the other. The psycho-motive impulses that prompt it are the forms in which our forbears have transmitted to us their habitual activities. Thus stage by stage we re-enact their lives once; in the phylon many of these activities were elaborated in the life and death struggle for existence. Now the elements and combination oldest in the muscle history of the race are represented earliest in the individual and those later follow in order."

The exponents of the recapitulation theory thus recognize the old culture epochs and assume that the child in his play retraverses the past history of the race.

The very careful observations which have been carried out in connection with the various types of play popular amongst children of different ages by Gulick, Johnson, Drummond, Bancroft[1], and others have produced such uniform results that it has been possible to formulate the hypothesis of the existence of the play periods.

By summarizing the results obtained from these investigations we are able to obtain a definite scheme of play for different ages. It is of interest to compare this with the culture epochs through which the race has passed.

Stages of man's evolution		Corresponding child's play
1. Animal Stage.	Period I.	Movement plays. Imitation plays. Swinging. Climbing, etc.
2. Savage Stage.	Period II.	Hunting plays. Simple games involving contest such as Touch Last, Hide and Seek, etc. Throwing at a mark. Striking with a stick (cricket).
3. Nomad Stage.	Period III.	Simple competitive games. Games of skill. Adventurous games. Early imaginative games. Keeping pets. Collecting.
4. Pastoral Stage.	Period IV.	Dolls. Gardening. Constructive play.
5. Tribal Stage.	Period V.	Team games.

[1] See later part of Thesis on Play Periods.

Mr Alexander Shand in his book *The Foundations of Character*[1] brings forward a further theory with regard to play. He looks upon 'play' as the characteristic behaviour of the primary emotional system of Joy. He formulates a law for 'play behaviour': "The Joy or enjoyment of Play tends essentially to exclude all behaviour that would simultaneously excite in the playing animal,—and in social plays, both in the playing animal and its companion,—anger, fear, or repugnance, and therefore restrains the manifestation of certain instincts within the limits required by its end."

Play makes use of a very large number of instincts associated primarily with other emotional systems, but in a form modified to attain the end of Joy, e.g. "to maintain the self in its present relation to the object" and to maintain the object as it is.

The common end of all joy, Mr Shand says, is "to conserve the existing situation." This is maintained in play which makes use of the instincts which belong to the serious side of life, such as pursuit, flight, concealment, fighting, destruction, without however calling up the concomitant emotions usually associated with these instincts, which therefore appear to be disconnected from their primary ends without obtaining others in their place. Hence the opinion that there is no serious motive in play, an opinion which cannot be maintained when we realize that play is the characteristic behaviour of the emotional system of joy.

The play theories have been subjected to much criticism by various writers[2], including McDougall, Winch, Bradley, Claparède, Carr, Patrick and others.

The critics of Groos follow two main lines, (1) those who object to Groos' distinction between work and play, (2) those who fail to agree with his use of the term 'instinct.'

The latter objections probably arise from the very unsatisfactory terminology existing at the time Groos wrote his first book. In the light of recent work on the relation between instinct and intelligence these difficulties have disappeared.

[1] A. F. Shand, *The Foundations of Character*, VII, 284; VIII, 287–300. 1914.

[2] H. M. Stanley, 'Prof. Groos and Theories of Play,' *Psychological Review*, VI, 86–92.

Claparède, *Psychologie de l'enfant et pédagogie expérimentale.*

W. McDougall, *Social Psychology*, chap. IV, p. 107.

F. H. Bradley, *Floating Ideas and Imagery*, Essays rep. from *Mind*, N.S., XV, 468.

C. T. W. Patrick, 'The Psychology of Play,' *Ped. Sem.* Sept. 1914, p. 469.

Winch[1] in two papers on the psychology and philosophy of play discusses the play theories very fully. He regards Groos' definition of play as practice as philosophical rather than psychological. He takes exception to the idea that the feeling of pleasure is the psychic accompaniment of play. In his second paper Winch quotes H. R. Marshall in support of the surplus energy theory. The preparation theory attempts to account for the forms which play assumes, as the surplus energy theory shows the conditions of the possibility of play.

He questions whether our knowledge is exact enough to enable us to decide whether the playful activity of the young is an aid or a hindrance to later needs. He admits that the practice theory illuminates much of the play of the lower animals, but states that it fails to account for the play of man. This he thinks may be due to the fact that the lower animals are destined to lead the same life as their ancestors did, while man's environment is constantly changing.

Winch points out the inconsistency of Groos' statement that play serves to tone down present instincts, rather than to strengthen them and create new ones, with his theory of play as a "divinely appointed preparation for the work of life." He suggests that it is not easy to fit the fact that geniuses mature early to the long period of youth needed by the preparation theory.

With regard to the recapitulation theory, Winch holds that if we accept the doctrine of biological recapitulation at all we must accept it for play. He quotes Professor Marshall as saying that in biology there is an effort to escape the necessity for recapitulation. He advocates the study of spontaneous play but points out that modification may be necessary from the educational standpoint. The problem for us, he says, setting aside the optimistic exaggeration of 'preparation' theories and remembering the plasticity and latitude which modern 'recapitulation' theories permit, is to use 'play' as a relief from work without descending into barbarism in the process; to use 'play' as a means of maintaining the physical strength to which modern life conditions are so inimical; to use 'play' as suggestive of mental development, so that we may find the easiest lines of approach for adult work and thought; and to supersede the play which too markedly exhibits primitive action, primitive beliefs, primitive ethics[2].

We can now summarize the theories that have been advanced to account for the Play Impulse.

[1] Winch, 'The Psychology and Philosophy of Play,' *Mind*, N.S. xv. 1906.

[2] 'Psychology and Philosophy of Play,' Part II. *Mind*, N.S. xv, No. 58, p. 189.

1. That play can be explained physiologically as due to the increase of surplus energy which is not needed to fulfil the ends of existence and tends to act along the lines of imitation of actions important to the welfare of the animal. SCHILLER, SPENCER, COLOZZA.

2. That play is recreation, i.e. a means of relieving the tension caused by prolonged work and of reviving the jaded muscles and nerves. LAZARUS, WINCH.

3. A. That the physiological explanation is insufficient and that play is a means of preparing for the future life of the organism and is made possible by the appearance of instincts before they are required. GROOS.

B. That the types of play are modified by the stages of somatic development. APPLETON.

C. That play not only serves as a means of practice for inherited instincts but acts as a stimulus to growth and a means of carrying on the inherited activities which would be harmful under changed conditions. GROOS, CARR.

4. That play recapitulates the history of the race in the child and that the older racial characters appear in the play of the younger child, etc. HALL.

5. That play is the characteristic behaviour of the Emotional System of Joy. SHAND.

In considering the various theories that have been advanced to account for the phenomenon of play, we find that, although when looked at superficially they appear to contradict each other, on further analysis they fall more or less in line.

It is probable that each explains some special type of play and that a really comprehensive explanation of play will involve them all.

It is not within the scope of this paper to discuss in detail how far each theory explains the different types of play, but only to apply them to the psychological investigation of the organized group game.

It is, however, necessary to consider the problem briefly and to indicate the lines on which the investigation might be carried further.

The change which has taken place in the conception of the relation between instinct and intelligence will go far to bring the various theories more into line with each other.

The older view held by Driesch and others that "Instinct is a complicated reaction that is perfect the first time[1]" is fast giving place to the more modern conception that instinctive and intelligent activity differ only in that the former is based on more or less innate conative and perceptual dispositions, while in the case of the latter these are to some extent acquired. The reaction that is "perfect the first time" is regarded as 'reflex,' and the tendency of the present day is to view instinctive activity as capable of great modification by intelligence.

Stout draws the line between instinct and intelligence by regarding the former as possessing a prearranged mechanism while the latter is capable of learning by experience[2]. Many writers, however, including Myers and McDougall, claim this capacity as an essential feature of instinctive as well as intellectual activity. Myers regards instinctive behaviour as having the innate mechanism only relatively fixed and given, while in intelligent behaviour it is relatively plastic and acquired.

Again, although the Lamarckian doctrine of the inheritance of acquired traits is still in disfavour, recent work by Karl Pearson and others is bringing more and more into prominence the fact that certain definitely acquired characteristics may be inherited. Weismann's theory of the germ plasm, Baldwin's idea of organic selection, and the work of Osborn, Lloyd Morgan, Wallace and others tend towards the belief that the individual may give a definite trend to evolution.

In the light of this recent work some of the main objections to the recapitulation theory and the practice theory are removed. If the former can be held independently of the Lamarckian doctrine there is much in its favour, as it is strongly supported by careful research work on the play periods[3] of the various stages of childhood for which the practice theory of Groos fails entirely to account. Miss Appleton's suggestion that these depend on the stages of development of the 'soma' tends to bring the two biological theories more in line with each other. The fact that the dominant characteristics of the play periods are more or less parallel with the stages through which the race has passed, as known from historical records, is very significant, especially when taken in connection with embryonic development, and the presence of rudimentary organs in Man. The fact that the instinctive tendency

[1] H. Driesch, *The Science and Philosophy of the Organism*, Gifford Lectures (Aberdeen), 1908. p. 110.

[2] Myers, Lloyd Morgan, Wildon Carr, Stout, McDougall, 'Symposium on Instinct,' *British Journal of Psychology*, III.

[3] See later part of Thesis.

towards certain types of games is so strong at certain ages can only be explained by this theory; the crude impulses of children which are known to all teachers and which cannot be removed by gentle suasion help us to realize this.

The recapitulation theory taken in connection with the practice theory certainly explains the evolution of the motor plays. The fact that young animals show strong inclination towards sex-plays long before the sex instinct matures seems to require Groos' theory of play to explain it; but the work of Freud and his followers has already shown us that the sex instinct is far more complex than at first appears and influences the development of children much before the age of puberty. The results of Freud's work may show that the practice theory is not necessary to account for such plays. It still holds good, however, as the only explanation for the special type of play of different species. It may also explain the far-reaching effects of imitation in all forms of play: the child, the young animal, by means of imitation fits itself for its future life.

At the same time the purely biological value of imitation is not clearly marked. The child, the young animal has no special tendency to imitate only those actions which will be of benefit to it. Its imitation of harmful actions is equally strong and it is only prevented from repeating these either by profiting by experience or by direct education. Lloyd Morgan has shown that many species of animals, especially birds, go through careful educative processes with their young. We are therefore led to question whether imitation really stands as a factor in favour of the practice theory. There is, however, another side in which this seems to be the case. Imitative activity is certainly modified by innate tendencies. The chick does not attempt to copy the duck in swimming, the lion cub has no desire to emulate the panther in climbing trees. In so far as this is the case imitation certainly favours Groos' theory.

The surplus energy theory combined with the practice theory seems fully to explain the experimentative plays of early childhood. The surplus energy theory alone will not account for these, as it fails to give a reason for the different types of experimentation found in different species and for the fact that after the first attempt such activity, if repeated, is more or less purposeful. The infant throwing down a spoon may be perfectly aimless in the first case but the moment he repeats the action there is purpose, although it is more or less unconscious, whether it be the love of being a cause, the desire to feel again the

sensation produced, or the mere delight in a more or less rhythmic movement.

If however we allow that surplus energy is made use of instinctively as a means of performing actions of benefit to the development of the child or animal along certain definite practice lines, this form of play seems to be explained, as it would naturally involve pleasurable sensations which would tend to insure the repetition of such actions.

Much of adult play comes under the recreation theory and can be explained in no other way.

The return to the use of primitive and ancient nerve tracts which is involved in such instinctive activities as hunting, chasing, fighting, etc., of necessity rests the higher nerve centres.

It is an interesting fact to note that the chief motor games of the adolescent period follow the lines of man's early development and make use of nerve tracts which must have been established very early in his existence.

The 'Kathartic' explanation of play advanced by Groos in his latest work[1] is interesting in the light of the recent work of Freud on the results of the inhibition of early tendencies. It seems difficult however to reconcile it with the practice theory. If play is that which elaborates "immature capacities to full equality with perfected instinct" and that which evolves "hereditary qualities to a degree far transcending this, to a state of adaptability and versatility surpassing the most perfect instinct," it is difficult to conceive that it would "on the whole contribute more to the weakening of existing instincts than to strengthen them or create new ones[2]." Professor Groos is certainly hardly consistent if he claims to hold both these views.

On the other hand it is not improbable that both suggestions are true but in relation to different types of play, and that the Kathartic function appears only in those types of play which have been evolved amongst civilized races in which the primitive instincts have been more or less inhibited.

This point will be discussed more fully when we deal with the group games.

The relation between the play of adults and children is also of interest. The active forms of adult play certainly seem to follow similar lines to the play of children in that they appeal to the primitive instincts.

[1] Karl Groos, 'Das Spiel als Katharsis,' *Zeitschrift für Päd. Psych. u. Ex. Päd.* Dec. 7, 1908.

[2] *Play of Man*, p. 375.

For the passive forms another explanation is necessary. If we accept McDougall's view that each instinctive tendency has its definite emotional concomitant and that these concomitants can be recalled in a faint degree without any conscious knowledge of the instinctive tendencies to which they are attached, it is easy to account for the passive form of adult play. The love of the drama, the fascination of watching a prize fight or a football match, is due to the factor of 'inner imitation.' The spectators feel in a lesser degree the emotions which accompany the instinctive actions displayed. This view is however not generally accepted and apart from it there is greater difficulty in accounting for the passive side of adult play.

It may be due to the factor of 'make believe' and the knowledge that the scenes which evoke certain emotions in us do so in a fainter and more pleasurable degree because we realize that they lack reality.

The subject will be discussed more fully later in connection with the group-game.

Turning to the definite psychological investigation of the factors which distinguish playful activity from any other form of activity, we find that it is impossible to separate 'play' from 'work' in the generally accepted sense. Rather should we separate it from that form of work—drudgery—which results in the baulking of instinctive dispositions[1]. In other words, all activity which tends to give free scope for the simple primitive instincts will come under the term 'play.' Such activity certainly seems to show the marked characteristic of 'love of being a cause' and that sense of 'inner freedom' on which Schiller laid such stress.

The whole activity of childhood when allowed to develop naturally follows these lines and may therefore be described as 'playful activity.'

It is impossible to say that play has no serious intent. Rather would we suggest that playful activity is that type of activity in which the end is in harmony with the means, and the individual with both. It is not difficult to realize that these forms of behaviour tend to follow the primitive lines of evolution, especially as they are influenced by nervous and somatic development, and it is also probable that by natural selection this form of activity has been made use of as a means of practice and education for future life. When we come to the higher types of play the tendency of the play activities seems to alter. With young children 'play' has the serious object which to adults would mean 'work,' but later 'play' seems to be divorced from such object.

[1] See Graham Wallas, *The Great Society*, chap. IV.

In the light of recent research by Freud and others it may be that the primitive instinctive tendencies which are necessarily baulked by civilization have become sublimated and find vent in those forms of play which make use of them without carrying them to their serious end.

The Group Game of the Anglo-Saxon represents such a type of play carried to its highest development, and the subject will be discussed in connection with this. This sublimation may be traced in its elementary form even in animals, but the fact that it occurs chiefly in domesticated animals tends to prove the view suggested[1].

The difficulties which surround a discussion on the meaning of 'play' are enhanced by the loose way in which the term is used.

Much of the so-called 'play' of civilized life lacks entirely the essential characteristics. The actor who earns his living by depicting the characters of others may be leading a life of intense drudgery, the professional footballer may at times hate the sight of the ball. At the same time each may enjoy the special activity,—the actor may enter into the soul of the part he is playing,—the footballer may play for the love of the game although he plays for money, and in so doing each is 'playing.'

For I maintain that the only essential characteristic of so-called 'playful activity' is that it is activity which is unbaulked.

In other words we may attempt to define 'play' as "that form of activity in which the end is in harmony with the means, and the individual with both, and in which the primitive instincts have full scope, or are sublimated in such a way that their serious end is not reached."

If this definition is accepted, it will include not only the accepted forms of play but all the highest ideals of work, and will only leave that drudgery in which the man or animal is forced to work for an end in which his interest is remote and by means which baulk his instinctive tendencies.

From this point of view the highest achievement of art and science, the loftiest conceptions of philosophy fall into line with 'play,' for by 'play' is meant that line of evolution in which '*l'élan vital*' has the fullest freedom and scope to achieve its end.

[1] McDougall, *Social Psychology*, p. 108.

Types of Play.

Before definitely undertaking the psychological analysis of the organized group game it is necessary to consider the various types of play which have been observed amongst animals and children, and the place the group game occupies amongst these.

Karl Groos[1] considers the play of animals and man separately. He divides the play of animals into the following types:

1. *Experimentation.*

This includes all play which enables the animal to get control of its muscles, and involves stretching, straining the limbs, clawing, etc. Puppies very early begin to gnaw any object. A kitten will play with its tail, in fact all animals of the cat tribe have been observed at an early age to play with the mother's tail.

2. *Movement Play.*

Play involving change of place for its own sake. One of the best examples of this is the delight birds take in swinging. Many birds seem to choose the highest branches of a tree in order to give vent to their love of this pastime. Romanes[2] speaks with great assurance of the movement play of fishes, but the fact that play of this kind is found so low down in the animal world still needs confirmation.

3. *Hunting Plays.*

This type of play Groos divides into two classes:

1. Hunting with live prey.
2. Hunting a lifeless object.

Many animals of the same species chase each other with great excitement, and the cat's love of torturing its victim is probably a form of this kind of play. The joy with which dogs run after a ball or stone and the fact that a dog will often play with an object alone are examples of play which involve the chasing instinct.

4. *Fighting Plays.*

The love of teasing, hustling and mock fighting appears to be an attribute of all young male animals, and in many cases the same characteristic develops in the female. The fact that dogs go through

[1] Groos, *The Play of Animals*, chap. III, p. 82.

[2] Romanes, *Animal Intelligence*.

all the appearances of real conflict without hurting each other is well known; the difficulty of explaining this has already been alluded to and McDougall's suggestion that this form of play has its own emotional concomitant[1].

5. *Constructive Arts.*

The most interesting example of this is that of the bower bird who builds a hall or antechamber to his nest which he decorates with the brightest colours, and which is used entirely for the purposes of courtship. Both sexes take part in its construction but the male is the director.

6. *Nursery Plays.*

Under this heading Groos quotes many cases of animals which adopt the young of their own or other species and also refers to the quaint friendship often observed amongst animals. It is a moot point whether either of these characteristics can really be classed under 'play.' By far the greater number of the plays of animals come under the heading of love plays, which are connected with powerful instincts of sex. These include the many playful accompaniments of courtship either by means of display or song.

Human Plays.

Groos divides Human Plays into two great sections, firstly those involving general functions, such as perception, ideation, emotion, which he places under the heading 'Experimental Play,' while those which demand the use of special functions, such as fighting, hunting, love-making, social intercourse, he terms 'Socionomic Play.' Under Experimentation Play Groos gives:

1. *Sensory Plays.*

Plays which definitely exercise the sense organs. These are the plays of very young children who find pleasure in mere contact, noise or light stimulation.

2. *Motor Plays.*

Under this heading he recognizes two types:

(*a*) Playful movement of the body, such as creeping, running, climbing.

(*b*) Playful movement of a foreign body which includes hustling, all games of throwing and catching and the constructive and destructive forms of movement plays.

[1] McDougall, *Social Psychology*, chap. iv. p. 110.

3. *Plays involving higher mental powers.*

These he again divides into three sets:

(*a*) Intellectual Play making use of memory, recognition, imagination, attention, reasoning. Blind Man's Buff is a good example of this type of game. Here memory and recognition are both brought in to a marked degree; building castles in the air, the conscious make-believe found in many children's games involve the use of imagination.

Reasoning Plays are numerous, the riddle being a good example of this type; games of skill, such as chess and all card games, fall into this category.

(*b*) Emotional Plays. These include all forms of playful experimentation with the emotions, and under this heading we must discuss the pleasure which is found in certain forms of physical and mental suffering which appear to have some relation to the play impulse. It is a well known fact that even normal individuals enjoy suffering of both kinds to a certain extent. This is of great interest psychologically. The pleasure may be due to the increased sense of personality which occurs in any mild form of suffering but a more probable explanation is the desire of experimentation and getting new and intense sensation, a desire which has a playful element in it. Many of our most popular games involve surprise. Blind Man's Buff, Hide and Seek, Drop the Handkerchief, owe much of their attractiveness to this emotional element. The love of the tragic draws thousands to the theatre, while the excitation of the emotion of fear makes the gruesome ghost story the most enchanting.

(*c*) Volitional Plays. This type of play involves direct experimentation with the will. Many contests and games of skill, requiring as they do great physical and mental endurance, fall into this class. Lighter games, such as "smiling snap," in which the two opponents face each other solemnly, the one who laughs first losing the game, and the popular method of singing "John Brown's Body" with the omission of a fresh word at every round, illustrate well this type of game.

In comparing the play of children with that of animals we find that the plays of early childhood, involving as they do experimentation, hunting, fighting, chasing games, approximate closely to the same form of play amongst animals, although in the case of children they make use of higher mental processes; but when we come to the organized games, the dramatic plays, the drama, we find a type of play which is entirely unrepresented in the animal world. The dramatic form of play certainly owes its origin to the powerful instinct of imitation. We can trace this type of play from the simple, purely imitative actions of childhood up to the games of make-believe which include, as they do, all the well-known folk song games of different countries. Each nation in the civilized world has its own rich literature of such songs based upon the national traditions. These include the line games, ring games and counting out rhymes, examples of which can be collected from every nation which has reached even a low level of culture. Writers on the

subject suggest that all these national games have been derived as a result of imitation by the children of the significant social customs of the period. The counting out rhymes are believed to have evolved from the ancient system of taboo, the ring and line games from tribal contest. Many of the games show a distinct element of the evolution of marriage customs. Most of them involve some co-operation and many of them call out the instincts of the chase.

Lady Gomme in her *Dictionary of British Folk-lore* gives an exhaustive account of children's games, collected from data in all parts of the British Isles.

These games, she says, fall into two classes:

Games of Skill.

Dramatic Games.

She mentions that all children's games have in them traces of ancient customs at one time important to the race. This is especially applicable to the Dramatic games. Of these the line games, of which 'Nuts and May' is an example, are derived from contests between two tribes. The circle games, such as 'London Bridge' and 'Ring a Ring o' Roses,' can be traced back to religious ceremonies. The arch form 'Oranges and Lemons' comes from a party faction contest. Again Lady Gomme traces through the games the evolution of the marriage custom. 'Nuts and May' shows marriage by capture; 'Three Dukes' exogamous marriage—the boys come for the girls of another tribe. 'There came three sailors' represents marriage by purchase, while circle games such as 'Sally Waters' show courtship and love preceding marriage and a distinct marriage ceremony.

The counting out rhymes of children display a very ancient origin. There is a possible connection between games of skill and early religious rites. Ball games are the remains of divination, while games involving two sides all point to contest. Many games show historical traces; for example, 'We are the Rovers,' a traditional type of contest game, arose at the time of the Border warfare.

A further evolution of the social ring and line game is seen in the introduction of the ball. Ball games consist of two kinds:

1. Those in which the ball is propelled by some part of the body.
2. Those in which a bat or club is used.

Groos regards the instinctive tendency to throw a missile at a mark, a tendency which seems common to the whole human race and which has even been observed in monkeys, to arise as a definite development of the experimental play of the infant. To 'throw at' is but a later

stage of 'to throw down.' To propel the missile with a club or stick—or in other words to enlarge the scope and power of the human organ—is a distinct elaboration of the throwing instinct; hitting is derived from throwing.

We get the final evolution of ball games in our modern organized group games, such as football, hockey and cricket.

THE PLAY PERIODS.

Many students of children's play have come to the conclusion, as a result of careful investigation, that each period of childhood has its characteristic games and that the child at varying stages of his existence shows a marked predilection for certain forms of play. It has therefore been possible to divide the stages of childhood into play periods, but it must be borne in mind that there is no definite line of demarcation between each of the periods.

It is interesting to note that in spite of the number and variety of the investigations the results have been very uniform. (See Appendix II *a*.)

We can divide the stages of childhood roughly into four play periods:

(1) 0–7 (*a*) 0–3 } The period for experimental and imitative
(*b*) 3–7 } non-combative play.

(2) 7–9. The period for dramatic, individualistic and combative play.

(3) 9–12. The period for simple competitive games—games of skill.

(4) 12–17. The period for group games.

It will be well to give some account of the chief characteristics of these play periods.

Period 1 (*a*). (0–3). *Type of Play Experimentation.*

The play of very young children consists of grasping, clutching, kicking and such simple bodily movements. The child very soon progresses to more complicated types of play, dropping and picking up, experimentation in sound, digging, playing with sand. There is great pleasure in continued repetition of the same movements. Conscious imitation begins about the seventh month. Towards the end of the period we get enjoyment in hiding and a marked predilection for anything rhythmic. On the whole the play is progressive in regard to complexity of movement and the pleasure in sensation. There is no conscious end in view, but there is love of being a cause and delight

in physical activity. The play is also distinctly individualistic. Very young children prefer to play alone and to follow their own initiative.

Period 1 (*b*). (3–7). *Imitative, Individualistic.*

Children at this age love to imitate actions of adults. There is a great tendency towards rhythmic movements. Sensori-motor plays have a firm hold; in addition these plays must possess some definite meaning. Towards the sixth year dramatic plays become strongly marked.

Physiologically there is a tendency towards large movements; very little pure adjustment is found. The plays are individualistic and non-combative and there is little constructive play. This period is a time of strong activity.

Miss Sissons[1], writing of the free play of Kindergarten children before school and in recess times, describes the older boys as playing a great many highly imaginative games—some of them rather rough and boisterous. In two months she noticed 31 distinct kinds of dramatic and imitative play. The games of the older girls were almost entirely dramatic. The smaller children indulged in simple experimentative games.

Period 2. (7–9). *Individualistic.*

The interest in ball games is at its height; many games involving the individual outlook appeal,—games of hunting, catching, etc.; 'Prisoner's base': 'Hide and Seek': 'Blind Man's Buff.' There is some tendency to co-operation in such games but the individualistic spirit is far the strongest.

Period 3. (9–12). *Competitive.*

There is great love of rivalry at this age. Simple feats of skill are attempted. In girls the age of dolls is at its height (see Stanley Hall; Miss Ravenhill)[2].

Mr J. Lee in an admirable article on 'Playground Education' calls attention to the sterility of ideas of this period. The child cannot set himself to play without a leader. It is the critical age. Romance and make-believe have to a great extent flown. It is essentially the practical age. Collections, pets, puzzles, use of books, are at the height of their attractiveness.

[1] C. Sissons, 'Children's Plays,' *Pacific Ed. Journal*, June, 1894.

[2] See Appendix II *a*.

To summarize the general characteristics of the plays of periods 2 and 3, there are a greater number and variety of plays than at any other period. The dramatic interest wanes towards the later part of period 3; the social element becomes more obvious. The individualistic tendency towards rivalry is gradually replaced by games of chase. There is also a marked difference in the games of the two sexes. Girls seem at this age to have a greater variety of games; boys tend to greater co-operation.

Period 4. (12–17). *Group games.*

This is the period of definite co-operation. The aggressive, individualistic character of the previous period disappears, a strong sense of group consciousness is developed. The game spirit and hero-worship are paramount. The play demands a higher degree of mental development. Loyalty is a marked feature, and obedience to a leader, subordination of self.

Dr Gulick[1] adds a fifth period, 17–23, he considers that, although the same games or plays are popular, they are pushed to the limit of endurance.

There is a much stronger feeling that the group interest is paramount.

In adults the general characteristics of the higher forms of children's play seem to be maintained, as far as active play goes, but there is a further development of the passive side of the play impulse, the main factor of which seems to be inner imitation.

The Psychology of the Organized Group Game.

In order to prevent any misapprehension in regard to this use of the term 'organized group game,' it is necessary to state that the term 'group game' has been applied to all forms of games involving co-operation, including many of the traditional ring and line games. The term 'organized group game' is here used to mean a game played by two opposing teams under a leader according to definite fixed rules.

In discussing the psychology of the organized group game it will be necessary:

(1) to endeavour to ascertain how these special national games have been evolved,

(2) to investigate the instinctive tendencies which are common to these and other forms of play activity,

[1] See Appendix II *a*.

(3) to find out the psychological factors which are more or less peculiar to this special type of play,

(4) to endeavour to find a reason for the fact that this type of game appeals so strongly to the Anglo-Saxon but less strongly to other equally civilized races,

(5) to analyse the mental disposition or cult of thought involved in the idea of 'playing the game.'

There are definite characteristics which are common to all the great national games.

They are all played with a ball which is propelled towards a mark either by a portion of the body or by a stick or club. They are all team games and involve co-operation which has reached the stage of division of labour under a definite leader.

The origin of the ball as an instrument for play is wrapt in antiquity. It can probably be traced in the first place to the discovery of the physical properties of round objects in nature. Many regard ball games as remains of divination ceremonies, and the use of the ball in rhythmic play is certainly very ancient.

The factor of co-operation is common to the great team games and to the traditional line and ring games. The line game has been shown to have been derived from the imitation of tribal contests. The evolution of the great English national games is obscure owing to the fact that as all ball games tend to change and mingle with others the nomenclature becomes very mixed.

It is probable however that the oldest British co-operative ball game was a form of 'hurling,' which can be traced back to the time of the Romans, who played it with a ball called 'Harpastum,' a word derived from 'harpago,' 'to snatch or take by violence.'

The players in this game were matched in couples against each other and the aim of each was to hurl the ball through his opponent's goal. The inhabitants of the western counties of England became very proficient in the pastime, but it was not until the 16th century that the game was played with a bat known as a 'hurle batte.'

Hockey has probably evolved from this game. The earliest mention of the word is in 1527, when amongst prohibitive games is named "The horlinge of the litell balle with hockie stick or staves." The Cornish 'hurling' and a like game in other parts of England consisted in the hurling or hand throwing of a comparatively small ball. It was very similar to the 'campball' (A.S. camp, a combat) of the Eastern Counties. This game was played between goals 150 yards apart with a small

ball which was thrown up by a neutral spectator midway between the opposing players whose object was to seize and convey it between their own goals.

The modern game of net-ball or basket-ball, which has become so popular in England and America, seems to be a revival of the game of 'hurling.' Here the ball, the size of a football, is bounced between the opposing teams whose object is to pass the ball and throw it into their opponent's goal which consists of a net fixed upon a pole 10 ft high.

The origin of football is difficult to trace. Some believe it to be very ancient, while others think it may have been derived from a special form of 'campball,' known as 'kicking camp,' in which the game was played with a large ball and kicked instead of thrown between the goals.

In 1349 'football' was prohibited by a public edict and again in the reigns of Henry VIII and Elizabeth. It seems however to have been well established at Cambridge in the reign of Charles II, as is evidenced by the writings of Pepys and other well-known authors.

The popularity of the game died out during the 18th century and it was little played except for the special Shrovetide contests. It was revived in the public schools early in the 19th century and has steadily gained in popularity up to the present time.

The two forms, Rugby and Association, have probably evolved along lines which differ to some extent, Association resembling hockey more or less in its rules.

The exact origin of cricket is somewhat difficult to determine, but there is no doubt whatever that it is a game essentially and exclusively English in its rise and development. As early as the middle of the 13th century a game of ball was played with a crooked or clubbed stick called 'creye.' In the Wardrobe Accounts of Edward I for 1300 the sum of 100*s.* is entered towards the expenses incurred by John Luk, tutor and chaplain of the young prince (Edward II), in playing at 'Creag' and other games. 'Cricee,' Anglo-Saxon for a crooked stick or club, is the probable origin of the name; but if this be the case the shape of the stick or club changed and became for the most part straight. Club-ball, as distinguished from cambuc or golf, seems to have been of the nature of cricket, and was played for some time with a comparatively straight club or bat. But in no mention of club-ball is there any reference to that essential of cricket, the stumps or wicket at which the ball is aimed. This is to be found in another old game which went

by the name of stool-ball. Stool-ball is frequently mentioned by the writers of the last three centuries. Strutt gives the following description of the game: "Stool-ball consists simply in setting a stool upon the ground, and one of the players takes his place before it, while his antagonist, standing at a distance, tosses a ball with the intention of striking the stool, and this it is the business of the former to prevent by beating it away with the hand, reckoning one to the game for every stroke of the ball; if, on the contrary, it should be missed by the hand and touch the stool, the players change places; the conqueror at this game is he who strikes the ball most times before it touches the stool. I believe the same also happens if the person who threw the ball can catch and retain it when driven back, before it reaches the ground."

From this description it is fairly obvious that a combination of stool-ball with club-ball, a bat being substituted for the hand, was the origin of the game now known as cricket. The oldest known mention of the game by its modern name goes back to the time of Edward VI.

The American game of baseball is of comparatively modern development and is by some attributed in its origin to the English game of rounders.

The tendency to use a missile as a means of attack is common to the whole human race. The small child in a fit of anger invariably seizes some object and attempts to hurl it at the offender, and this primitive method of fighting has been observed in the higher type of monkeys as well as man.

The simple throwing game is closely allied to the transference of motion to the missile by means of a sudden blow by a part of the body. Later comes the development of the means of increasing the bodily radius, and therefore the force of the blow by using a stick or a club.

'Catching' is the complement of 'throwing,' and in no way can our supremacy over matter find more satisfactory expression.

The second factor common to all these games is the tendency to greater or less co-operation. This tendency may be traced in its development from the gregarious instinct through the looser form of co-operation found in the traditional line and ring game to the higher form of co-operation under a leader.

Traces of co-operative games are found amongst animals.

Hudson[1] describes a game which involved elementary co-operative play amongst weasels and to the ordinary observer the play of lambs certainly seems to show rudiments of the co-operative spirit.

[1] *The Naturalist in La Plata*, p. 384.

The traditional line games of all races seem to have originated in the imitation of a contest. This type of play makes use of the pugnacious instinct and the instincts of rivalry and imitation in a marked degree in addition to the primitive forms of chasing, hunting, etc. The practice theory for play is sufficient to account for the activities thus far, as they all tend towards the development of the physical and mental co-ordination so necessary for the adult animal.

When we come to consider a further factor, however, we see that this is not the case. In the traditional line and ring games there is a form of loose co-operation, as in Chevy Chase, Touch Last, Nuts and May, and other games so popular amongst children between eight and ten years of age.

The co-operative factor is, however, outweighed by the marked individuality of this type of play. Although a leader may be necessary, the game is not popular unless the leader is constantly changing and each child has the opportunity of taking the rôle. Anyone who has observed children of this age playing cannot fail to notice that it is the age of marked self-assertion in which only those games appeal which give scope for this tendency. If a team game such as football or hockey is forced upon children at this stage they will play it, chiefly because of the desire to emulate their elders, but the spirit of the game does not appeal to them.

If we consult the results of researches on the play periods we find unanimity of opinion that at the age of adolescence there is a marked change in the mental content. The social consciousness develops, romance and idealism appear. The youth of both sexes require someone on which to fix their budding affection; this is often a person of the same sex and a person possessing the simple virtues which so strongly appeal to this age. There is a strong tendency to form gangs, clubs, etc., towards working as a part of a whole under a leader. The feeling of rivalry so closely allied with the sex instinct tends to become rivalry of the group rather than that of the individual. It is at this age that organized group games appeal most strongly. They satisfy so many of the instinctive tendencies: the combative instinct, rivalry, throwing at a mark, endurance, co-operation, organization and loyalty to a cause.

Again, a consideration of the mental attributes which by a concensus of opinion are admittedly present in a marked degree in individuals who show special aptitude for playing organized group games, will show that alertness, quickness of thought and action, promptness in decision, judgment, and resourcefulness head the list and it is not assuming too much to suggest that these attributes have been trained

by participation in the game[1]. If we add the physical training in co-ordination of muscle, accuracy of aim, etc., we see that the mental and physical attributes of individuals who excel in these games are precisely those which have had to be produced through long ages in the evolution of man in his primitive stage.

The power of complete co-ordination of muscle, accuracy of aim, quickness of thought and action, judgment were to man in the savage stage essential for the preservation of life itself. It is not too much to assume that as nine tenths of man's existence have been passed in this stage there are innate tendencies towards the development of such factors. At the same time, if it is allowed that the plays of childhood fulfil this need, it seems impossible to account for the definite types of play which appear at different ages unless we accept the recapitulation theory. Admitting this, it is easy to see that the plays of childhood make use of those general broad instinctive tendencies of catching, chasing, hunting, fighting, co-operation, etc., which have been most useful to man in his primitive existence, and that at the age of adolescence the child has reached the tribal stage in which co-operation is further affected by the element of division of labour, each individual acting as a definite part of the whole under a leader. The development of the disposition of loyalty towards a leader, involving as it does the negative self-feeling on the one side and the marked positive self-feeling on the other, was a necessary factor for the unification and therefore the success of the tribe.

If the recapitulation theory is held, the organized group game falls into line with the more primitive types of play. If, on the other hand, it is not accepted, it is difficult to see why the group loyalty of the adolescent appears so markedly at this stage. Groos' practice theory will hardly account for this.

The only satisfactory explanation of the evolution of the group game is found in the combination of the two theories, e.g. that man in his play retraverses the stages of race development and in so doing trains by the action of intelligence those instinctive tendencies which have been evolved to aid in the continuation of the race.

The organized group game thus falls into line with other types of play. As the highest type of motor play, it has been evolved from the more primitive forms and makes use, as these do, of the deep-rooted instinctive tendencies, but at the same time it brings into play those tendencies which appeared when man reached the tribal stage and which show themselves in the youth of the race at the period of adolescence.

[1] See Appendix I.

If we turn to the special English games we find that their popularity varies in accordance with the measure in which the game satisfies these special needs. In comparing cricket with football no one will have much hesitation in saying that football is essentially the most popular game of the masses, cricket of the more intellectual classes. The tremendous crowds that a football match draws are equalled for no other sport. It is impossible to explain this as a result of the betting spirit as this can be exercised as well in many other ways.

If we analyse the instinctive tendencies that are brought into play in football, we see that the primitive instincts of propelling a missile towards a mark, of catching, throwing, etc., are combined with a strong combative propensity which is further enhanced by the quickness of the game and by the personal contact which comes in grappling, tackling, and the like. It is well known that contact in all forms seems to satisfy an ancient need. At the same time the instinct for rivalry is appealed to and the group spirit is catered for.

Association football certainly has a greater popularity with the masses than Rugby. This is probably due to the fact that the appeal to the individual's combative instinct is more powerful in the one game than the other.

Hockey follows football in satisfying these special needs but falls far behind it in its appeal to the general public. This is due partly to the lack of personal contact which is allowed in football and partly to the fact that propelling the ball with a stick is a later development than propelling it with the foot and fails to satisfy the same primitive instinctive needs.

Many disallow cricket as a group game. It is far more individualistic and its appeal to the group consciousness of the players is subordinated by its demand for personal skill. It is played in summer at a season when the same violent activity required for football is scarcely possible. The instinctive tendencies based on the combative instinct and the instinct of rivalry are satisfied, but it is essentially a scientific game and appeals strongly to the educated classes whose instincts have become more or less intellectualized. At the same time the team interest is strongly maintained in cricket, although it requires a higher stage of ideation to realize it than is necessary in football or hockey. The individualistic attitude is really not the dominant one amongst the finest type of players.

It would appear that cricket really represents the latest evolution of the group game in which there is co-operation of highly skilled

responsible units and in which the later stage of tribal life is represented. Here not only has each individual in the team to do his part as a unit acting with other units but during part of the game he has to take full responsibility and act more or less alone. May not this show the dawning of the idea of citizenship? This view is borne out by the fact that cricket appeals far more than football to the more educated classes, that is to individuals who have reached a further stage of development.

The game of net-ball which has become very popular in English girls' schools is played by both sexes in America. It approximates closely to football and hockey in its effect on the players.

Baseball, the American national game, will fall more or less under the same category as cricket. It seems to have been evolved to fit the American type of character and demands a very high standard of skill and accuracy. It has never become popular in England.

We have shown that the organized group game has been developed as the most advanced type of motor play, and that it can be brought into line with the more primitive types of play by an explanation which involves both the practice theory and the recapitulation theory. The fact that this type of play, apart from making use of a number of primitive instincts also brings into play the more recently developed tendencies for group organization and division of labour, explains why it is only found amongst races who have reached a certain stage of development. Again the fact that the instinct of rivalry and the pugnacious instinct have full scope in these games gives a reason for their being found more especially in those races where these instincts are strongly marked. This view is corroborated by experience. The Maoris, a strong and warlike race in which rivalry is well developed, take to football with avidity and often learn to beat the Anglo-Saxons in the game, while travellers who have attempted to teach it to less warlike tribes such as the Hindu or the Burmese in which the instinct of rivalry is undeveloped, find no response.

This fact not only gives a reason for the hold the organized group game has taken upon the English race but also suggests an explanation for these games having increased in popularity so largely during the 19th century.

It is necessary to look for this explanation in the needs of the race under the stress of civilization to find scope for the innate dispositions. The Anglo-Saxon is descended from ancestors in whom the instinct of rivalry and the pugnacious instinct were very strongly developed. They were the fiercest fighting men of their age and their descendants

must find some vent for the strong instinctive tendencies they have inherited.

Graham Wallas suggests that in "civilized man the relation between disposition and stimulus is most complex. Man is born with a set of dispositions related, clumsily enough but still intelligibly, to the world of tropical and subtropical wood and cave which he inhabited during millions of years of slow evolution and whose main characteristics changed little over vast periods of time....In our own time an environment has been created in which for most of us neither our instinctive nor our intelligent dispositions find it easy to discover their most useful stimuli....We cannot in S. Paul's sense 'mortify our dispositions.' If they are not stimulated they do not therefore die nor is the human being what he would be if they had never existed. Each disposition baulked produces a nervous strain of which the individual himself is unconscious[1]."

It is along these lines that we have to look for an explanation of the recent advance in popularity of our great national games. They have been evolved from the games of earlier times to satisfy the needs of individuals, the majority of whose instinctive dispositions have been baulked as a result of civilization, they have been evolved by a race in which the instincts of rivalry and pugnacity have been developed to a specially high degree in the past and which therefore need some special means of satisfying these instincts when they can no longer gain satisfaction in the normal way.

If we attempt to analyse the mental content of the mind of an adolescent, even in the most civilized environment, we find that it differs only in degree from the mind of his primitive forbears, while if we consider the life he often has to lead we cannot fail to realize how pitifully his natural instinctive tendencies are baulked.

He is filled with the love of action, the desire to use his limbs, to practise the arts of the chase, to fight. The instinct of sex is acting along the lines of love and romance. To him the crude virtues of physical prowess, bravery and courage are paramount. The youth of the Northern race especially inherits from his ancestors the power of physical endurance as is proved by the fact that the Anglo-Saxon can stand hard physical strain and exposure but succumbs easily to the diseases of town life and lack of air.

All these instinctive dispositions have been developed through the ages to fit the life man has been accustomed to. The youth in the

[1] Graham Wallas, *The Great Society*, Part I, chap. IV, p. 64.

savage state is early taught the arts of the chase and the fight. His body is trained to the utmost. His mind is fixed upon life's primitive things. He satisfies the instinct of curiosity in the hunting adventure, the sex instinct by an early physical marriage,—the instincts of rivalry and pugnacity in the tribal fight.

The youth of the present day is precluded from the hunt and the chase. Instead of the primeval forest he has the school desk, or the office stool; his love of adventure is limited to the chances of city life and if he breaks out in other lines he is probably looked upon as a criminal. His sex instinct with its imperative demands cannot be satisfied. On all sides his ancestral dispositions are baulked, the necessary stimuli are absent and he becomes dull and listless unless some other stimuli can be found to take their place. Herein, I believe, lies the explanation of the apache, the hooligan, and in many cases, especially amongst the comparatively young, the drunkard and the gambler.

To quote again from Graham Wallas:

"If the desire for change of work, of achievement comes on, then the bookmaker is always round the corner; and the publican will give at any moment for a few pence, that dreaming reverie, that sense of the tremendous significance of the world, which led their ancestors, sitting at the tent door or among the mountain sheep, to the beginnings of philosophy and science[1]."

Turning to the consideration of the mental content of the adolescent when playing the organized group game we find the satisfaction of many of his innate desires.

The longing for the chase, the hunt, the fight, the delight in physical activity, training of eye and hand, muscular endurance, all find scope. The dawning instincts of co-operation, group consciousness, loyalty to a leader are satisfied. The crude virtues which he admires are the ones most necessary to the games captain. The love of adventure is brought into play and the desire for a fight is satisfied in the vigorous contest of the game.

Again the urgent promptings of sex are eliminated to a great extent by the use of the vital energy in other directions. The game seems to satisfy all his instinctive cravings and thus produces that sense of inner freedom which is a factor of all unbaulked life and therefore of 'play.'

[1] Graham Wallas, *The Great Society*, Part I, chap. IV, p. 66.

As a result of this the youth forms an emotional disposition round the game as an object, a group of ideas round which, for the time being, the whole of his thought centres.

If the organized group game gives such scope for baulked dispositions it is necessary to consider how it is that the instinctive tendencies which it employs do not reach the natural fulfilment of their end.

That this is essentially a more or less modern development is shown by the fact that in earlier times the games were so often publicly prohibited. We may assume that this meant that the players frequently lost control of themselves and allowed their instincts to work along lines injurious to the community, in other words to work towards their normal end.

It is interesting to note in the modern form of the game that the weakening of the emotional concomitants usually associated with the instincts varies in direct proportion to the development of the cult of "playing the game."

In young children it is difficult to keep the element of positive self-feeling out of the game and in many matches in Association football played by members of the less educated classes the game is liable to end in a free fight, the emotion of anger so closely allied to the fighting instinct arising and getting beyond control.

Groos would probably explain the absence of the true end of the instinct by his practice theory for play. This however would not account for the play of adults which follows the same lines as that of the adolescent, as with them the majority of the instincts have matured.

It is therefore necessary to find some other explanation for the fact that a game such as football can be carried to the most extreme limit of excitement and contest without arousing the emotion of anger and in the event of defeat, the desire for revenge.

Mr Shand's view that 'play' is the special form of behaviour for the emotional disposition of joy might explain this to some extent, but the whole process of a game such as football mitigates against the laws of joy as laid down by him. The participants in a football match do not "tend to maintain the object itself as it is" neither do they "tend to maintain the self in its present relation to the object[1]." Rather do they work for a definite end which is similar to that of battle but which apparently does not call up the same emotional states. McDougall's explanation that the instinct of rivalry which requires the

[1] A. F. Shand, *Foundations of Character*, chap. VII, p. 281.

subjection of a rival, rather than his extinction, predominates over the pugnacious instinct in such games[1] may explain this to some extent but it does not seem to account for the attitude of equality which prevails between winner and vanquished immediately the game is over.

None of the explanations advanced seem to get to the root of the matter. I believe the solution lies along the lines worked out by Freud and his followers. Freud has shown that, certainly in the case of the sex instinct, repression leads to dissociation, sublimation and symbolization. May not this be true of other instinctive tendencies? If so a solution to the problem may be found.

In civilized life many of the instinctive dispositions have to be repressed in early childhood for the good of the community. As a result of this the ideas connected with these tendencies have become more or less dissociated from the general mental content and more or less divorced from their emotional concomitants. They form, according to Freud's doctrine, isolated groups of ideas which are cut off from the general consciousness but which at the same time affect it. They may enter consciousness again in such a modified form that it is difficult to recognize them and the energy which would be expended in fulfilling the ends of the instinctive actions is made use of in another form, is sublimated and intellectualized. Thus many instinctive tendencies find means of expression far remote from their original end.

I believe an explanation such as this accounts for the fascination of the organized group game in modern life. The instincts of hunting, fighting, rivalry which have been more or less repressed in the civilized youth are sublimated and form detached associations which in turn become connected with the game idea, which gives vent for these and full scope for the primitive instincts of throwing at a mark, chasing, etc. In this way these tendencies appear once more in consciousness associated with the game idea but divorced from their original meaning. Thus in their modified form they fail to recall the emotional concomitants associated with the instincts in their primitive form or only recall them in a much fainter degree. The 'game' group of ideas will therefore take a similar place in the mental content of the youth to that ascribed by Freud to 'dreams' in giving a vent for unsatisfied desire.

The suggestion put forward that the organized group game has been specially evolved to satisfy the needs of the Anglo-Saxon race is borne out by the fact that these games are not generally practised

[1] W. McDougall, *Social Psychology*, chap. iv, p. 113.

amongst other civilized races. Football and cricket have certainly been introduced into France and Germany and taken up, especially in France, with enthusiasm by certain sections of the community. That they have not, however, gained any real hold upon the communities at large points to the fact that there is no real instinctive need for them. In countries such as these where compulsory military service has developed with advancing civilization another explanation may be forthcoming. The instinctive needs may have been fulfilled in another way. This may also explain why the 'group game' was unnecessary in the age of chivalry in England.

There is scope for a very interesting investigation as to how far the play of each civilized country fulfils the special needs of each race.

In this connection it is interesting to consider the games of ancient Greece and Rome.

The Greek Olympia represented the highest level of the national games in Greece, and probably no institution had a greater effect in moulding the national character and in producing that wonderful type of physical and intellectual beauty and harmony of development which we see reflected in the art and literature of Greece and which has never found its equal in later times.

So exalted a place was given to the athlete in the Greek ideal that by many he was regarded as more worthy of honour than the general, returning loaded with spoils from the wars.

The Roman games included feasts and theatrical performances, as well as feats of contest. They were largely spectacular and were closely connected with the religion of the country. At the beginning of each civil year the consuls vowed to the gods games for the safety of the commonwealth, the expenses of which were defrayed by the treasury.

The taste of the Roman public for such spectacles grew until the public games became a passion, and the Caesars vied with the more wealthy citizens in lavish expenditure on them. From the beginning the games were spectacular and the athletes were paid professionals.

It is of paramount interest to notice that the Greek games are pre-eminently individualistic. There is no attempt at the co-operation which is so marked a feature of our modern national games.

To account for this we must turn to the ideals of the people. The Greek view of life was essentially that of the individual. The magnificent scheme of education which resulted in the evolution of the Greek citizen, who is still regarded as the flower of the human race, the

topmost pinnacle which has yet been achieved in the scale of evolution, was evolved at the expense of an enormous under class—the common freemen and the slaves. To the Greeks the highest class was all that mattered. The members of this class were given a training which produced their wonderful harmony in physical and intellectual development, but at the expense of the masses.

The ethical ideals of modern life are entirely opposed to this, and though we may never again reach the summit of Greek culture we are moving nearer and nearer to the ideals of the true democracy—the development of the whole. It is this spirit of democracy which appears in our national games, while the ideal of individual perfection marks the Olympiad.

Again, we can trace in the Greek games the realization of the paramount desire for physical and mental harmony which is so strong a feature of Greek literature, and we can see traces of the romance and mystery which ever surrounded their religion.

The psychological explanation of the Greek type of play is not difficult to find as it fits in with their general ideals for national and individual development.

When, however, we turn to the Roman games, it is more difficult to find an explanation. The vein of coarseness and brutality which can be traced through all their public spectacles may well be accounted for by the national type of character, at once more warlike and less imaginative than the Greek.

At the same time it is very difficult to understand why such an eminently practical and active type should take their pleasures passively as spectators.

The Roman audience was composed of the flower of Rome. It was not the citizen alone who watched the gladiatorial contest, but the warrior also fresh from a victorious campaign. Here indeed may lie the explanation of the passive side of the Roman games. The nation was essentially a nation of soldiers, ever setting out to conquer some weaker nation, to colonise, to subdue. It is conceivable that the warlike passions of the soldier needed some stimulus in his times of rest without the accompaniment of the strenuous labours of action. This he would get by watching a spectacle, by the power of inner imitation. His body would be resting, but his mind would be refreshed by the faint rousing of the emotional state which he had enjoyed in all its splendour in the hour of battle.

The warlike spirit of the race may also explain to some extent the

enjoyment of the women in a spectacle which called up in a faint degree the emotional state of war; and this gave them relief for those warlike feelings which, owing to their sex, they were not enabled to satisfy in battle.

The Roman audience was not however composed wholly of martial elements and it is necessary to seek some explanation for the passive enjoyment of the 'freeman' who had neither taken part in the fight nor been associated by strong emotional ties with those who had, and could therefore neither recall the warlike emotions in the way possible to the soldier, nor the weaker reflection of them possible to the women of the martial families.

It is of interest to note that the same passive enjoyment of a spectacular contest is found amongst the modern Anglo-Saxons, a race which approximates nearly to the ancient Roman type. The most satisfactory explanation of this phenomenon is that of 'inner imitation' and has been already suggested. It involves, as I have shown, McDougall's doctrine that each instinctive tendency has its definite emotional concomitant which can be revived to a certain degree without recalling to consciousness the idea of the instinct in its primitive form.

McDougall shows how the innate disposition may have been modified in man to such an extent that its action may be changed or inhibited to a very large degree. At the same time there is always an unmodified native central part which will produce visceral changes and emotional states of consciousness in accordance with its unmodified native constitution[1]. Again, McDougall shows that the instinctive reactions are capable of being initiated, not only by perceptions of objects of the kind which directly excite the innate disposition, the natural or native excitants of the instinct, but also by ideas of such objects and by perceptions and ideas of objects of other kinds[2].

If this view is accepted such type of passive enjoyment can be explained. The spectator at the sight of a contest of any kind has his instinctive tendency to combat faintly excited. His muscles tend to move unconsciously but the movement is inhibited so that the instinctive action is not performed. At the same time although there is no revival of memory ideas of contests, as is the case with the soldier, the ancestral tendencies of each individual are sufficiently strong to revive the emotional element in a faint degree and to produce certain visceral changes which give rise to pleasurable feeling.

This explanation is borne out by the fact that children cannot

[1] W. McDougall, *Social Psychology*, p. 42. [2] *Ibid.* p. 32.

enjoy a game passively. The idea is sufficient to set a child's muscles working so that he is only satisfied if he takes part in the game. There are also many adults who have reached a stage of proficiency in a game who derive no pleasure from watching one. There is however another section of the audience of the modern football match to which this explanation would not apply. The crowd consist for the most part of individuals who cannot play the game or who only play it with very limited skill. They probably fail in the initial muscular power required, and by lack of vitality have never experienced the instinctive desire of fighting in a sufficiently strong degree for it to have been baulked and sublimated. They therefore are only capable of passive enjoyment of the game. That their instincts are roused directly to a certain degree is shown by the excitement produced in them. There are others, however, skilled athletes, capable of taking full part in the game who also get enjoyment from watching a match. Their pleasure can be explained partly by the explanation suggested to account for the delight the Roman soldier took in the spectacular games. This cannot explain fully the athlete's enjoyment. The inhibition of his muscles must be more or less voluntary as he is watching an actual game, not another type of contest as in the case of the soldier. This must therefore produce a feeling of strain which will need to be relieved in another way. His enjoyment is probably more or less aesthetic and arises from the feeling of satisfaction and freedom which is experienced in contemplating beauty of form and movement. This is evidenced by the fact that the pleasure increases the more perfect the game becomes but is spoilt by a single false move.

It is very difficult to explain the passive side of adult play unless Mr McDougall's view is accepted and this form of play certainly seems to be additional evidence in favour of his theory.

The factors of 'make believe' and 'love of betting' certainly count in this type of play but they are hardly strong enough to explain the fascination of football which draws crowds far in excess of any other sport. 'Make believe' is more easily satisfied at a cinema or theatre while betting is more natural to horse racing, prize fighting and games of chance.

It is now necessary to discuss the 'cult' or tendency of thought, the ideal sporting spirit of 'playing the game.' This really brings us into the domain of ethics, but it is necessary to consider the psychological development of this ethical code and the reasons which have led to the

profound effect upon the national character which seems to have produced such marked results.

Not for one moment is it suggested that the English code of honour is a result of the national games. The tendency to 'play the game' has certainly been an attribute of the race inherited probably from the age of chivalry. The very term 'play the game' shows however that the idea is closely allied to the sporting spirit, and it is in the game that the child frequently gets his first idea of strict honour. A boy will often cheat in his school work while nothing will induce him to cheat in football.

How has this arisen?

I believe that it is due to the fact that the game and the mental associations surrounding it, separated as they are from the main consciousness, have produced in the individuals emotions derived from the great emotional concomitants of the instincts, but varying in degree or sublimated so that they appear in a different form, and that one of the great essentials of the game is that feeling of inner freedom which is a characteristic of all unbaulked action.

Individuals taking part in such games have found that this sense of freedom can only be maintained if the game itself is maintained as a unity, that is if it is played according to definite rules which have been evolved to produce harmonious action between the units of the team. This tendency has produced a habit of thought in connection with the game which is passed on by suggestion to each new participant in the game. This habit of thought becomes associated with the 'game' group of ideas which is forming in the mind of the individual and is aroused in any connection with it.

The very large place which this 'game' group of ideas holds in the mind of the adolescent of both sexes has resulted in the formation of a national habit of thought which is carried on as tradition.

That this is the case, in a smaller degree, can be proved by anyone who will take the trouble to analyse the change in the mental content of a number of children of the right age taken from an environment in which the code of honour is low. If these children be taught a group game, at first cheating is universal, self-assertion is paramount, and the emotions of anger and jealousy are rife. Gradually however the tendency to co-operation becomes marked, the idea of group consciousness appears, the individual is subordinated to the whole. The code of honour in connection with the game is entirely altered by suggestion and at the end of a year of such training a team of children are able

to play a match with self-control, to continue to the end of a losing game with full energy and vigour and to take a beating good humouredly. Evidence of such results have been obtained from many schools in different parts of the country.

It is especially interesting to notice in this connection the rise in popularity of such games amongst girls and the evolution in them of the 'games spirit.' At present the introduction of athletics in girls' schools is almost too recent to allow us to dogmatize but as far as can be ascertained the results are essentially the same as those found among boys.

If the theory advocated in this paper be accepted, the value of the 'organized group game' as an educational factor must be admitted to be great. If these games have been evolved to satisfy the instinctive tendencies which are baulked by the conditions of civilization they are certainly natural means of education which should be made use of to the fullest extent. So far such means have only been tried seriously in the English public schools, with a result that the popularity of the games is so remarkable that many have thought that Athleticism plays too large a part in the education given by these institutions.

Rather I would suggest that this very popularity shows that such activities are an instinctive necessity, and results have proved that the training given by such games produces individuals who are more fitted to cope with life's difficulties than others who have not had the benefit of such activities.

It is not suggested that this should be the only means of education but that it should be combined with intellectual training for all classes of the community and looked upon as a strong educational factor rather than as a means of recreation only. For if the 'group game' has been evolved for the purpose suggested it will be of even more value to the less educated class than to those who benefit by it in the public schools.

The very great value of activities which tend to make use of instinctive dispositions has been shown by the wonderful results of the Boy Scout movement which has appealed so universally to boys of the age preceding the 'team game' period.

We know that the use of more primitive forms of play has been advocated by the leading educationists of every age and that the Greeks looked upon 'play' as the most important branch of their special type of education by which they reached an harmonious stage of development which has never since been attained.

It is not too much to hope that if rightly used this special form of

play which has been evolved by the Anglo-Saxon race may become one of the most powerful factors in the education of that race.

It is impossible to separate moral from mental characteristics, but the consensus of opinion on the results of training in such organized group games goes to show that the qualities we look upon as making more or less high moral character are strengthened by such training. These qualities are certainly some of those which mark man in his highest stage of evolution.

The Greeks looked upon individual development as the ideal of attainment and used a special form of 'play' as a means to reach this ideal.

The Anglo-Saxon as a later product of evolution regards the harmony of the group as the ideal, the individual development of the unit as a part of the whole.

The success of English methods of colonization is due to the ideal of self-government and freedom which permeates our national thought, and it is not too much to say that this very ideal is carried on to a great extent by men from the public schools who have acquired early the tradition of the game. It is to men such as these that we owe the generally accepted idea that the Englishman's word is his bond, and it is not too much to say that this is due to a tradition of honour which he terms 'playing the game.' A phenomenon which can produce a cult of thought which has such far-reaching effects is surely one which requires careful consideration from the point of view of the educationist.

If the same effects can be produced on the masses by introducing this cult and by making use of these national games to a similar extent in general education, surely steps should be taken to ensure it, and to use such means as a part of the educational curriculum.

It is not enough to use such games as recreation alone, for this simply results in the few taking part while the many satisfy their instinctive needs passively by watching only. This fact is shown by the enormous attendance at football matches throughout the country. Why should not those who obtain passive enjoyment from the sight of the game gain the far greater advantage of active enjoyment in participation, and by so doing not only satisfy their innate tendencies more fully but acquire in addition the spirit of the game?

This could only be achieved by introducing the whole system of training by such games into the schools and by allowing the cult of thought surrounding the 'game' idea to permeate slowly through all classes. That such a cult of thought can be produced within a few

years in whole sections of the youth of the community, although it is almost entirely foreign to their upbringing, has been shown by the really marvellous results of the 'Boy Scout Movement.'

The experiment with regard to 'games' has already been tried in the greater number of the secondary schools of both sexes and in many public elementary schools where the teachers themselves realize the value of the 'games spirit.'

We have still however to wait for a national institution. The playground movement in America and England has shown us how widespread is the educative effect of organized play. In America the subject has received careful consideration[1] and University courses have been established for the training of 'play leaders.'

It is not too much to hope that in time the nation will reach the realization that a phenomenon such as the 'organized group game' which has been evolved to satisfy the instinctive needs of a virile race should be made use of as a national part of an education the ideal of which is to produce a perfect citizen.

Summary.

I have endeavoured to show in this thesis,—that play is a universal phenomenon found amongst animals and man and that its complexity varies with the stage of development of the species and the individual,—that the plays of childhood can be divided into definite periods which coincide with the periods of race development,—that the play of animals and children makes use of instincts and by modifying them intelligently trains for the adult life,—that the theories suggested account respectively for different types of play,—that the earliest forms can be explained by the Surplus Energy theory,—the later forms by the Practice theory combined with the Recapitulation theory and much of adult play by the Recreation theory,—that the traditional games of all countries have arisen as the results of the imitation of the serious occupations of the life of the period, based on the use of the primitive instincts of rivalry, pugnacity, chasing, hunting, etc.,—that the organized group game as the highest form of motor play represents the tribal stage of the race and therefore only appears in races which have reached a certain stage of development in which co-operation is combined with division of labour and loyalty to a leader,—that the final development of the group game seems to have arisen as the accompaniment to civilization

[1] See Appendix II *c*.

and has been evolved as a means of giving scope to those instinctive tendencies which are baulked by such civilization, and that the evolution of this kind of game appears in the race which has inherited from its forbears the instincts of rivalry and pugnacity to a marked degree.

I have endeavoured to show that as a result of civilization there has been a dissociation of ideas and a definite group of ideas formed around the concept 'group game' such that the instinctive tendencies it makes use of and their emotional concomitants have become sublimated and appear in consciousness in an altered form.

I have attempted to show that the fascination of the 'organized group game' in modern times can be explained on the lines that it has been evolved to satisfy the baulked dispositions of a warlike race under the conditions of civilization, and that the cult of 'playing the game' has been established as a national habit of thought by suggestion resulting in 'tradition.'

Finally I have advocated the further use of this national development as a means of education, for by it we may hope to go far towards the production of that harmonious individual development attained by the Greeks, combined with the social consciousness of modern achievement, by allowing full play to instinctive tendencies along lines which are compatible with the general good.

By this means, combined with intellectual development we may hope to produce an individual capable of making his surroundings harmonize with the trend along which the race is developing and thus remove much of the discontent, the feeling of thwarted desire and the morbidness prevalent as accompaniments of civilization.

By so doing we may hope to give scope to that activity which has been defined as 'play' and which, I believe, is simply that line of evolution along which man has the fullest scope to develop his innate powers, or in other words that the life force or '*l'élan vital*,' has the greatest freedom to work out its appointed end.

APPENDIX I

Synopsis of Results obtained from Answers to a Questionnaire on the Educational Value of Group Games.

(*A detailed analysis of these results is to be published in the* Proceedings of the Society of Education, *London.*)

In order to ascertain the current views of educationists on the value of the organized group game the following letter and questionnaire were sent out to 1000 of the leading public and secondary schools in England. A short synopsis of the results obtained is here given.

The Psychological Laboratory,
King's College, London.

The Educational Value of Group Games.

Dear Sir or Madam,

In view of the strong belief which is generally held in the beneficial effects of handwork on brain development, it seems important that some research work should be undertaken to find out whether any such results can be traced to definite training in group games, such as Cricket, Football, Hockey, Netball or Lacrosse.

The value of such games as physical and moral training has long been known in the Secondary Schools, and is gaining some recognition in the Elementary Schools. The fact that such games involve a high degree of physical activity, combined with definite thought, suggests that it is possible that they may help to stimulate brain growth. The proof of this would have far-reaching results.

There are already many and varied opinions on the subject, but practically no scientific data. This can only be obtained by collecting together a large body of expert opinion. I shall therefore be most grateful if you will assist me in obtaining the necessary information

by either answering the enclosed questions yourself, or allowing your games Teacher to do so.

I am,

Yours truly,

M. Jane Reaney,

Research Student.

(Under the supervision of Dr William Brown, Head of the Department.)

Questionnaire.

The Educational Value of Group Games.

1. (*a*) Do you consider that any evidence exists to show that mental development takes place as a result of definite training in a Group Game, such as Football, Hockey, Cricket, Netball, etc.?

(*b*) If so can you quote a definite case?

2. (*a*) Do you consider that there is any relation between play ability and general ability?

(*b*) Do the boys and girls who excel in games show any tendency to be above or below the average standard of intelligence?

(*c*) Do those who show marked apathy towards games, or fail to reach any standard of efficiency in them, tend to be above or below this average standard of intelligence?

3. Are you aware of any special mental characteristics which mark respectively:

Part I. The best Football players
,, Cricket ,,
,, Hockey ,,
,, Netball ,,
,, Lacrosse ,,

Part II. The boys or girls who show least aptitude for playing games.

4. What game do you consider most valuable from an educational point of view?

5. From your experience, would you say that there is any special age at which Group Games appeal most strongly?

6. Do you think that the School Games should be organized in the Upper School by the children themselves, or by a teacher?

7. Do you consider that Games should be compulsory?

Questionnaire.

Answers received.

639 answers were received from 487 schools, of which 268 were boys' schools, 200 girls' schools, and 19 mixed schools.

380 of the opinions given were from the heads of schools.

Answer I. Mental development as a result of training in Group Games.

(*a*) Number who say that development occurs, 283.
Number who say development does not occur, 113.
72 per cent. in favour. 28 per cent. against.

(*b*)	Number who could quote *definite* cases	69
	Number who could quote *many* cases	18
	Number who could quote several cases	26
		113

Remarks.

6 could quote definite cases of moral development.

5 specially mentioned general alertness, will power, quickness of perception and judgment, attention.

Number of answers, 522.

Answer II. Relation between play ability and general ability.

			approx. %
(*a*)	Number who say there is a relation	317	65
	Number who say there is *no* relation	141	30
	Number who cannot answer	10	
(*b*)	Of boys and girls playing games well:		
	Number who say *above* the average general intelligence	250	55
	Number who say *below* the average general intelligence	30	6
	Number who say of *average* in general intelligence ...	167	37
(*c*)	Of boys and girls playing games badly:		
	Number who say *below* the average in general intelligence	219	48
	Number who say *below the average and geniuses* ...	45	10
	Number who say *above* the average	40	9
	Number who say of *average* intelligence	129	27

Answer III. Characteristics which mark the best players.

Part I. Alertness, judgment, rapidity of action and thought, resourcefulness, self-control, unselfishness, power of initiative, perseverance, concentration, power of combination, determination, self-reliance, patience, method. These are mentioned in the order given.

64 per cent. of the answers are in favour of alertness, under which is included rapidity of thought and action, judgment and resourcefulness.

Part II. Characteristics of children showing least aptitude for games.

Dull, slow, slack, lazy, individualistic, morbid, self-conscious, self-centred.

54 per cent. of the answers are in favour of dulness, slackness, etc.

Answer IV. The game most valuable from an educational point of view.

Boys. 58 per cent. in favour of football.
42 per cent. in favour of cricket.

Girls. 66 per cent. in favour of hockey.
34 per cent. in favour of netball.

Answer V. Age at which games appeal specially.

Boys. 12 onwards.

Girls. 13 onwards.

Answer VI. Should games in the upper school be organized by the Teacher or by the children?

Boys' schools.

In favour of organization by Teacher	8 per cent.
In favour of organization by children	22 ,,
In favour of organization by children under supervision ...	70 ,,

Girls' schools.

In favour of organization by Teacher ... ... 24 per cent.
In favour of organization by children ... ... 20 ,,
In favour of organization by children under supervision ... 56 ,,

Answer VII. Should games be compulsory?

Total. 77 per cent. of answers in favour of compulsory games.

Boys' schools.

83 per cent. in favour of compulsory games.
17 per cent. against compulsory games.

Girls' schools.

75 per cent. in favour of compulsory games.
25 per cent. against compulsory games.

The majority of those in favour of compulsion suggest that such compulsory games should be subject to modification under medical advice, and that the children in the upper school should be given scope for other hobbies.

General Conclusions based on answers to Questionnaire.

1. There *is* definite evidence to show that mental development takes place as a result of training in group games.

A sufficient number of definite cases can be quoted to prove the above statement.

2. There is a definite relation between play ability and general ability.

Girls and boys who play games well are on the whole *above* the average intelligence, or of average intelligence, but seldom below it. Girls and boys who show marked apathy to games or play them badly are on the whole *below* average intelligence.

3. The following qualities are marked characteristics of the best players: Alertness, rapidity of thought and action, judgment, resourcefulness.

Children who show little aptitude for games tend to be slow, dull and slack.

4. Football is the game of greatest educational value for boys; hockey for girls.

5. The games appeal most strongly to boys above 12 years of age, and to girls above 13.

6. The consensus of opinion is in favour of organization by the children, under supervision.

7. Games should be compulsory.

These conclusions have been drawn from the results of answers obtained from educational experts in schools where 'games' have

been made part of the curriculum. In many cases the opinions are formed after years of experience and should therefore carry weight.

It is interesting to note that the qualities acknowledged almost universally to be marked characteristics of children who excel in their games are those in which man must have excelled in order to survive in his fight for existence.

APPENDIX II

(*a*) Results of experimental research on the Play Periods.

(*b*) Historical references to the value of Play as an educational factor.

(*c*) The Playground Movement in America and England.

(*a*) The Play Periods.

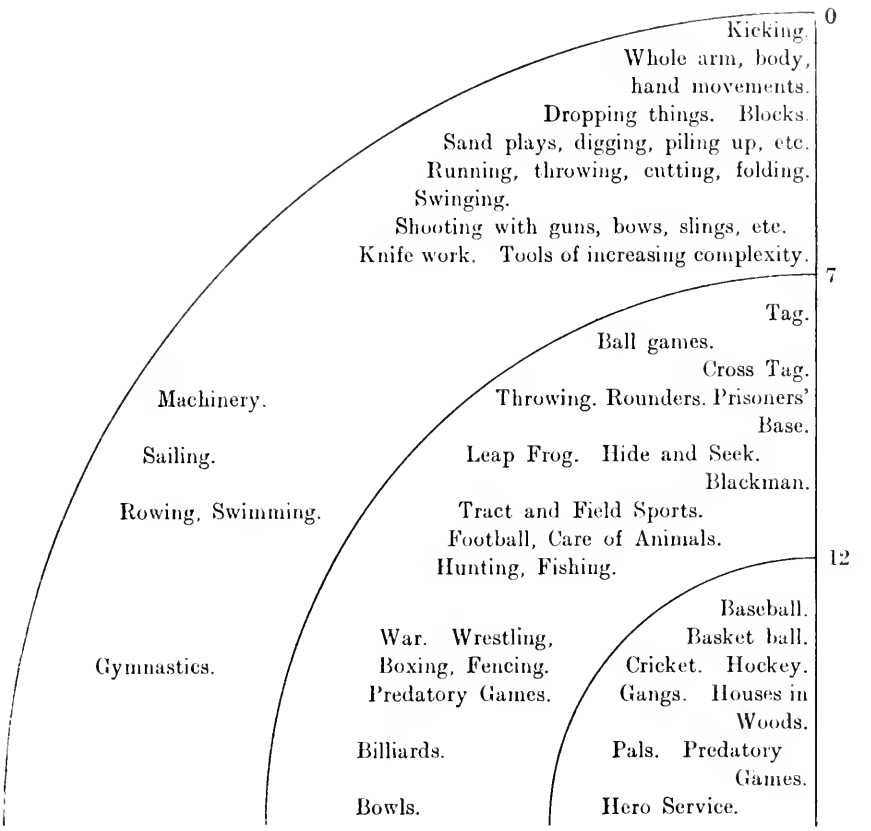
A large number of investigations have been made on the definite types of play found amongst children of certain ages. The results of some of the most important are quoted below.

Dr Luther Gulick[1], President of the Playground Association in America, gives an exhaustive study of the play periods. He defines five.

1.	Babyhood. Age 0–3.	Individualistic play, non-competitive, the accomplishment and observation of objective results.
2.	3–7	Play individualistic and imitative.
3.	7–12	Individualistic and competitive, involving active muscular co-ordination and sense judgment.
4.	12–17	Team games. The plays of adolescence are socialistic, demanding the heathen virtues of courage, endurance, self-control, bravery, loyalty enthusiasm, and the savage occupations of hunting, fishing, swimming, sailing, etc.
5.	17–23.	Social play. The plays of later adolescence are a development of the team games but involve an added factor. The plays are pushed to the extreme of endurance and there is a growing feeling of the 'group consciousness.'

Dr Gulick classifies the games under these periods, but at the same time points out that there is no definite age limit and much overlapping. This classification, which is given below, applies chiefly to the games of Anglo-Saxon boys.

[1] Luther Gulick. 'Psy., Ped., and religious Aspects of Group Games,' *Ped. Sem.* VI, 6, 135–151.



Mr Joseph Lee (late President of the Playground Association in America), in an article on Playground Education, quotes three periods[1].

(1) 1–9. Dramatic Age.

(2) 9–11. Age of Self-assertion.

(3) 11–. Age of Loyalty.

Other researches on similar lines point to the same conclusions.

T. R. Creswell found that, as the result of an investigation on 2000 Worcester (Am.) school children, games involving physical activity predominated over all others[2].

He gives as a result of his work three play periods:

6–9. Amusements centred on some object.

9–13. Games with vigorous exercise and great diversity of interests.

[1] J. Lee, 'Playground Education,' *Ed. Rev.* XXII.

[2] Creswell, 'Amusements of Worcester School Children,' *Ped. Sem.* V, 6.

14–. Games involving creative, co-operative and contest factors with distinct end in view.

He found that the interest in traditional games reached its height at 11, while that in games of chase rose at the age of 10, and declined to only 4 per cent. at 18. The curve for Hide and Seek is interesting. It rises from 5 per cent. at 7 years of age to 55 per cent. at 10, and falls rapidly to about 20 per cent. at 12 and 0 per cent. at 18. Ball games show a gradual rise throughout, while the love for make-believe falls rapidly before the age of 10.

Creswell found a distinct tendency towards seasonal games. He concluded as a result of his observations that boys were much more variable than girls.

McGhee collected the play preferences of 8000 children in S. Carolina[1]. His results seem to fit in with other observations. He finds a marked decline of interest in running games from 7 onwards and a rise in popularity of games involving rivalry and co-operation.

He also notes a distinct lack of power of organization amongst girls (cp. Ravenhill).

Mr G. E. Johnson gives five periods[2].

0–3. Development of the senses—experimentation.

4–6. Development of motor ability; imitative games.

7–9. Simple competitive games—games of skill. Some co-operative games.

13–. Organized and co-operative games—gangs—clubs. Social games; hero-worship.

Dr Drummond and Irving King divide children's play into three periods.

The former in his *Introduction to Child Study* gives:

1–7 years. Individualistic.

7–12 ,, Imitative. Emulative.

12– ,, Social and co-operative games.

Miss Alice Ravenhill in *Child Study*, January, 1911, in an article entitled, 'Some Results of an Inquiry into the Play Interests of English Elementary School Children[3],' gives data obtained from a questionnaire sent out to 6369 children, including 4002 girls and 2367 boys, from 3 to 13 years of age, and requiring answers to the four questions:

[1] 'A Study of the Play Life of South Carolina Children,' *Ped. Sem.* VIII, 1900.

[2] Johnson, *Education by Play and Games*

[3] *Child Study*, Jan. 1911.

What are your favourite games? Why?

What are your favourite toys? Why?

The charts supplied show the preferences for special games at each age. Miss Ravenhill divides the games into: (1) ball games; (2) active social games, including all games which involve physical activity with the co-operation of companions, such as hide-and-seek, ring games; (3) individual active games; (4) parlour games; (5) dramatic or make believe. She finds that active social games are easily first favourites throughout school life; that individualistic games are most prominent at the age of eight, but never exceed 25 per cent.; that the interest in dramatic play so strong in little children dwindles slowly from 17·5 per cent. to 3 per cent., while love of quiet parlour games rises. In boys the interest in ball games becomes more dominant at an earlier age than in girls. Amongst girls the doll interest is strongest at eight years, 97·75 per cent. putting their dolls first; it never drops below 55 per cent.

On the whole the paper is most suggestive, and the results seem to point to the recapitulation theory of play, and only suffer from the drawbacks usually associated with a questionnaire to children.

(*b*) Historical Account of Reference to the Educational Value of Play.

In considering which country has contributed most fully to the investigation of the subject of the educational value of play we find that the palm certainly goes to America from the point of view of practical investigation, and to Germany from that of philosophic argument.

The value of play in Education however has been recognized to a greater or less extent by all nations.

Amongst the Greeks it was regarded as of paramount importance, the ideal Athenian primary education being divided into three parts —letters, music and play. This last, which included the physical training of the palaistrai and gymnasia is by far the most prominent. Amongst the Spartans, especially, an elaborate form of education by means of play was advocated.

Allusions to the value of play are found in the writings of Plato, Aristotle and others. Plato advises state legislation for compulsory teaching in play, and in the seventh book of the Laws calls attention to the effects the plays of childhood have upon the permanence of all forms of statecraft.

In the *Republic*[1] Plato makes further reference to the necessity for children taking part in the "more lawful forms of games" as a means of surrounding themselves with an atmosphere which will enable them to grow up to be "well conducted and virtuous citizens." He discounts elaborate toys and recommends that children should make their own. Several references are also found in Aristotle[2] as to the recreative value of play. Historical evidence is forthcoming that games such as Hide-and-seek, Hunt-the-slipper, and many others popular amongst modern children were well known to the young Greeks.

Amongst the Romans, play as a part of education was not held in such repute, and there is little on the subject in the classic writings except in connection with Athenian education[3].

Amongst later Italian writers on the subject Vittorino da Feltre stands out as a prominent advocate of play in education, while Ferrante advises supervised play in public schools[4].

In modern times Dr C. H. Colozza, Professor of the Royal School for Women Teachers of Gymnastics at Naples, has written his valuable work, *Il Giuoco nella Psicologia e nella Pedagogia*[5], and Paola Lombroso, in *Saggi di Psicologia del Bambino*, 1895, advocates a method of teaching by play. The most recent and far-reaching research into the value of the play spirit in Education is due to the work of Dr Maria Montessori; and the latest type of educational reform is known as the Montessori Method.

Many educational writers from the Renaissance Period onward call attention to the educational value of play. Rabelais in his *Gargantua*[6] gives a list of 316 games as exercise for mind and body. Montaigne in his *Essay on Custom*[7] points out that children's plays are their most serious occupations, and insists upon the necessity for the physical side of training. Fénelon upholds play as a relaxation from work, while Rousseau[8] wrote that the early education of Emile should consist almost entirely of play, and in so doing influenced much of the later French literature on the subject. Madame Campan in *De l'éducation* devotes some attention to play and games[9]. Jean Paul Richter

[1] Plato, *Republic*, Book IV.
[2] Aristotle, Book VII, 17; VIII, 3.
[3] Cicero, *De Officiis*. Quintilian, *Institutes*, Book I, 3.
[4] Ferrante Aporti, *Manuale di educazione ed ammaestramento per le Scuole Infantili*, 1840.
[5] Colozza. See p. 12.
[6] Rabelais, *Gargantua*, Book I, 22.
[7] Montaigne, *Essay on Custom*, Book I, 25.
[8] Rousseau, *Emile*.
[9] Madame Campan, *De l'éducation*, Book IX, 1752.

says in *Levana*[1]: "In every child a circle of games and real actions should be provided, composed of as many different individualities, conditions and years as can possibly be found, in order to prepare him in the 'orbis pictus' of a diminished play world for the larger real one."

Richter attaches very serious importance to the phenomena of children's play, which he regards as "the first poetry of the human soul."

In modern times Bernard Perez in *Etude de Psychologie expérimentale*, —'Les trois premières années de l'enfant,' upholds the biological theory of play.

Allemagne, in his *Histoire des jouets*, gives an interesting account of the evolution of toys, while Angelo Mosso in *Les exercices physiques et le développement intellectuel* (1904), and other publications, draws attention to the important rôle that physical activity plays in mental development.

Frédéric Queyrat's work, *Les jeux des enfants : étude sur l'imagination créatrice chez l'enfant* (1905), endorses the practice theory and applies it to prove the biological and educational value of play.

In Switzerland, Comenius and Pestalozzi stand as the great educational reformers, who have advocated play as a means of training. Comenius, in his *Great Didactic*, *The Mother School*, *Laws of a Well-ordered School*, and other writings, advises that children should be encouraged to take part in running, ball games, etc., as recreation.

Pestalozzi, although he did not introduce any new theory in connection with games, laid great stress on physical education.

Among modern writers Dr Edouard Claparède, Professor of Experimental Psychology at the Geneva University, in his work, *Psychologie de l'enfant et pédagogie expérimentale*, devotes some space to the discussion of play; and although not definitely connected with play, the *Eurhythmics* of Jaques Dalcroze may be quoted as reviving the old Greek idea of rhythm, which is an important factor in many of the higher forms of play.

It is from Germany that we get the greater part of the writings on the philosophy of play. The work of Gutsmuth, *Spiele zur Uebung und Erholung*[2], which was practically the first book on the subject in the German language, had a great influence upon the physical training of the German people. Gutsmuth, as has already been mentioned,

[1] Jean Paul Richter, *Levana*, Book III.

[2] See p. 11.

upheld the surplus energy theory for play, but recognised the importance of ennui as a stimulus to playfulness. He also classified many games under the two main classifications, Active Plays and Rest Plays. These are again subdivided into several classes, including Plays of Observation and Judgment, Plays of Attention, Fantasy, Wit, Memory, Taste, Pure Bodily Plays and Plays of the Understanding and Higher Judgment. His great aim was to revive interest in active games which he believed had degenerated during the middle ages.

It is to this country we owe the great system of Education which has become known as the Kindergarten system based on the work of Froebel which is founded entirely on the belief in the Play Spirit.

Basedow, 1723, lays great stress upon physical development in connection with his school, the Philanthopinum[1].

The Classic work of Professor Karl Groos has already been referred to. He has given an exhaustive account of the play of animals and man in his two books, *Die Spiele der Thiere*, published in 1896, and *Die Spiele der Menschen*, in 1899. Both these books have been translated into English by E. L. Baldwin, and the first named one into French by A. Dirr and A. van Gennep.

Professor Groos included in his books, besides a discussion on the theory and psychology of play, a vast fund of information collected from observations on the play of animals and children.

In England very little is found on the philosophy of play, except in the writings of Locke[2] and Spencer, although a number of books dealing with special sports have been published[3].

In 1877 a pamphlet entitled *What is Play? A Physiological Enquiry*, by J. Strachan, M.D., appeared[4]. The writer foreshadowed Groos' theory.

Winch's articles on the 'Philosophy and Psychology of Play,' published in *Mind* in 1906, have already been referred to[5].

The Power of Play in Child Culture, by C. Hamilton Archibald[6], urges the cultivation of the play spirit rather than its suppression.

[1] Basedow, *Book of Method*.

[2] Locke, *Thoughts concerning Education*.

[3] F. G. Affalo, *The Sports of the World*; H. Alken, *National Sports of Great Britain*, 1821; E. D. Cuming, *British Sports Past and Present*; F. W. Hackwood, *Old English Sports*; J. Strutt, *Sports and Pastimes of the People of England*, etc.

[4] J. Strachan, M.D., *What is Play? A Physiological Enquiry*, 1877.

[5] See p. 23.

[6] C. Hamilton Archibald, *The Power of Play in Child Culture*, Melrose.

In a very comprehensive article on 'The Play Motive in the Higher Classes of the School[1],' Dr Percy Nunn pleads for imaginative teaching, by which the child may be enabled to realise to some extent the life around him.

Miss Ravenhill's investigation has already been referred to.

The latest English work on the subject is *Children's Play, and its Place in Education*, by Mr Walter Wood, 1913[2]. Mr Wood discusses the play periods, summarizing the place of play in the history of Education, and giving a careful synopsis of the various theories. He devotes the remainder of the book to the discussion of the educational value of play, the small place it occupies in elementary education and the need for proper play facilities and supervision. He dwells on the value of dramatic play apart from organized games, and calls attention to the fact that the latter are still more or less limited by class or sex. Mr Wood devotes a chapter to the discussion of juvenile literature, and another to the playground movement in America, and the remarkable results it has already attained. He regards the movement, which is becoming universal in America, England and Germany, as one which may save the child from the evil effects of over-civilisation.

Turning to America we find a number of articles devoted to the discussion of the philosophy of play, and to experimental investigations into the play preferences of children. Most of these articles appear in the *Pedagogic Seminary*, the *Kindergarten Review* and other Educational papers. It is only possible to touch briefly upon a few of them.

Dr Stanley Hall[3], the author of the Recapitulation Theory of Play, has devoted much time to the subject.

In his book on *Adolescence* he propounds his play theory. In an exhaustive study on the subject of dolls he deals with the question of the psychology of the love of dolls, and concludes that the love of power is the great factor rather than the maternal instinct developing before its time. The 'Story of a Sand Pile' is one of the most illuminating descriptions of the Child Mind at play.

[1] Percy Nunn, 'The Play Motive in the Higher Classes of the School,' *Ed. Times*, Nov. 1912.

[2] Walter Wood, *Children's Play: Its Place in Education*, Kegan Paul, 1913.

[3] Stanley Hall, 'The Theory of Play,' *Kindergarten Mag.*, Sept., 1901; 'Rhythm of Work and Play,' *Kind. Rev.* Sept. 1901; 'Christianity and Physical Culture,' *Ped. Sem.* IX; *Dolls, Toys, and Playthings*, Clarke University, 1895; Stanley Hall and A. C. Ellis, *A Study of Dolls*, New York, 1897; *Adolescence*, II, ch. VII, 202–236, New York, 1904; *Youth*, Appleton, N.Y., 1906; 'The Story of a Sand Pile,' *Scribner's Mag.* June, 1888, Vol. III, 690–696.

The work of G. E. Johnson[1], superintendent of Playgrounds, Recreation Parks and Vacation Schools at Pittsburgh, Pennsylvania, on *Education by Plays and Games* has already been mentioned. This deals with the play periods, and illustrates with numerous examples their significance to the child.

The Monograph by Estelle Appleton on the *Comparative Study of Play Activities of Adult Savages and Children* has already been alluded to, and the writings of Gulick[2] and Lee[3].

Two books have appeared in 1915 which deal very fully with the subject from the practical point of view: *Play in Education*, Joseph Lee (Late President of Playground Association of America). *Education through Play*, Henry Curtis, former secretary of the Playground Movement in America.

Mr Lee accepts the practice theory for play and devotes himself to the study of the value of play from this point of view.

He gives a careful analysis of the different play periods and the types of play common to each, and devotes the greater part of his book to the practical discussion of how play should be made use of as nature's chief means of education.

Mr Henry Curtis, as the supervisor of the playgrounds of Columbia, has had many opportunities of testing his theories of the value of playground education. The book contains an interesting account of play in the schools of America, England and Germany and a practical discussion of the difficulties and needs for the organization of play in country and town schools.

Finally it will not be out of place to give in outline the results which have so far attended the institution of the Playground Movement in America and England.

[1] G. E. Johnson, *Education by Plays and Games*, 1907; 'Better Use of Playground,' *The Child*, II, 8; 'Play and Physical Education,' *Proc. N. E. A.* 1895, 958–958.

[2] Luther Gulick, 'Some Psy., Ped., and Religious Aspects of Group Games,' *Ped. Sem.* VI, 6, 135–151; 'Some Psychical Aspects of Muscular Exercise,' *Pop. Sc. Monthly*, Oct. 1898, Vol. LIII, 793–805; 'Athletics and Civilization,' *The Child*, I, 7, 1911; 'Why Play must be taught,' *School Journal*, 1906, Vol. LXXIII, 289–290; 'Play and Democracy,' *Proc. Playground Ass.* Vol. I.

[3] Joseph Lee, 'Playground Education,' *Ed. Rev.* XXII, 1901; 'Restoring the Play Inheritance to our City Children,' *The Craftsman*, N.Y., March, 1914; 'Play for Home,' *The Playground*, N.Y.C., August, 1912; 'American Play Tradition and our Relation to it,' *Playground*, July, 1913.

(*c*) The Playground Movement in America, England, and Germany.

It is to America we must look for the first sign of a public movement for the establishment of municipal playgrounds. The Playground Movement in America is about 25 years old[1]. The inspiration of the movement may be traced to Berlin, for it was in this town that public sand-piles were already a feature of the parks some time before they were introduced into America or England.

Between 1894–98 public playgrounds were established in New York, Baltimore, Philadelphia, and many other of the leading towns of the United States. These were kept up by private subscriptions and run by social clubs for some time, but the demand became so great that they speedily outgrew such management and the Playground Association of America was formed to extend the work. By 1900 several similar associations were in full swing, but by this time it had been realised that to provide a playground does not ensure play and the success of the movement depended upon providing good play leaders. At this time the work was encouraged by the allotment of municipal grants towards public playgrounds and by the fact that the Education bodies combined with the Playground Association to further the movement. This lead to the expansion of the work into a recreation movement and the establishment of public Recreation Committees for the control of the recreation of the public at large. In 1913, 332 cities were conducting organized play under qualified play leaders, 250 towns were devoting between them £700,000 a year to the maintenance of playgrounds alone.

The Playground and Recreation Association of America employs field secretaries to tour the country and give advice in matters of organization. Many of the universities have opened special courses for the training of play leaders. Pittsburg University appointed in 1910 a Professor of Play who is assisted by three instructors. There are two courses in Play, a one-year course and a two-year course. The syllabus for the one year is as follows[2]:

History of Philosophy.
History of Human Progress
American Ideals.
Psychology.

[1] 'Playground Education.' See *Ed. Rev.* xxii, 1901.

[2] Walter Wood, *The Playground Movement in America*, p. 38 B. of E. Pamphlet 27.

Principles of Education.
History of Education.
Play.
Childhood.
Playground Experience (apprenticeship and practice work).
Biology.
Physical Education.

The student in the school of Education may take the course in Play with Education and Philosophy attached as above or he may take the course in Education with a course of lectures on Play attached.

Similar schemes are in force in the universities of Chicago, Baltimore, Wisconsin, Philadelphia and other cities of note.

Three suggestive courses in Play were drawn up by the Committee appointed after the first Congress of the Playground Association held in Chicago in 1907[1]. These are:

1. A Course of Play for Grade Teachers.

2. The Institute Course in Play—to be given by playground supervisors to the social workers.

3. A Course for Professional Directors, designed to assist in the formation of a university course.

This last course is divided thus:

Syllabus 1. Child Nature.

I. General Theory of Evolution as it relates to Animal Life.
General Theory of Evolution as it relates to Man.
General Theory of Childhood as a Re-creation of Man.
General Laws of Heredity.
Child Nature (specially considered).

2. The Nature and Functions of Play.

I. Theories of Play.
II. Pleasurable Elements in Games.
III. Aim and Spirit in the Conduct of Play.
IV. Age and Sex Differences in Play.
V. The Teaching of and Rotation in Games.
VI. Factors controlling the expression of the Play Impulse.
VII. The Relation of Play to Work.

3. Social Conditions of the Neighbourhood.

I. Race History, Tendencies, Prejudices.
II. Living House, Conditions of Housing.
III. Social Conditions.
IV. Industrial Conditions.

[1] Walter Wood, *The Playground Movement in America*, p. 42, B of E. Pamphlet 27.

4. Hygiene and First Aid.
   - I. The Body as a Machine.
   - II. Personal Hygiene.
   - III. Preventive Medicine.
   - IV. Emergencies.

5. The Playground Movement.
   - I. Playgrounds of Germany.
   - II. Playgrounds of Great Britain (Cricket and Football at Eton, Harrow, etc.).
   - III. The Playground Movement in the United States.
   - IV. The Sand Gardens and Playgrounds for Small Children.
   - V. The School Playgrounds.
   - VI. The Municipal Playgrounds.
   - VII. The Field Houses.
   - VIII. Playgrounds in the Parks.
   - IX. Bathing Beaches and Swimming Pools.
   - X. Playgrounds for Institutions.
   - XI. Departments and Organizations controlling Playgrounds.
   - XII. Allied Movements.

6. The Practical Conduct of Playgrounds.
   - I. What is a Playground?
   - II. Spirit and Aims in the Conduct of Play.
   - III. Activities.
   - IV. Organization and Management of Activities.
   - V. Care of Supplies and Ground.
   - VI. Discipline.
   - VII. Dealing with Parents.

   Appendix:
   - 1. Class Athletics.
   - 2. Group Athletics.
   - 3. Track and Field Meets.

7. Organization and Administration of Playgrounds.
   - I. Personal Recreation.
   - II. A Study of General Recreational Facilities.
   - III. Planning a Playground System.
   - IV. Securing the Playgrounds.
   - V. The Construction of Playgrounds.
   - VI. The Equipment of Playgrounds.
   - VII. The Purchase and Care of Supplies.
   - VIII. The Conduct of the Playground Office.
   - IX. The Training of Teachers.
   - X. Selection of Teachers and Planning of Work to be undertaken.
   - XI. Tramps and Excursions.
   - XII. Relations with Parents and other Departments.
   - XIII. Promotion of the Movement.
   - XIV. Securing the Funds.

The Playground and Recreation Association has now its representatives in every part of the country; it has a magazine, *The Playground*, in which topics connected with all branches of the subject are discussed, and holds every year an Annual Conference which is attended by delegates from every state.

In England the Playground Movement has not reached the same stage of development but it has already made rapid strides in three main directions.

1. The establishment of evening Play Centres.
2. The organization of Vacation Play Schools.
3. The movement for establishing public playing grounds in parks and open spaces, under supervision.

The establishment of the play centres in London is due chiefly to the work of Mrs Humphry Ward[1]. In 1906 seven centres were formed with an attendance of 200,000. In 1913 21 play centres had been started, showing an attendance during ten months of over 1,600,000. The children in these centres are taught games, needle-work, carpentry, under suitable supervision.

A report upon the vacation play centres in 1913, issued by the L.C.C. Education Committee, showed that the aggregate number of attendances during August, 1913, was about 450,000. The vacation play centres had previously only been tried as an experiment, but in June, 1913, it was decided to select special schools in the country for the purpose, and 20 were chosen. In deciding the suitability of each school three points were considered:

1. The need of a play centre for children who live in poor and over-crowded districts.
2. The remoteness from a park or open space.
3. The presence of school halls where some of the children could play quiet games[2].

The work of the Guild of Play in Bermondsey is well known and the widespread effects are most encouraging.

There is much activity in all the chief towns of the kingdom in connection with the establishment of playgrounds in the public parks.

In London open spaces are reserved in 30 of the parks[3].

In Manchester there is a superintendent specially appointed to supervise the public games; nearly 97,000 senior scholars took advantage

[1] Mrs Humphry Ward, 'Evening Play Centres,' *Times*, Feb. 6, 1914.

[2] 'Vacation Play Centres,' *Ed.* Nov. 21, 1913.

[3] 'Organized Games,' *Times*, Ed. Sup. Aug. 4, 1914.

of the play facilities between May and September, 1913. There is also an organized play scheme for little children. Eleven play centres have been arranged and women games leaders appointed to supervise the play. No less than 60,000 individual visits were paid by children to these centres during the summer of 1913[1].

Similar schemes have been carried out in Brighton, Leeds, Bolton, Bristol, Norwich, Grimsby, Wolverhampton and Northampton, with equal success[2].

It is in Germany that we have found the chief work on the philosophy of play, but it is not until the end of the nineteenth century that any attempt at the public organization of play is found in this country. In 1877 Wiese, in his *Letters on English Education*, praises the English games but doubts whether they would succeed in Germany. In 1892 a great movement in favour of games arose, and in 1894, 400 public playgrounds had been founded. These were fitted with all kinds of appliances and supervised by special play leaders. The movement has rapidly increased, many of the leaders coming to England to study the typical English games. It is a question whether the movement in Germany is not already suffering from that over-organization which is so prone to kill the spirit and abide by the letter only[3].

When we turn to consider the results of this widespread movement we find that opinion is unanimous both in America and England that certain definite results have been attained which show clearly that the work along these lines has assisted social and educative advance. There has been a marked increase in school discipline and efficiency, and a decrease of truancy and of juvenile delinquency which can be clearly traced to the introduction of organized play and games amongst the children of the poorer classes. Indirectly the movement has had a widening influence on education which can but be beneficial, and many of the subjects started as play subjects have now found their place in the curriculum of the elementary school.

[1] 'Organized Play for Poor Children,' Manchester Parks Committee's Fine Enterprise, *Manchester Evening News*, May 2, 1914.

[2] 'Games in School Life. Experiments at a Leeds School.' *Huddersfield Ex.* May 25, 1914; 'Children's Organized Games Guild,' *Bolton Evening News*, May 22, 1914; 'The Guild of Play,' *Daily Telegraph*, Dec. 6, 1913; 'Holiday Play Centres,' *Times*, Nov. 12, 1913; 'Physical Recreation, Manchester and Playing Fields,' *Man. Guar.* Jan. 7, 1913.

[3] Hughes, 'Educational Value of Play and the Recent Play Movement in Germany,' *Ed. Rev.* 1894.

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SOCIETIES ALREADY IN EXISTENCE

(apart from those in England)

The Playground and Recreation Association of America. New York City.
A Central Committee for the Encouragement of Games in Germany. Berlin.
A Society for Promotion of Games. Vienna.
A Society for the Promotion of Organised Play. Prague.
Comité des écoles de garde. Paris.
A Society for Open-air Games. Gothenburg.
A Society for Games and Excursions. Switzerland.

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