

According to Groos, play is the outcrop of instincts which have been evolved like other instincts, arising by congenital or germinal variation, and fostered in virtue of their utility. But what can be the utility of play, which by definition has no serious purpose?

To this Groos answers that play is of fundamental importance as "the young form of work". The play period is an apprenticeship, a preparation for adult life, with the great advantage that mistakes are not of serious moment. Throughout the ages those kittens and other young carnivores which hunted best in fun have hunted best in earnest; the non-players and the bad players have been eliminated. Play is thus a rehearsal without responsibilities, a sham-fight before the battle of life begins, a preliminary canter before the real race. In short, as he says, while there is some truth in the assertion that animals play because they are young, it is perhaps as true that they have a period of youth in order that they may play, and the forms of play have been defined in relation to the realities of adult life.

A second justification of play is found in the simple fact that it affords opportunity for the exercise and perfecting of instinctive activities, which, therefore, do not require to be so definitely engrained in the cerebral constitution. Thus, it may be said that play is a device which lightens the burden of inheritance.

It is certainly a suggestive idea that the play-period affords scope for the rise and progress of new variations before the struggle for existence has become keen. It affords what the Germans call *Abänderungsspielraum*—elbow-room for initiatives, new departures, idiosyncrasies, which form the raw material of progress. The importance of this biological justification of play in relation to human children is obvious.

There are few great facts of life in regard to which precise observation and critical interpretation would be

Psychologi-  
cal Aspect  
of Mating.      more welcome than in regard to animal  
courtship. Here, even in spite of himself,  
the biologist must become a psychologist.  
The historical aspect of the question admits of brief  
statement. (a) Long before Darwin's day, naturalists