Why do animals make their play more difficult?

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Play is common in the young of many species, and it seems likely that play influences development and learning. One way in which play may influence learning is in the provision of contexts within which an organism can safely experience and benefit from moderately discrepant events. Such events are believed to facilitate learning because they consist of challenges that the organism can resolve, the successful resolution of the challenges resulting in cognitive growth. The possibility that play is linked to moderately discrepant events is explored by considering the play behavior of young dolphins and killer whales. Our systematic observations of these animals demonstrate that they consistently modify their play behavior to make the goal more difficult to achieve, demonstrating that the play activity is at least as important as the play outcome. This suggests that the animals are purposely producing their own moderately discrepant events, and that one of the functions of play is to provide cognitive stimulation. Such stimulation might result from an organism's own activities as well as the activities of play partners. Thus, play may have evolved to facilitate cognitive development in both solitary and social animals.