The semivalues, introduced by Dubey, Neyman and Weber in 1981, form an ample family of solutions for cooperative games with transferable utility and include, among others, the solutions of Shapley and Banzhaf.

For one of these solutions, it can happen that different games obtain a same payoff vector. We say that two games are inseparable by semivalues if both games obtain the same payoff vector for any semivalue that is considered.

The linearity of the semivalues allows to reduce the problem of the separation to the null game and to consider the games simpler than they are inseparable from the null game: the commutation games. It has been proven that all inseparable game from the null game is a linear combination of commutation games, which allows to know the dimension of this vector subspace for each space of cooperative games.

For each semivalue, a modification for games with structure of coalition can be considered using at level of the modified quotient and within each coalition block the induced semivalue, in analogous way to as Owen in 1977 introduces the coalitional value from the Shapley value or in 1981 the modified Banzhaf value from the Banzhaf solution.

The multilinear extension of the commutation games has a specially simple expression; as much it is so it can be verified that, for games with four players, the concepts of separable by semivalues and separable by semivalues modified for games with coalition structure are coincident. It does not happen the same for games with five or more players, where the commutation games are now separable from the null game by modified semivalues.

But, the definition of commutation game can be adapted and thus we obtain the definition of expanded games for commutation games with four players. This expanded game fulfils the following property: its multilinear extension agrees with the multilinear extension of the commutation game with four players in a space of only four players. This way is able to obtain a basis of the subspace of inseparable games from the null game by modified semivalues.

The incorporation of the coalition structures is able to reduce of significant way the dimension of the subspace of inseparable games from the null game when the cardinality of the set of players is equal or greater than five.