

SPATIAL STRATEGY USED BY THE WORLD CHAMPION IN SOUTH AFRICA'10

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Introduction

Same as in any other invasion game, soccer is a battle for space and position, and the description of play events, regarding their spatial and chronological order of appearance, is the first step for describing and understanding the nature of the game. In this sense, players' placements and movements can be considered a major content of the team's strategy. The objective of this study is to describe and understand the spatial strategy employed by the Spanish National team in their way to the World Championship in South Africa 2010. Interaction contexts performed by the teams and the use of the space during the game

Methods

The seven games played by the Spanish team in the final phase of South Africa'10 World Cup were analyzed by means of an *ad hoc* taxonomic system. Data collection was performed using MOTS (1). SDIS-GSEQ 5.0 (2) and *Matlab* (3, 4) were used for sequential analysis and polar coordinate analysis respectively. The polar coordinate analysis is a double data reduction strategy, which provides a vector representation for determining the relation between the criterion behavior (our object of study) and the other categories, which conform the taxonomic system.

Results & Discussion

The results obtained from the polar coordinates analysis help us describing the game action in soccer, adding the diachronic dimension of the events and combining the prospective and retrospective perspectives. The practical application carried out in the context of soccer enabled us to derive a vector plane of the relations between the pitch zones used by the Spanish team as the matches unfold. The depiction of the relations between zones, being these considered as focal behaviors, revealed the different routes used World Champion in its attempt to score.

Conclusion

This study reveals key aspects underlying the complex game of soccer. At the highest levels of competitive soccer, teams are similar in terms of ability. Therefore, knowing their 'preferred routes' and the patterns of play they tend to use during a match facilitates the preparation and decision-making of the team, as well as to determine the strategy to use in a future encounter.

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