

The Basic Elements for Decision Making in Ballgames

NA-17

Osamu Suzuki (Nihon University) Takaya Kitazawa (Nihon University)
 Ryosuke Tsuchida (Joestu University of Education) Katsuhiro Hirose (Kagoshima University)
 Naoki Suzuki (Tokyo Gakugei University) Daisuke Matsumoto (Nishikyushu University)

About "Game Structure" Theory

Expanding a series of our studies (AAHPERD National Convention 2008, 2009, 2010, and 2011), we present a new and useful viewpoint for PE teachers based on the game structure theory developed in Japan.

The essential element of ballgames is a competition for a future unknown result (objective of competition). In such a situation, tasks of competition in which players engage to directly achieve the objective distinctly arise. We clarified the relation between various activities of learners (extension of concept) and learned contents (intension of concept) through organizing the tasks and the processes of task-solving.

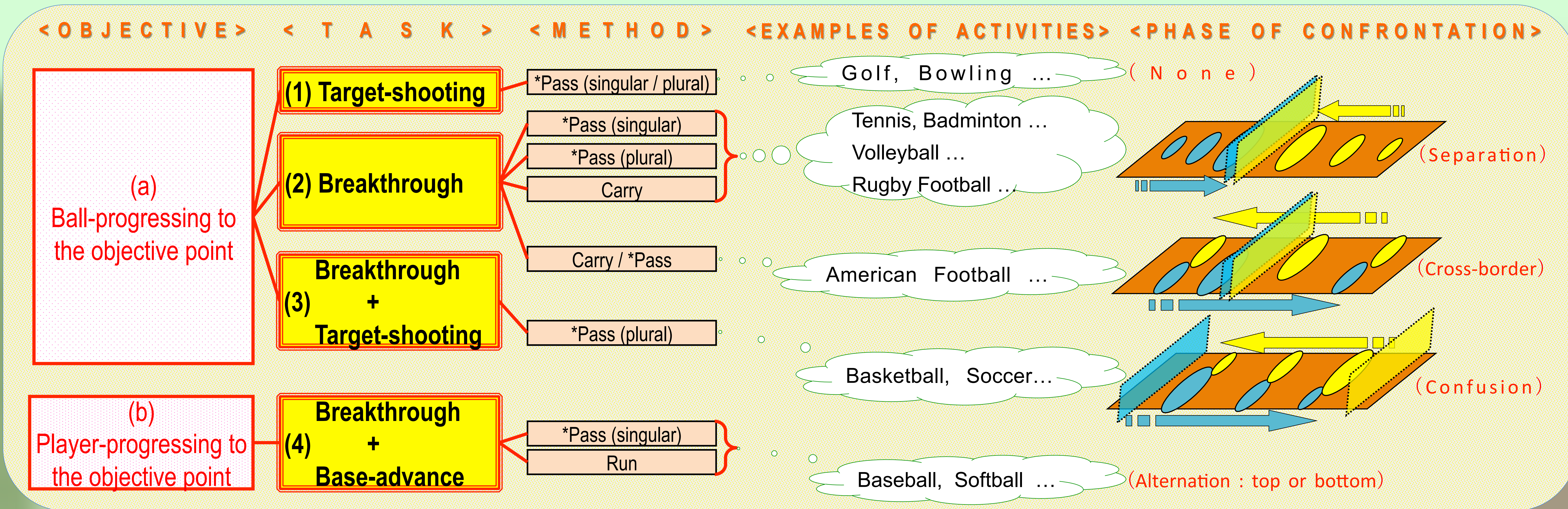
Every ballgame of any type has one of the two distinct objectives: (a) **ball-progressing to the objective point** or (b) **player-progressing to the objective point**. The ball or player progression is accomplished either through the conflicts between offense and defense or by the personal activities of an individual player.

Considering these elements, the processes of task-solving can be classified into four types:

- (1) Target-shooting
- (2) Breakthrough
- (3) Breakthrough + Target-shooting
- (4) Breakthrough + Base-advance

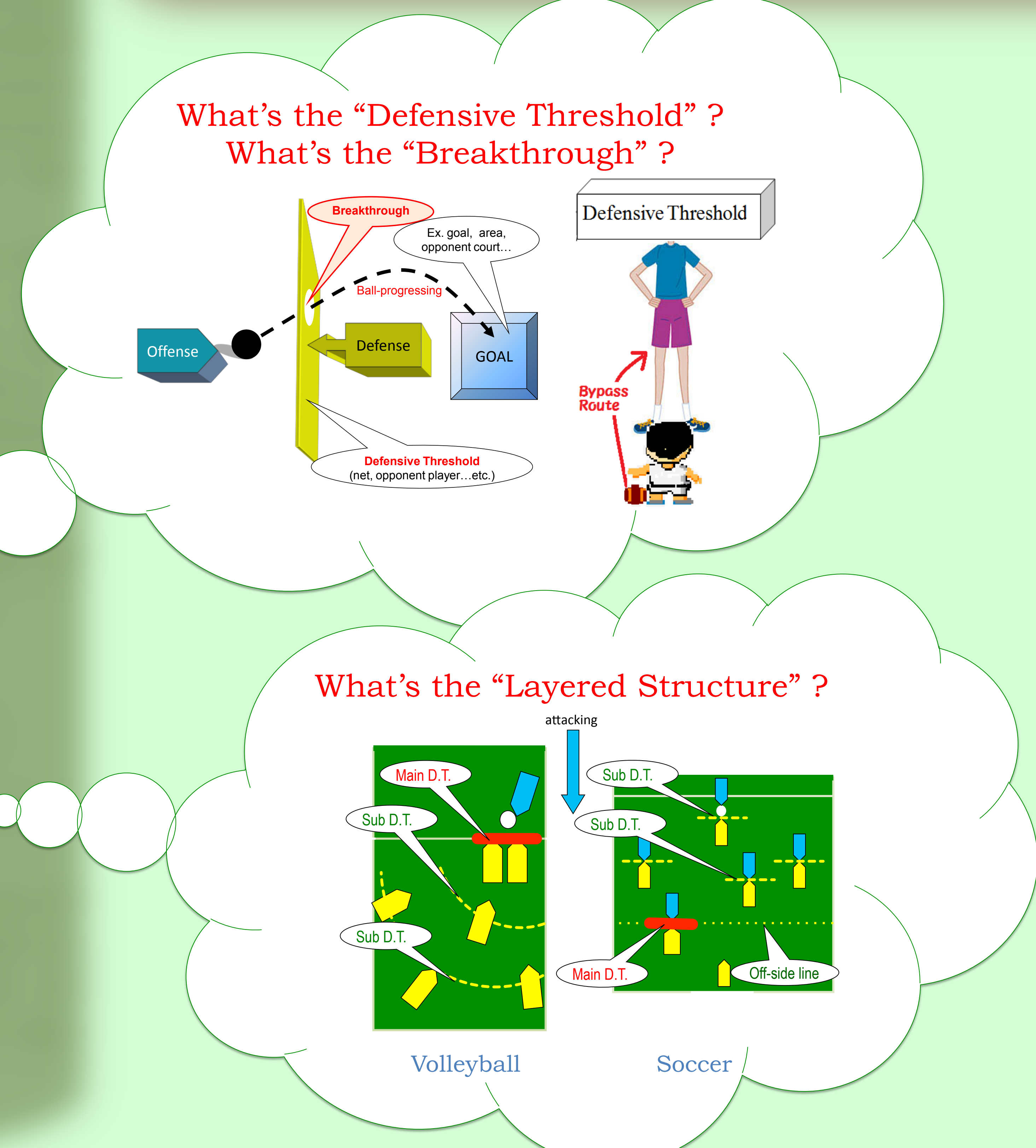
Each type of task-solving represents a fundamental learning aspect of ballgames.

Furthermore, based on the **layered structure of defensive threshold** and the selected **method** to breakthrough the structure, three phases of "confrontation" between offense and defense can be distinguished.



***NOTE**
 We use the term "Pass" in the following meanings:
 pass (to the teammates)
 dribble (pass to himself/herself)
 shoot and attack (pass to the goal)
 hit (by foot, hands, racket, bat...)

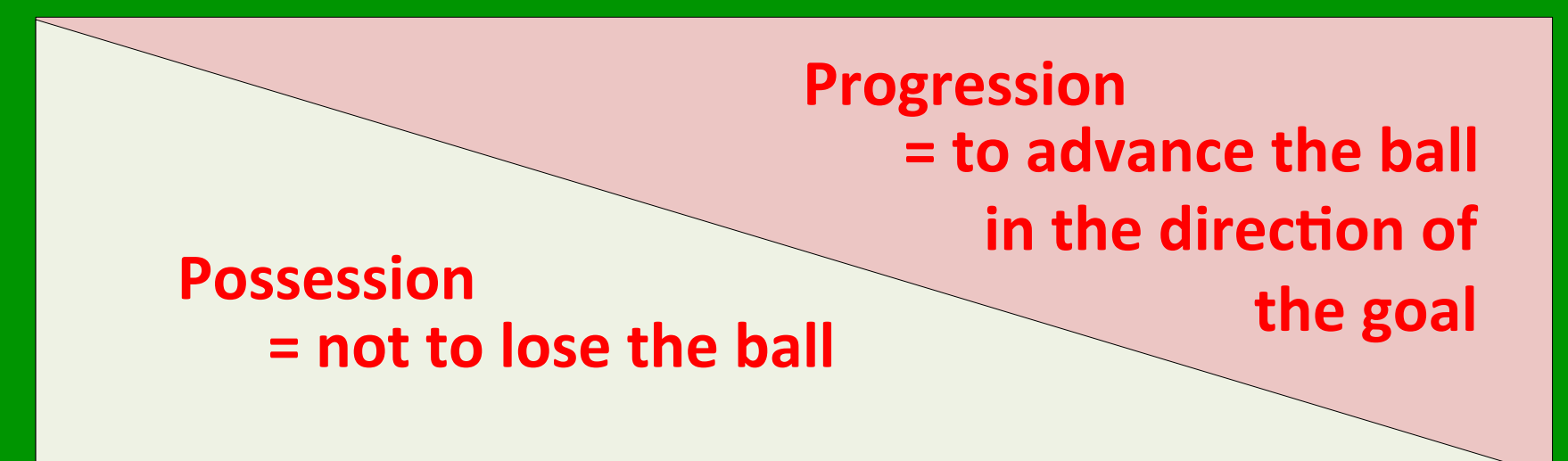
Task Solving Process in Ballgames



Especially in the process of breakthrough task-solving, players select the specific application of ball manipulation as follows:

- "pass" the ball toward the objective point (goal or the other player of own team) , or
 - "carry" the ball by himself/herself toward the objective point.
- In any case, players (offense) face the dual function:
- not to lose the ball (ball-possession), and
 - to advance the ball in the direction of the goal (ball-progression).

(ball-seizing) → (attacking) → (shooting)



Viewing in the light of social constructivism, the phase of confrontation changes according to which one the offense give priority. For example, you can easily understand it by comparing the novices' soccer game and the experts' one. Therefore, assessing how these two antagonistic elements are distributed, we can grasp the intention of each offensive behavior. This idea will help teachers improving PE lesson where many ballgames are handled.

These findings provide a new perspective for ballgame instructions, which enables the learners to construct the processes as meaningful experience, not just reproducing solutions for the tasks of the competition.