



FOOTBALL PERFORMANCE ANALYST

MODULE 2.
UNDERSTANDING AND
ANALYZING THE GAME

**- CONMEBOL -
EVOLUCIÓN**

Module 2. Understanding and Analyzing the Game

I want to start our process of understanding the football game from a great reference in football studies, the Portuguese Júlio Garganta:

"The game of football arises from the nature of the confrontation between two complex systems, the teams, and is characterized by successive alternating states of order and disorder, stability and instability, uniformity and variety."

Our starting point for getting to the analysis of the game is in understanding this sport in depth.

When we see that football has two complex systems that confront each other and that, with each decision, change the course of the match. Thus, it is evident that the observation and analysis of the game becomes more and more a support tool for the coach. We are talking here about helping with subsidies to improve the game.

The game that is improved by training and the training improved by the game. A cycle: observation, analysis and actions.

Whether in the pursuit of titles or in the training of future athletes, information has become a working tool.

The coaches, every day, have more clarity on the training processes to improve the game. Thus, one can intervene when necessary, correcting the paths and conducts in favor of improvements. We can affirm that these interventions will always be shaped by types of knowledge, from the most empirical, scientific, or philosophical, which will happen with the intention of constantly improving individual and collective performance.

But how to obtain such information and provide such support to coaches, clubs, and athletes?

How to extract good information?

How to define what will or will not do?

The answer lies in deepening the game references and excellent planning of the analysis objectives.

We assume that there are aspects of performance that include the physical, technical, tactical, and mental. All these aspects happen at the same time. Moreover, we are talking about individual, group, and collective actions.

We will go through content ranging from the athlete to all athletes performing at the same time.

So here, I will try to be as pedagogical as possible by fractionating the lines of understanding the game of football in all its complexity.

Can I count on you?

So let's go!

Following this line of reasoning, the analyst will develop tasks aligned to the coach's needs. A constant production of quantitative and qualitative data about the game of his team and the opponents so that the coach can understand and make his own decisions. These decisions impact the strategies, game model, training characteristics, and even the choice of athletes.

This consists in giving each team greater control of the game and play, aiming to increase performance and decrease risks.

The planning process determines the quality of the information obtained. We are talking about asking the right and necessary questions to the game and getting the best answers from the game.

Does it make sense to you?

Issues like:

- What to observe and record;
- Who to watch;
- How to observe;
- When to watch;

- Why watch;
- What to watch for;
- For whom;
- And what are the conditions of the observation.

We can define the planning process as the tool of clear analysis. After all, if you don't know where you want to go, any path will do. Right?

Invest in having many references about the game. Static and dynamic references, as well as individual, group, and collective references. We are not talking here about what is right or wrong, but about references.

Benchmarks are indicators of the paths that the team and athletes follow or not. Many might say that they are performance or route indicators.

At this point the support technologies are chosen, according to each reality of course. Because there is no best technology for football, there is the best one applied to your information needs. Extracting the most from practices to build better trainings and games.

Inside the Game

We start from the idea that every team has a set of values and beliefs that derive from a history and a tradition. This will directly influence the philosophy of the game, that is, those ideas that the coaches have experienced throughout their lives. This will cause a set of ideas to be taken as the best for that coach. This is how he develops his game model, which can be adjusted and adapted to each reality.

But what would this game model be?

These are tactical references that allow us to give meaning to the principles and concepts of a certain way of playing. And from there, the construction of the training sessions to operationalize a behavior that aligns with the desired model.

Among the ways to think about tactics, we will highlight 3 ways:

1. Team tactics: when we think of the actions performed simultaneously based on the game model;

2. Group tactics: usually between 2 to 4 athletes in actions to promote the model's proposal;
3. Individual tactics: when we think about decision making by individual interpretation of certain situations in the game.

Here we can already see that understanding the game is about knowing the team's culture, idea, and game model.

Figure 1: Aspects the performance analyst should know



Source: Author's own design.

Now, each training session will make sense from the design of the training exercise to the general and specific objectives. Analyzing will become easier and more understandable. Information will be clear.

This answers the main question:

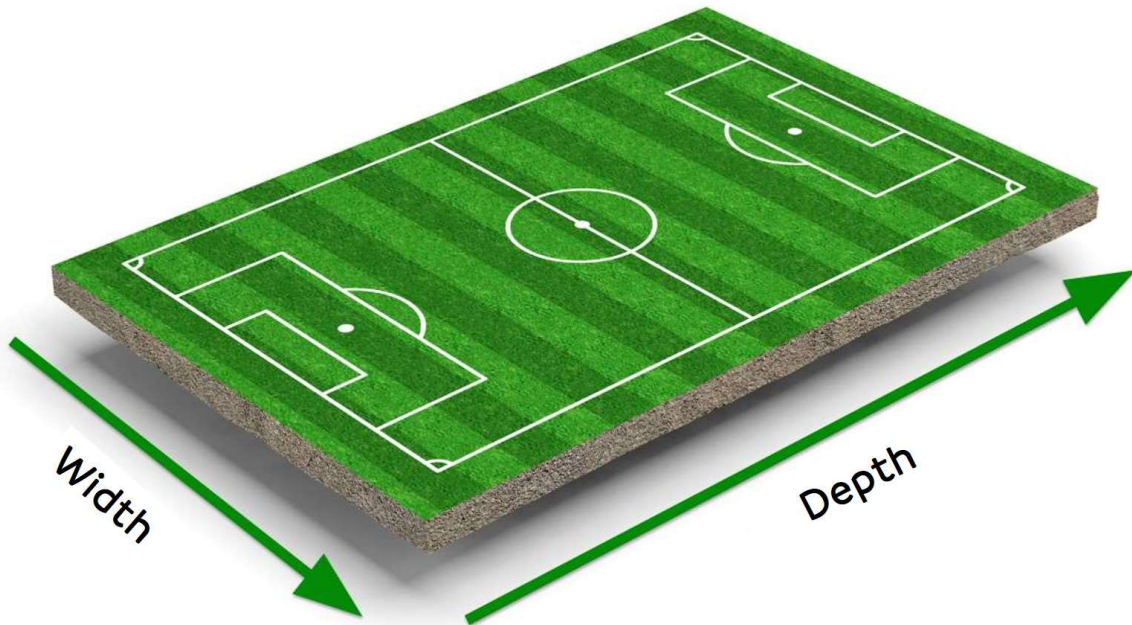
- What should I analyze in the game and in training?

Static spatial references in the game

When we think about the dimensions of the football field, we can, in a didactic and imaginary way, list references that help give an even better understanding of the game and analyze it in this approach.

Let's start with width and depth, also known more technically as transverse axis (width) and longitudinal axis (depth).

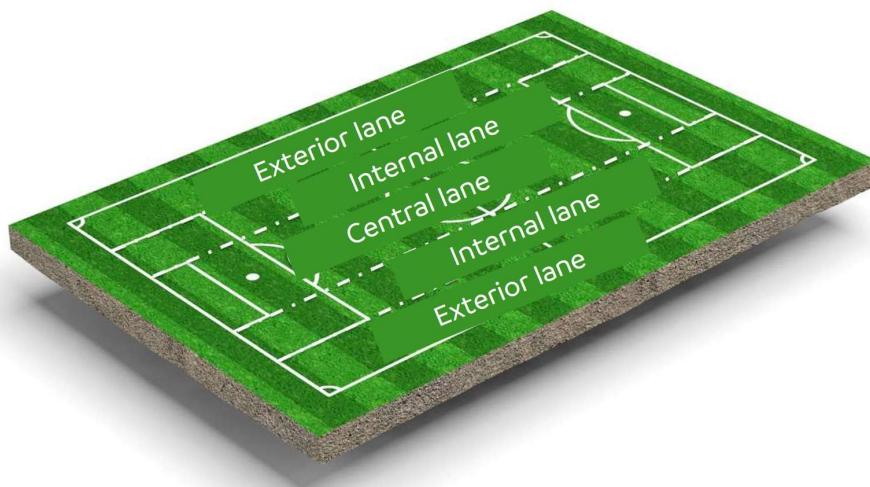
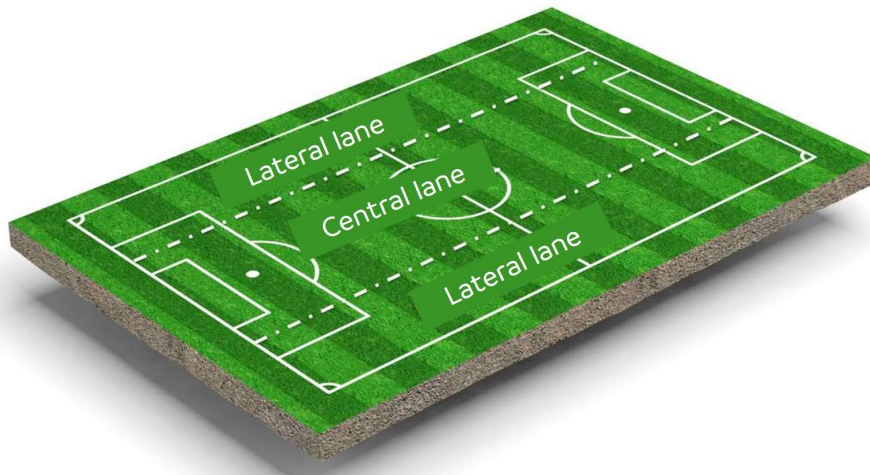
Figure 2: Dimensions of the playing field



Source: Own design.

Another very usual way of giving references on the field is through longitudinal strips, often called field runners. There are coaches who set 3 to 5 lanes.

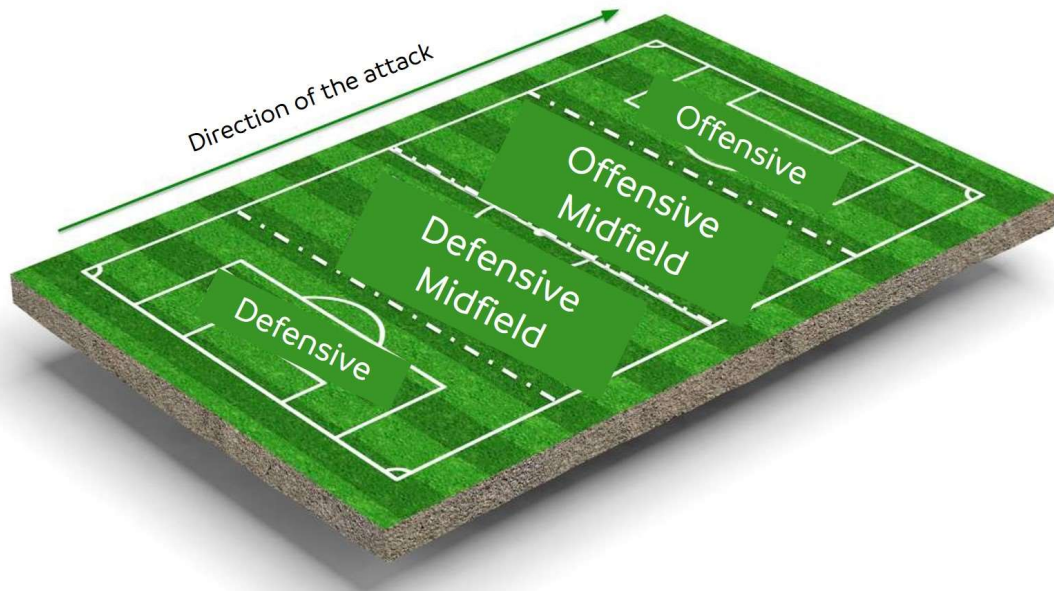
Figure 3: Runners



Source: Own design.

And across the board, usually in 4 sectors: defensive, defensive midfield, offensive midfield, and offensive.

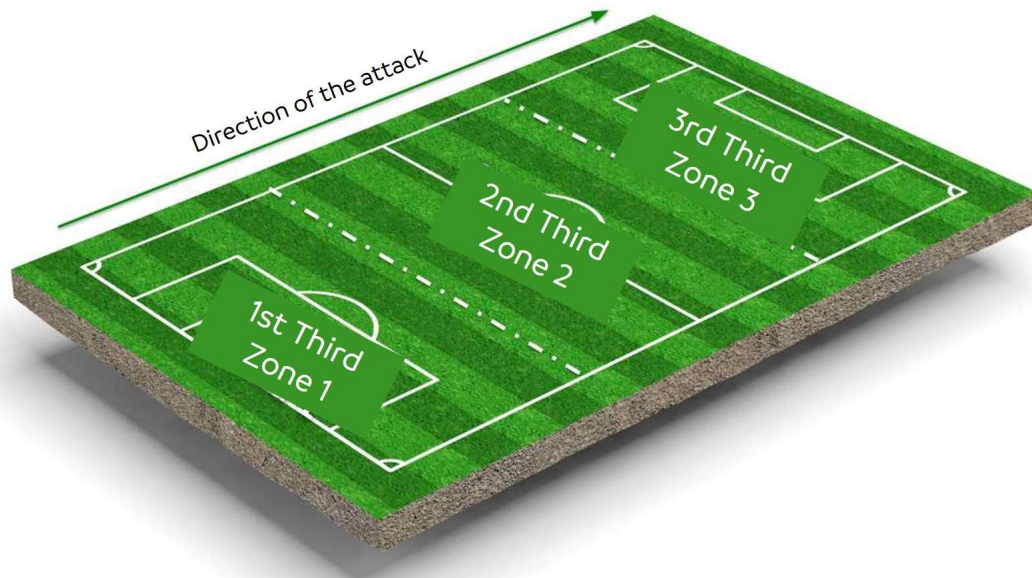
Figure 4: Sectors of the field from a transversal perspective



Source: Own Design.

As well as in thirds of the field: defensive third (1st third), midfield third (2nd third) and last third (3rd third).

Figure 5: Thirds of the field



Source: Own design.

When we combine the imaginary longitudinal lines (3 to 5) with the transversal ones (4) we have several zones on the field, which are important references for analysis and team/athlete organizations.

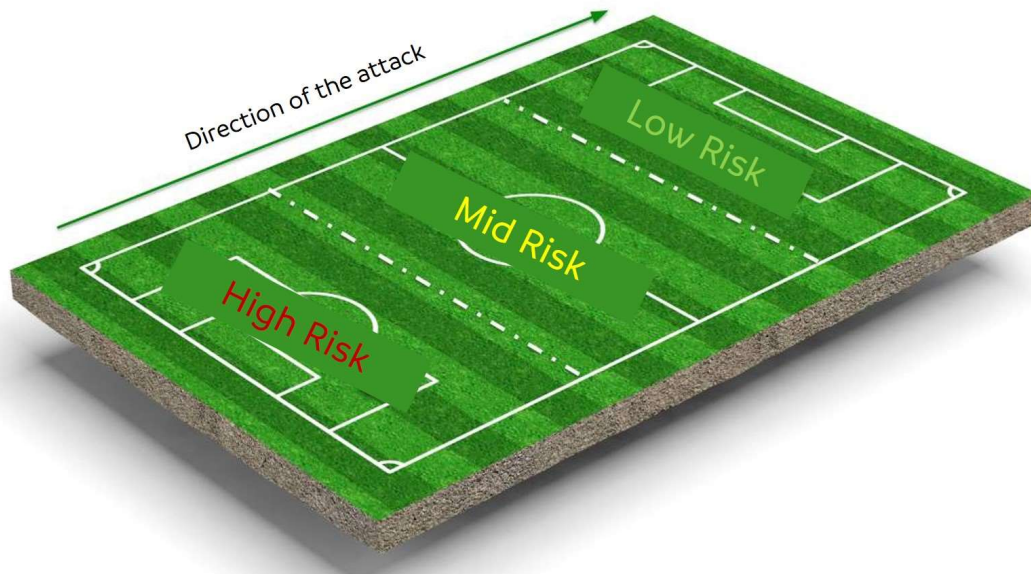
Figure 6: Field divided into 12 and 20 zones



Source: Own design.

One more way to reference is through risk zones to goals. The closer the opponent is to your area (defensive sector), the more risk the team has. The farther and closer to the opponent's defensive sector, the better.

Figure 7: Risk level according to the distance to the own goal



Source: Own design.

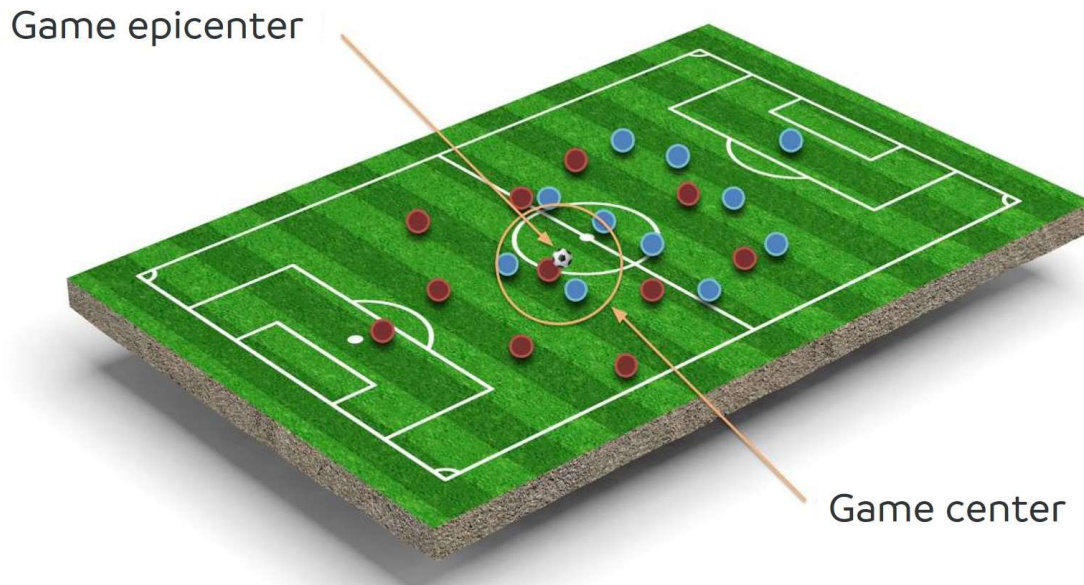
We can thus interpret risk zones. Some scholars and coaches speak of imaginary diagonal lines that start from the midfield line (intersection of the midfield line and sidelines) to the base of the goalposts, forming a funnel toward the goal and consequently more risk.

Dynamic game spatial references

We will now move on to references taking into consideration where the ball is in full motion and athletes in dynamic situations.

Some pedagogical references to the game name the place where the ball is as the Game Epicenter. And from the epicenter of the game, imagine a circumference of 9.15 meters, this space is called the Game Center. These are references where you can identify where the center of attention, the ball, and athletes from both teams are interacting.

Figure 8: Center and epicenter of play



Source: Own design.

With this same reference you can also see who is not interacting in the center of the game, but who nevertheless has clear functions to perform on both teams. It is expected that the whole team is performing actions on behalf of the team.

And since we are talking about the whole team, there is another reference. Just imagine interlinking each open player (excluding the goalkeeper) with lines, forming a polygonal area. We can call this area Effective Playing Space or Effective Playing Space.

Figure 9: Effective Play Space



Source: Own Design.

Remember, this is a snapshot of a dynamic structure that doesn't stop, it develops over the course of the game different dimensions that characterize a given team in its dynamic game space behavior.

Another widely used dynamic reference is the ball's width and depth lines.

As for the ball line, we just have to imagine a line that goes from side to side at the height of the field where the ball is. So we will have, behind the ball line and in front of the ball line.

Already thinking about width lines, take as a reference in making lines (like the direction of the runners) where each athlete is positioned. We can see the lines of position of the athletes in reference to the width. And for the depth, following the position of the athletes, from lateral line to lateral line. We will have a full view of longitudinal and transversal lines of the team.

In addition to this knowledge, it includes two more references: pass line and pass zone.

For the pass line, let's imagine a line between the player with the ball and another player from the same team without interference from the opponent, allowing the pass to be made. This is built dynamically. The famous creation of pass lines to develop the game:

Figure 10: Pass line



Source: Own design.

Now, the passing zone is a specific area of the field where the teammate can receive the ball, even if he is not yet there. You know that green grass free to get the ball and the teammate? It is there!

Figure 11: Pass zone



Pass Zone

Source: Own design.

The game based on the phases and moments of the game

In a very didactic way, we can divide the game into phases and moments.

When we talk about a phase, we are talking about a situation that is running for a longer time during the match and moments like quick situations.

To break down this look, imagine the attack that is in an organized way to go through stages such as initial actions, development actions, and final actions to generate the finish and goal. We can call it the Offensive Phase and focus on this analysis.

The same applies to the Defensive Phase, of how the team structures itself and acts to defend until it recovers the ball.

When thinking about Moments, then imagine in quick situations like:

- When losing possession, the team leaves its offensive phase and must act to minimize risks and regain possession. A quick moment that requires quick actions, in this case called defensive transition.

Figure 12: Attack-Defense Transition



Source: screen capture from AZ Sportech (2020c, <https://www.youtube.com/watch?v=Ap09jDgIAM8&list=PLuiWr7NcQzXcqXFDEanBChQhlexwTcKSU&index=12>).

- By gaining possession of the ball, the team breaks out of its defensive structure to quickly take an advantage, get to the goal, or even move into an offensive phase and start attacking. We call this transition the offensive transition.

Figure 13: Peru's fast offensive transition in Copa América



Source: screen capture from CONMEBOL (2019e, https://www.youtube.com/watch?v=au2k_tmjiuE).

In addition to all of this, we are faced both in attack and defense with set pieces and replenishments.

One of the situations with many details to study, both in training and in games, that requires time and practice.

Imagine the amount of detail in a corner, be it defensive or offensive.

In relation to this, the percentage of goals from set pieces in Copa América 2019 was 27%. If we compare it with the percentage that had the World Cup in Russia in 2018, with 37 %, it can be concluded that it is a game situation that can continue to be optimized by the teams participating in this tournament.

Figura 14: Comparison of Copa América and the World Cup- Russia 2018



Source: AZ SPORTECH, 2020a, https://scontent.faep6-1.fna.fbcdn.net/v/t1.0-9/109244975_115793866873379_984047758994015506_o.jpg?_nc_cat=106&ccb=1-3&_nc_sid=973b4a&_nc_ohc=U9dqee04pJEAX-hYFXp&_nc_ht=scontent.faep6-1.fna&oh=82dc87b07a91037560ea525a89f6a101&oe=606B8E21

Análisis de pelota quieta	Set Piece Analysis
Goles	Goals
De pelota quieta	From Set Pieces
En los goles de pelota quieta	In the set pieces goals

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De corner	From Corner
De tiros libres	From Free Kicks
De penales	From Penalties
De saque lateral	From Throw-in

So in these game situations, divide initially between offensive and defensive. And then by situation:

- Exit of the ball in the midfield
- Goal Shots
- Throw-ins
- Corners

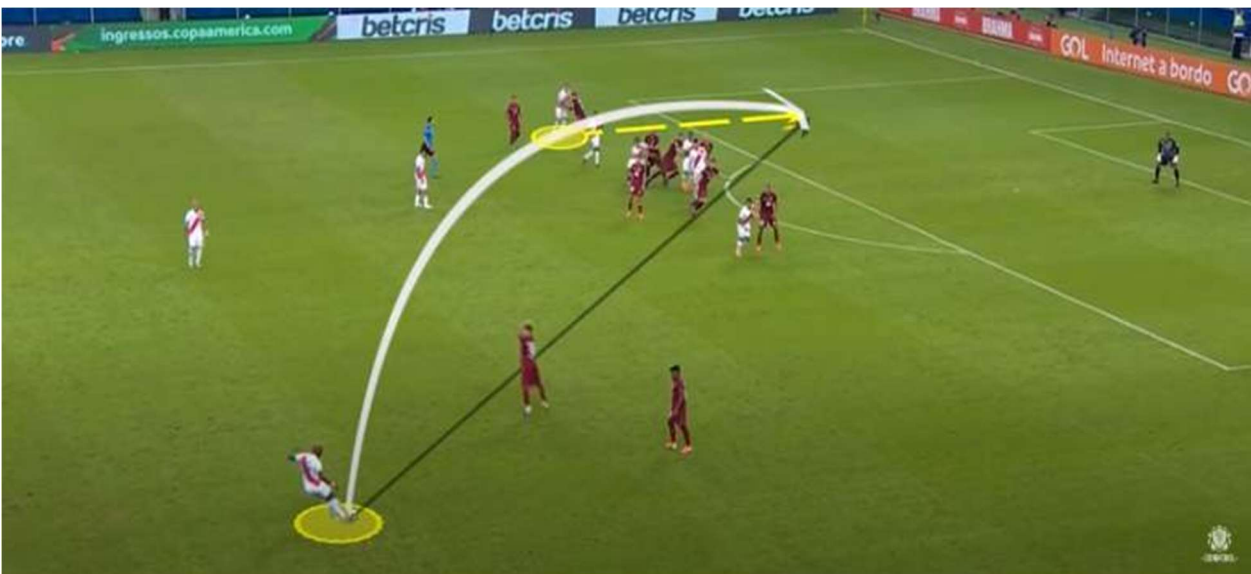
Figure 15: Defensive proposition for corner kick.



Source: screen capture from CONMEBOL (2019b, https://www.youtube.com/watch?v=iKT-M1FCrrw&list=PL4A2cX5iL_omcEckTCwJUqC6gYSLQ1Lbi).

- Free-kick takers

Figure 16: Offensive proposition for free shooting in the offensive midfield zone



Source: screen capture from CONMEBOL (2019c, https://www.youtube.com/watch?v=nZzEJ2k_3Hs&list=PL4A2cX5iL_omcEckTCwJUqC6gYSLQ1Lbi&index=2).

Look at what an interesting analysis structure!

Now, in each phase or moment, categorize by type or method. By patterns presented by the team.

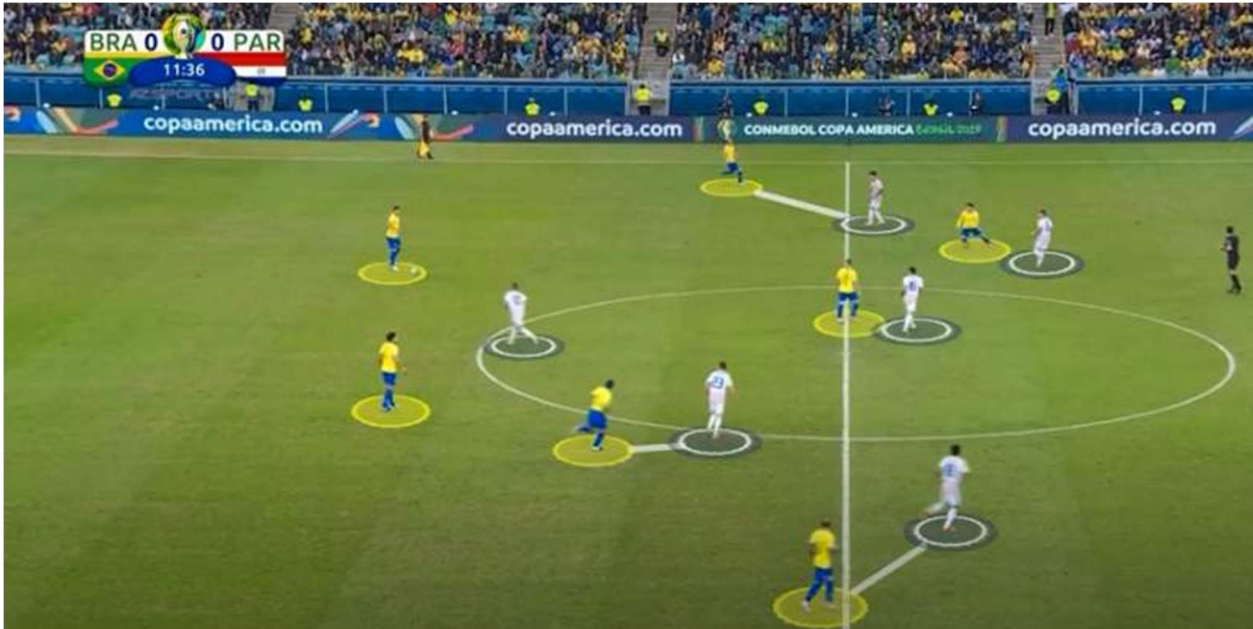
Generally the attack has as its type or method:

- Fast attack;
- Counter Attack
- Direct attack/direct link;
- Supported/combined attack;
- Position attack.

The defense can follow as referenced below:

- Regarding Player Action
- Individual

Figure 17: Personal reference



Source: screen capture from AZ Sportech (2020b, <https://www.youtube.com/watch?v=UBfWM2O9M0E&list=PLuiWr7NcQzXcqXFDEanBChQhIexwTcKSU&index=19>).

- Zone

Figure 18: Defense in zone



Source: screen capture from CONMEBOL (2019a, https://www.youtube.com/watch?v=bKNQoZLoXjY&list=PL4A2cX5iL_omm4EaneHWOvV_uSpjYQXRr&index=1).

- Mixed
- Regarding the field location
- High Marking / High Block

Figure 19: Pressure in high block



Source: screen capture CONMEBOL (2019d, https://www.youtube.com/watch?v=bDL01gqzhl&list=PL4A2cX5iL_omm4EaneHWOvV_uSpjYQXRr&index=2).

- Medium Marking / Medium Block
- Low Marking / Low Block
- Time of Athletes' Action after losing the ball
- Immediate Pressure on the ball carrier

- Timing
- Passive

Football is fantastic for its complexities and greatness of study. Above were some ways to view and qualify the events. You will find tens of hundreds of other theoretical and practical references for transitions, attack and defense. Remember to expand your knowledge in references.

The game based on Tactical Principles

When we talk about Tactical Principles we are referring to the theories of an internal logic of the game through collective and individual situations that govern the game's operation.

The operationalization of players' tactical-technical behaviors and players' awareness of them, to simplify the transmission and operationalization of the concepts, helping in the selection and execution of the action required for the situation (Teoldo *et al.*, 2009; Teoldo *et al.*, 2011).

As a brief explanation of these starting points for understanding the game, there is a scalar division of the tactical principles:

- General Tactical Principles;
- Tactical Operational Principles;
- Fundamental Tactical Principles;
- Specific Tactical Principles.

General Tactical Principles:

- Do not allow numerical inferiority
- Avoiding numerical equality
- Seek to create numerical superiority

Tactical Operational Principles (DEFENSE):

- Protecting the goal
- Stop the opponent's progression
- Reduce the opponent's playing space
- Nullify the finishing situations
- Regain possession

Tactical Operational Principles (OFFENSE):

- Keeping the ball
- Building offensive actions
- Progressing through the opponent's field of play
- Create finishing situations
- To finish in the opponent's goal

Fundamental Tactical Principles (DEFENSE):

- Containment (inside the game center, carry out opposition)
- Defensive coverage (defender support)
- Balance (defensive balance and recovery balance)
- Concentration (players outside the center of the game should provide defensive reinforcement)
- Defensive Unit (the ones farther away can give support)

Fundamental Tactical Principles (ATTACK):

- Penetration (progression of the ball carrier toward the goal)
- Offensive Coverage (offensive support)

- Mobility (movements made between the last defender's line and the back line, creating depth)
- Space (movements made outside the center of the game, between the ball and the last line of defenders)
- Offensive Unit (support movements and offensive compactness performed outside the center of the game)

Specific Tactical Principles: are specific guidelines of action patterns that the coach wants, the team's identity.

The Guiding Structure of Football Match Analysis

I propose to you a framework for understanding and analyzing football games following the topics below:

1. General characterization and team information: you should always think about whether it is your team or your opponents, because there may be some adjustments in the presentation of the information. But in general we follow the idea of presenting the team. Below are some items for reference:
 - a. Classification
 - b. Points
 - c. Games
 - d. Victories
 - e. Ties
 - f. Defeats
 - g. Goals scored (detail how)
 - h. Goals conceded (detail how)
2. Prediction of the 11 athletes and substitutes: try to verify how often the athletes are used and the dynamics of substitutions.

3. Match sheet: the main characteristics of the match such as location, field conditions, weather conditions, cards, refereeing, etc.
4. System of play: usually described in a numerical format indicating the number of athletes in each sector of the field.
5. General game analysis: individual analysis of the best players in each team
6. Offensive organization: characterization of what they do in the initial, developmental, and final phases of the attack.
7. Offensive transition: what is the behavior and characteristic of transition.
8. Defensive organization: characterization of the way in which they defend.
9. Defensive transition: what is the behavior and characteristic of transition.
10. Offensive tactical schemes: refers to the connections between athletes during the game, the way they move and relate to their functions on the field. Highlighting strengths and limitations in various situations such as:
 - a. Exit of the ball in the midfield
 - b. Goal Shots
 - c. Lateral throws
 - d. Corners
 - e. Free-kick takers
11. Defensive tactical schemes: as explained above, the connections between athletes during the game in situations of:
 - a. Exit of the ball in the midfield
 - b. Goal Shots
 - c. Lateral throws
 - d. Corners

- e. Free-kick takers
12. Individual Analysis: description of the athlete's performance
13. Final considerations

Proposals for understanding the game and its players

Analyzing the players individually is one way to understand the individual influence on the collective.

To do so, we can analyze according to some FIFA® recommendations on its website fifa.com regarding the individual technical and tactical aspects. In the technical ones, I will highlight the following:

- control the ball;
- running with the ball: driving and dribbling;
- pass;
- finalization;
- header;
- volley;
- feinting: with ball and without ball;
- disarming;
- interception;
- defensive duels.

And regarding individual tactics, we highlight:

- occupation of the spaces;
- decision making;
- behavior during the games;

- When you have possession of the ball:
- movements;
- deselect;
- support generation;
- domain;
- passes;
- dribbling;
- finishes.
- When you are not in possession of the ball:
- reposition behind the ball line;
- delaying the opponent's progression;
- marking;
- interception;
- 1 x 1 duels.

Another approach to individual analysis in the game

One way to analyze the football athlete is through declarative and procedural knowledge.

How many times have you seen an athlete talking about the best decisions, about how he would do it, and you were happy that he understood it. But at game time, none of what he talked about happened.

Why does this happen?

To talk about this we enter the area of knowledge and learning.

Many times when questioning an athlete about certain situations in the game, he verbalizes (answers) that he would make a certain decision if that situation happened to him. This may

be clear to him, but it may or may not happen in practice, in the process, in the execution. What the athlete sometimes verbalizes is not necessarily going to happen.

The inverse also happens, the athlete performs and most of the time doesn't know why he/she always does that. We can call this procedural knowledge.

We will encounter in the process of analysis and preparation of athletes the need to align declarative and procedural knowledge for the best performance, improve understanding and execution.

And look how interesting!

When analyzing an error, a non-execution, are you absolutely sure that the athlete knows what he has to do? Or even if he knows and didn't do it?

It makes a lot of sense to improve decision making through new guidelines and specific training.

So, when thinking of analyzing individual tactical actions and those of an athlete in relation to the collective, think about the hypothesis of:

- Does he really know what he has to do or can he not execute?

A feedback to the coach that raises the bar for training production and game performance.

In short, they were suggestions to understand and analyze the game by going through individual and collective situations.

References

Clemente, Filipe & Couceiro, Micael & Martins, Fernando & Figueiredo, António & Mendes, Rui (2014). Análise de jogo no futebol: Métricas de avaliação do comportamento coletivo. Motricidade. 10. 14-26. 10.6063/motricidade.10(1).1517.

FIFA®, site <https://www.fifa.com>

Pereira, J.J.G.M. Construção de um modelo de observação e análise do jogo de futebol baseado na visão de intervenientes profissionais em diferentes contextos de elite. Professional Internship Report. University of Porto, Portugal. 2017.

Silva, J.M.G. Modelação Tática do Jogo de Futebol. PhD Dissertation, 1997.

Teoldo, I.C., Silva, J.M.G, Greco, P.J., Mesquita, I. Princípios Táticos do Jogo de Futebol: conceitos e aplicação. Motriz, Rio Claro, v.15 n.3 p.657-668, jul./set. 2009

Teoldo, I.C., Silva, J.M.G, Greco, P.J., Mesquita, I. Proposta de avaliação do comportamento tático de jogadores de Futebol baseada em princípios fundamentais do jogo. Motriz, Rio Claro, v.17 n.3, p.511-524, jul./set. 2011

Thiengo, C. & Marques, M. Football Glossary: terms and concepts related to techniques and tactics. ISBN: 978-65-00-033-113