# Game models in football coaching: an ecological dynamics perspective

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# Game models in football coaching: An ecological dynamics perspective

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**Abstract**

The use of Game Models in modern football coaching has gained prominence as a framework for shaping team organisation and decision-making. A Game Model can be defined as a performance framework that guides team behaviour through tactical principles, influencing both training design and game plans. However, current applications often overemphasise predefined patterns of play and coach-led directives, which may constrain players' adaptability in dynamic match contexts. Such approaches may reduce player autonomy and limit exposure to the informational complexity of team sports performance. This paper presents an ecological dynamics perspective on Game Models, positioning them as adaptive, principle-based frameworks shaped through ongoing player-environment interactions. Drawing on the concept of affordances in ecological psychology (Gibson, 1979), Game Models are reframed as dynamic systems that support perception-action coupling rather than prescribing fixed solutions to be rehearsed in practice. From this perspective, practice design emphasises representative design, perceptual attunement, and verbal feedback that supports decision-making. It is proposed that practice environments should promote co-adaptation, self-organisation, and shared tactical intentions of players, with tactical principles acting as attentional anchors that guide performance behaviours in response to evolving task and environmental constraints. Practical examples are provided to illustrate how an affordance-based conceptual framework may support player development, tactical flexibility, and skill transfer. In doing so, the paper seeks to bridge theory and practice by aligning learning design with the perceptual-motor and cognitive demands of football.

**Keywords**: football; principled game models; ecological dynamics; affordances; practice designs

## 1.0. Introduction

In football, a Game Model is commonly described as a performance framework shaped by a coach's tactical philosophy, player characteristics, contextual constraints, and the club's traditions, including cultural and structural goals. It typically informs a team's playing style, tactical principles, training methodology, and long-term planning strategies such as tactical periodisation (Plakias, 2023). Historically, Game Models have been used to formalise patterns of play, define positional structures, and prescribe set behaviours for teams in and out of possession and during transitions (Costa et al., 2011; Garganta, 1997; Guilherme, 2004). These frameworks often include reference to tactical principles such as counter-pressing, breaking lines, support play, or compactness (Shaw & Glickmann, 2019), which are expected to guide performance across distinct phases of the game (Bompa, 1994; Castelo, 1994; Práxedes et al., 2018). A commonly identified limitation of traditional Game Models is their tendency towards reductionist and deterministic approaches, where coaches predetermine tactical behaviours that players are expected to comply with and perform within, irrespective of the unfolding competitive context (Wellock, 2026; Ribeiro et al., 2019). Coaches often seek to oversimplify complex tactical phenomena into digestible, prescriptive behaviours, despite the complexity of competitive performance environments (Cushion, 2007). The application of prescriptive tactical frameworks risks constraining the adaptive capabilities of players (Araújo & Davids, 2016) because coach-led practice designs often simplify the environment into automatised rehearsal of patterns of play (e.g., shadow play), which may limit players' ability to adjust effectively to the variability of competitive match play (Chow et al., 2015; He et al., 2023; Wellock, 2026). Such approaches may reduce exposure to the informational complexity and dynamic interactions that characterise match play, potentially constraining the development of flexible and context-sensitive decision-making behaviours (Davids et al., 2022). These limitations suggest the need for a theoretical framework that can account for interaction, variability, and adaptation in real-world performance environments. At present, it seems that there is limited empirical evidence to determine how Game Models should be conceptualised or implemented most effectively.

The ecological dynamics framework is renowned for offering one way of understanding performance shaped by player-environment interactions. Within this perspective, tactical principles may be understood, not as fixed instructions or patterns, but as functional invitations for action (Ribeiro et al., 2019). Players perceive and act upon these invitations based on affordances, defined as opportunities for action that emerge relative to the performer's capabilities and environment conditions (Silva et al., 2014). For example, rather than prescribing that a team must always high-press when defending in a 1-4-3-3 formation (Shaw & Glickmann, 2019), coaches might guide players in training to recognise where space, teammate support, numerical advantage, or player orientation affords an effective press (Travassos et al., 2013; Vilar et al., 2012).

If coaches wish to adopt an ecological dynamics focus, it may require a reconceptualisation of a Game Model as a flexible scaffold rather than a deterministic blueprint to follow (Wellock, 2026). Instead of prescribing action sequences, a Game Model grounded in ecological principles may support players in adapting through continuous interaction with dynamic constraints and evolving information. This key idea aligns with research suggesting that successful performance in elite football is often characterised by tactical flexibility and responsiveness (Jordet et al., 2020), not adherence to pre-set, structured patterns of play (Goes et al., 2019; He et al., 2023). Crucially, player development does not occur in a vacuum. Learning is also shaped by the broader *form of life* including cultural and historical traditions of a football organisation, socio-cultural norms, and institutional values (Rothwell et al., 2018; O'Sullivan et al., 2023). In professional football, a club's Game Model, therefore, should not only reflect tactical priorities, but also embrace the cultural context of its players, coaches, and community. These socio-cultural constraints influence how affordances are perceived and enacted and should be embedded within the pedagogical and organisational structures that support Game Model implementation (Woods et al., 2020).

The aim of this paper is to present an ecological dynamics perspective on Game Models in football coaching, positioning them as a conceptual framework for understanding and designing practice. Rather than acting as prescriptive tactical scripts, Game Models are conceptualised as performance frameworks that support perception-action coupling and player autonomy. From this perspective, Game Models can guide the design of representative learning environments that invite co-adaptive player and team behaviours in affordance utilisation, in response to the constraints of competition.

An ecological perspective suggests that adaptive performance emerges as players perceive and act upon opportunities within the environment. Accordingly, practice design may facilitate self-organisation around shared tactical intentions, rather than the reproduction of fixed patterns. In this regard, Game Models may function as tools for supporting learning, adaptation, and resilience of players under competitive pressure. Given the limited empirical evidence surrounding the effectiveness and application of Game Models, this paper positions its contribution as a conceptual framework intended to guide future research and applied practice.

The structure of this paper is organised to progressively develop the argument from conceptual foundations to applied implications. Section 2 examines traditional approaches to Game Models in football, highlighting potential limitations in their conceptualisation and application. Section 3 outlines key principles from ecological dynamics, providing the theoretical basis for an alternative perspective. Building on this, Section 4 presents an affordance-based conceptual framework for understanding Game Models. Section 5 then considers how these ideas may inform coaching practice, including task design and coaching practice. Section 6 discusses the broader implications of this perspective and outlines directions for future research.

## 2.0. Rethinking Traditional Game Models: Towards Adaptive Playing Approaches

Before developing an ecological reconceptualisation of Game Models, it is important to critique existing traditions that often resist such evolution. The complexity of football performance has contributed to the emergence of Game Models as a means of structuring the game into manageable phases and principles that shape playing approaches (Ribeiro et al., 2019). However, despite their widespread use, the concept of Game Model appears to remain inconsistently defined within the literature and is often conflated with related terms such as "Game Style" or "Playing Styles" (Plakias, 2023; Hewitt et al., 2016), potentially contributing to inconsistent application in practice.

One such issue is the adherence to predefined or historically-derived styles of play that are often poorly articulated, which may lead to misalignment with current team capabilities, tactical innovations and new competition demands. An illustrative example comes from former English Premier League manager Sam Allardyce, who recalled his tenure at West Ham United F.C.:

> *"As soon as I was appointed manager in 2011 the big debate was whether I would follow the 'West Ham way' which nobody could define, but, whatever it was, I apparently didn't play it. The fans were being brainwashed into thinking that, historically, the club had a particular style of play which was akin to Barcelona which was potty"* (The Guardian, 2015).

This anecdote suggests a potential risk of enforcing playing philosophies that lack operational clarity. While tradition can offer performance identity and coherence, it may also act as a socio-cultural constraint that may act as a rate-limiter on innovation and adaptation, particularly when it becomes detached from the contemporary needs of the players, relative to competition demands. In applied football contexts, Game Models are often closely linked to 'romantic' notions of club identity, which may not always be operationally defined (Reeves, 2026). A key issue, therefore, appears not to be the existence of a Game Model itself, but the potential misalignment between an intended model and the realities of competitive performance. When Game Models are

derived from coach-imposed preferences rather than the current players' needs and competition demands, they may constrain rather than support adaptive behaviour. Furthermore, effective implementation may require alignment between the coach's intended approach and the characteristics of the playing group (Tamarit, 2015; Tee et al., 2018).

In response to these limitations, an ecological dynamics perspective has been proposed as analternative approach by emphasising responsiveness, perception-action coupling, and player-environment interactions (Davids et al., 2013; He et al., 2023). Such approaches do not necessarily reject identity or philosophy outright, but emphasise contextual responsiveness over historically derived approaches. Tactical principles may be framed as emergent and evolving with the squad, rather than imposed and dictated by legacy. In practical terms, this means moving away from efforts to mimic historically preferred styles of play and anchoring the Game Model in the current strengths and developmental needs of the playing group. A Game Model may be understood as a scaffold for flexible co-adaptation, rather than a doctrine to be followed.

## 3.0. Theoretical Foundations

To reconceptualise Game Models within an ecological dynamics framework, it is important to establish an understanding of key concepts that underpin this perspective, with a specific focus on constraints, affordances, and representative learning design (RLD) (Newell, 1986; Araújo & Davids, 2016). These interconnected ecological ideas provide a foundation that may help to understand football performance as an emergent, self-organising phenomenon, shaped by continuous interactions between players, teammates, opponents, the ball, and the surrounding environment (Davids et al., 2008; Travassos et al., 2013; Silva et al., 2014).

### *3.1. Understanding Constraints*

Informed by ecological dynamics, the design of practice environments in football can be understood as grounded in the manipulation of interacting constraints to guide emergent behaviours. Drawing from Newell's (1986) foundational work, the constraints-led approach emphasises how skilled behaviour emerges from the dynamic interaction between individual, task, and environmental constraints. Rather than prescribing idealised solutions, coaches exploit these constraints to design training environments that invite exploration and adaptability (Davids et al., 2008; Renshaw et al., 2019; Chow et al., 2015).

In football, this framework may support the construction of Game Models as flexible, evolving systems rather than fixed tactical scripts. Task constraints may include tactical principles (Ribeiro et al., 2019), positional responsibilities, and contextual factors that shape performance, such as time remaining or scoreline (Schulze et al., 2022). Environmental constraints encompass elements such as weather, pitch surface, crowd engagement, or sociocultural influences (such as historical traditions and expectations), while individual constraints involve player-specific factors including fatigue, tactical experience and understanding, technical proficiency, or psychological state. Coaches can purposefully manipulate selected task and environmental constraints to shape affordance landscapes that offer functional opportunities for action within representative practice tasks (Chow et al., 2015; Pinder et al., 2011).

### *3.2. Affordances and Adaptive Behaviour*

The Game Model underpinned by ecological dynamics can be understood as a tool for designing representative environments, promoting player attunement and adaptability, rather than a top-down playbook of instructions for enforcing pre-planned patterns of play. Ecological dynamics focuses on real-time interactions of players with the environment, where athletes attune to affordances that arise relative to their capabilities and the game context (Gibson, 1979; Araújo & Davids, 2016). Available affordances are not static entities, but are dynamic, emerging and

disappearing in relation to changing task, environmental, and individual constraints. Affordances describe the functional relationship between an individual and the environment, specifying what actions are possible relative to a performer's capabilities, intentions, and the surrounding informational landscape (Gibson, 1979; Araújo & Davids, 2009). Affordances do not exist independently of the athlete but emerge and disappear in specific performance contexts. For example, a through ball to a teammate in football becomes an affordance only if a teammate perceives the fleeting opportunity to exploit their positioning, timing, and movement. Button et al. (2021) argue that a Game Model informed by affordances becomes a flexible scaffold for adaptive behaviour, shaped by direct perception of surrounding information to regulate actions in performance, rather than directed by the prescribed execution of a memorised action plan. This understanding of performance in football suggests a shift in how player and team decision-making are conceptualised. Rather than processing information internally and selecting from a bank of rehearsed responses, players learn to scan the field, detect meaningful information variables, and adapt their actions accordingly (Jordet et al., 2020; Seifert et al., 2022). In this view, behaviour can be understood as continuously regulated by perceptual attunement of the performer to the evolving demands of the game. If learning depends on players becoming attuned to affordances in context, then it is possible that the Game Model needs to be underpinned by the same ecological principles that preserve key information-action couplings between practice and competition.

### *3.3. Representative Learning Design*

RLD appears to play a crucial role in aligning training with the affordance-rich nature of competition environments (Pinder et al., 2011; Davids et al., 2013). Training should aim to preserve the informational and action dynamics of match play to support learning that transfers to competitive game situations. Davids (2024) highlights a key distinction between processes of skill acquisition and skill adaptation in performance preparation, emphasising the need for learners to adjust behaviours under changing environmental constraints rather than simply repeat techniques. Coaches can embed tactical concepts (e.g., creating width, pressing) into practice through varied and unpredictable tasks that support adaptation, not rote technique execution. The Game Model serves

as a framework for player intentionality to be considered by coaches when designing learning experiences, guiding player intentions without determining and prescribing fixed performance solutions in advance. For example, training a team to recognise and exploit transitions should not rely solely on rehearsed counterattack drills. Instead, practice tasks may be designed to invite players to perceive evolving affordances under time pressure and spatial constraint (Seifert et al., 2014). Through co-adaptation, players may then generate novel performance solutions based on the unfolding context, rather than recalling memorised movement patterns (Headrick et al., 2015; Woods et al., 2020).

### *3.4. Coach Feedback as Player Challenges*

In designing representative learning environments, the role of coach feedback may become crucial in reducing complexity to simplicity and making it compelling without prescribing solutions (Juarrero, 2023), guiding players' attentional search within affordance-rich performance contexts in the surrounding environment (Correia et al., 2019). This idea aligns with the concept of wayfinding in learning (Woods et al., 2020), where learners navigate affordances available in the surrounds in an emergent manner. Play-based and exploratory learning approaches as outlined by Rudd et al. (2021) can help foster such skill adaptation within representative contexts. From a pedagogical perspective, this approach aligns with a nonlinear pedagogical methodology where feedback is used, not to correct errors in isolation (Davids, et al., 2008), but to amplify relevant information and constrain exploration within functional boundaries (Otte et al., 2021). Drawing on ideas of Jones et al. (2021), this position paper proposes the concept of *"Coach Feedback as Player Challenges"*, a strategy that transforms coach communication into augmented information designed to enhance player search activities, attunement to information and problem-solving capacities. These prompts are presented in Tables 1-4 and serve as practical examples of how coaches can embed feedback into task design to scaffold learning without prescribing behavior, thus bringing the Game Model to life. Beyond practice design, ecological principles also have important implications for how coaches analyse and interpret performance data to inform the ongoing refinement of Game Models and learning environments (O'Sullivan et al., 2026).

### *3.5. Ecological Perspectives on Performance Analysis*

Traditional performance analysis in football often mirrors a linear, cognitive approach, quantifying metrics such as possession, pass accuracy, or number of shots on goal to infer success or playing style (Hughes & Franks, 2005; Lago-Peñas et al., 2010; Bradley et al., 2014). While useful, such methods risk decontextualising behaviour, overlooking the dynamic, relational aspects of performance. Ecological dynamics offers a way to reframe analysis by examining how contextual information guides player-environment interactions, enabling a more integrated understanding of tactical behaviour in situ (O'Sullivan et al., 2026). This approach may encourage analysis of how match status, opponent strength, or performance venue influence a team's affordance landscape and the behaviours that emerge as a result (Sarmento et al., 2018; Hewitt et al., 2016). Understanding these dynamical interactions may enable coaches to refine their Game Models in response to contextual constraints, evolving tactical principles (Garganta, 2009) and practice design to better support adaptable, real-time performance in competition.

Furthermore, performance analysis informed by ecological ideas may move beyond isolated event frequency counts to examine the influence of collective system variables such as team centroids, synchrony, or space occupation that reflect functional coordination behaviours (Frencken et al., 2011; Folgado et al., 2014). This systems-oriented perspective aligns with how playing styles can shift in response to contextual changes, highlighting the need for adaptable models that capture football's inherent complexity. These system variables not only help explain team coordination but also inform how coaches can structure Game Models that reflect the dynamic nature of football performance. Building on this, an ecological dynamics framework offers an alternative to traditional coach-centered Game Models, characterized by pre-set solutions and tactical plans. In this approach, Game Models can be understood as dynamic, evolving systems shaped through continuous interactions between players, tasks, and environments. Learning emerges through co-adaptive

behaviours, with the coach designing affordance-rich environments and supporting players' perceptual attunement to contextual information (Chow et al., 2015; Renshaw et al., 2019). This view positions the coach, not as an instructor, but as an 'orchestrator' who facilitates and exploits tendencies for system complexity by designing and guiding learning experiences (Jones & Wallace, 2006). Rather than enforcing specific solutions, coaches shape exploratory opportunities that enable players to discover functional behaviours in response to unfolding match demands. By integrating these concepts, it seems that Game Models in football can evolve from prescriptive playbooks into dynamic systems that reflect the 'lived', situated reality of the sport. Coaches and analysts, together with other specialists, may co-design training and performance frameworks that promote adaptive behaviours grounded in the interactions between player, task, and environment.

## 4.0. Reconceptualising a New Game Model

Building on Section 3, this section presents an affordance-based framework that conceptualises Game Models in football as a dynamic system of affordances. These affordances may be understood to emerge through the ongoing interactions between players and the constraints that shape football performance (Chow et al., 2015; Renshaw et al., 2019; Araújo et al., 2007). Figure 1 represents the game as a continuous loop of interdependent and overlapping phases rather than discrete, sequential segments. Each moment, whether during attacking, defending, transitions, or restarts, as well as each phase (for example, Attacking, Building up and Scoring, or Defending, Disturbing and Regaining), can be understood to feed into and emerge from the others. The infinity loop is intended to illustrate the non-linearity of the game, where transitions are not merely bridges between stable states, but central to the fluidity of play. The central crossover may be interpreted as representing *transition moments* where opportunities for reorganisation and affordance exploitation are heightened. Each coloured phase in the model corresponds with a dedicated section in Tables 1-4, mapping In-Possession (green), Out-of-Possession (red), Transitions (yellow), and Set Pieces (purple), to provide coaches with a framework that may inform coaching practices across game phases.

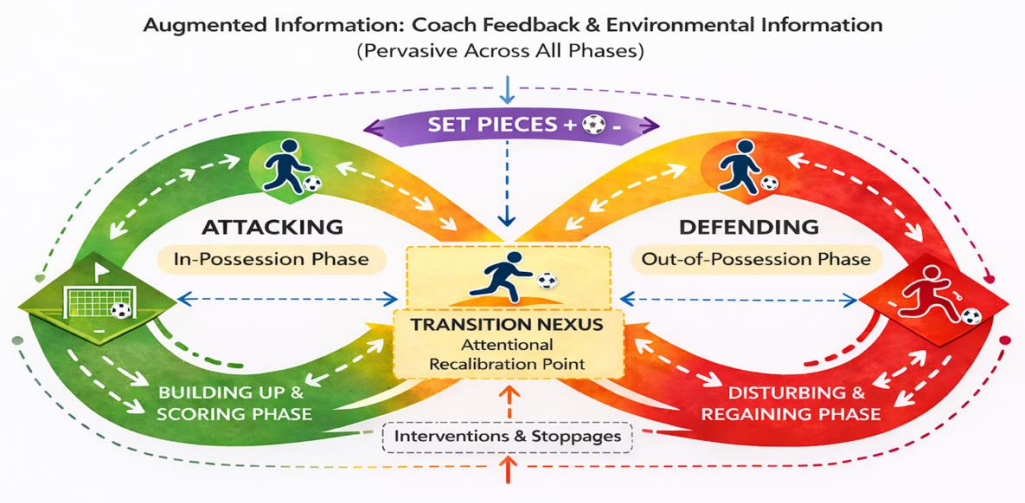


**Figure 1**: The constant flow of a football game moments and phases

The phase labelled *Disturbing and Regaining* is intentionally separated from the broader concept of transitions. While *transitions* refer to the immediate shift following a change of possession, *Disturbing and Regaining* captures proactive defensive behaviours such as pressing, counter-pressing, and disrupting the opponent's build up to regain the ball. This phase can be understood to reflect deliberate tactical intent aimed at destabilising the opponent and forcing errors. This could often lead directly into attacking moments or, if play is stopped, into structured restarts such as throw-ins, free-kicks, or corners. In contrast, the *Building up* and *Scoring* phase reflects the intention for the team in possession to build up an attack and progress the ball forward to create a scoring opportunity. These opposing intentions may illustrate how tactical behavior emerges in the game as an interconnected system, through ongoing perturbations and adaptations rather than fixed phase boundaries.

The central crossover point, labelled the *Transition Nexus*, may be conceptualised as a metastable performance space where affordances rapidly reorganise between attacking, defending, transitions, restarts, and set pieces. These moments may require players and teams to re-attune to changing informational variables and adapt accordingly as the affordance landscape reorganises following shifts in possession, spatial structure, or game flow. While transitions in football are traditionally understood as changes in ball possession, the Transition Nexus in our model represents

an informational and attentional recalibration point. At this point, it is possible that players may reorient their perceptual systems toward newly available informational variables following a change in game conditions (e.g., possession change, spatial reorganisation, or stoppage). These moments require players to attune to emerging affordances and adjust their intentions and actions accordingly. In ecological dynamics terms, this represents a metastable region of play in which multiple action possibilities coexist, and the system can recalibrate rapidly in response to evolving informational constraints. Augmented information such as coach feedback may help direct players toward available affordances. Informational interventions, such as verbal feedback, although often delivered retrospectively after an event (Cushion, et al., 2012), in contrast may serve in a *prospective* function by influencing future decisions and actions. In this sense, the Transition Nexus represents not just a region of change, but rather an ecological interface where perception, intention and action converge to support adaptive actions in the unfolding game.

The dashed horizontal and curved arrows are intended to reflect alternative movement pathways and perceptual-action loops, symbolising how players may transition fluidly between phases based on contextual information, intentions, and emergent opportunities for action. Each dashed arrow represents a recursive feedback loop in which players may continuously attune to new information, recalibrate intentions, and adjust actions. For example, a failed set piece may transition immediately into a defensive phase demanding rapid regaining behaviour, continuing the adaptive performance loop. The vertical arrows represent external interventions that can influence the game's flow. These include coach feedback, referee decisions, or injuries, all of which may momentarily pause play and lead to restarts, set pieces or changes in flow. In this way, they symbolise moments where external inputs shape internal adaptations and can offer critical recalibration opportunities.

The proposed conceptual model aligns with Morris' (2022) notion of "embracing turbulent waters" in paddle sports, positioning unpredictability of practice contexts as fertile ground for learning and adaptation. Similar ideas are evident in recent work by Dann et al. (2024), who emphasise the importance of RLD in creating training environments that expose athletes to the

inherent variability and uncertainty of performance settings. Football performance is understood, not as a sequence of isolated phases, but as an ecological flow of nested constraints and emergent and disappearing affordances (Button et al., 2020). In this view, Game Models may evolve into systems of shared attentional anchors, structures that guide team coordination while preserving the flexibility for individual players to adapt to emerging and disappearing affordances. Tactical principles (e.g., "pressing"), particularly when individuals and teams are defending in the *Disturbing & Regaining* Phase, act as enabling constraints (Button et al., 2020), offering pillars of augmented information without rigidity. These principles are not rehearsed through repetition, but instead can emerge in representative learning environments where players are guided to attune to game-relevant information sources.

This model seeks to reconceptualise Game Models as dynamic, affordance-rich frameworks, grounded in ecological dynamics. Rather than prescribing fixed scripts, it seems that an ecological approach may support a non-linear, co-adaptive system where phases of play are interwoven through feedback, intention, and perception. Coaches adopting this lens design learning environments that invite players to perceive, interpret, and act within a flowing system of tactical intentions, supporting resilient and adaptive performance in unpredictable environments.

## 5.0. Designing Representative Training Environments for Adaptive Performance

Having established the conceptual and theoretical foundations in the preceding sections, this section focuses on how an ecological dynamics perspective on Game Models may be translated into applied coaching practice. Building on the ecological framing developed in the previous sections, some evidence suggests that RLD may offer a mechanism for operationalising affordance-based Game Models within football training environments. It is possible that practice tasks which preserve key informational and action couplings (Chow, 2013) present in competition may enable players to perceive, interpret, and act upon emerging affordances under representative constraints (Pinder et al., 2011; Davids et al., 2013). Rather than relying on rehearsed patterns or decontextualized drills, coaches can design dynamic tasks that require decision-making and adaptation (Araújo et al., 2017).

As Woods et al. (2020) suggests, it seems that in some coaching contexts, players may function as passive elements within a coach-conducted, playbook-driven practice structures, rehearsing an idealised model of the game, and potentially limiting their autonomy and self-regulation (see also Wellock, 2026). Rather practice tasks should be designed to challenge players to function as they would in the game itself. Training design may reflect the continuous flow of the game (Figure 1), where transitions, attacking, and defending moments flow into one another. Following this logic, coaches must ensure that tactical principles are embedded within fluid activities that simulate realistic game interactions. This design feature fosters the development of adaptable behaviours and responses under pressure. It seems that, for a Game Model to be operational, it may include a set of tactical principles defined across all playing phases and clearly articulate expected player behaviours within those contexts (Pimenta, 2014). In practical terms, this idea suggests that coaches may translate an affordance-based Game Model into practice by: (1) designing representative tasks that preserve key informational constraints of competition, (2) aligning tactical principles with game-specific situations rather than fixed patterns, and (3) using feedback to guide players' attention toward relevant affordances, rather than prescribing pre-determined, ready-made, solutions.

This approach positions the Game Model as a guide for task design, training planning, and in-game decision-making. Table 1 illustrates how tactical principles in the attacking phase can be aligned with affordance-based intentions to guide adaptable player behaviour within context. In the defending phase, the same logic of affordance-based regulation of action can guide tactical responses, as shown in Table 2.

426 **Table 1**: Attacking phase (Building up & Scoring): Tactical Principles and Affordance-
427 based Intentions

| Tactical Principle of Play | Coach Feedback/Challenge | Affordance-based Intention |
|---|---|---|
| Breaking lines | How can your pass or your dribble eliminate two or more defenders? | Recognise when your action can find space and a teammate behind or between the opponent's defensive lines. |
| Finding the free player | Who can you pass to help retain and progress possession from a player unmarked or available? | Search for a teammate with the best option of advancing the attack |
| Options to play forward | How can you position yourself to create space for yourself or your teammate? How can the team's shape offer optimal height, width and depth? | Play quickly when opportunities open for vertical or diagonal passes into the next attacking third. |
| Rotation and Balance | Try to recognise when to clear and when to fill spaces on the field while maintaining the team shape | Constantly assess when to change positions to exploit space and maintain team shape. |
| Finishing | How quickly can you finish the attack and ensure that the attack, if unsuccessful can still lead to more goalscoring opportunities? | Recognise when the game invites a shot, final pass, or decisive dribble, and act to maximise scoring chances while maintaining possession to quickly exploit space to score. |

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**Table 2:** Defending phase (Disturbing & Regaining): Tactical Principles and Affordance-based Intentions

| Tactical Principle of Play | Coach Feedback/Challenge | Affordance-based Intention |
|---|---|---|
| Regain as high as possible | Try to regain possession through pressing quickly to force a mistake and opponent turnover in possession | Recover possession as quickly as possible, as high up the pitch as possible. |
| Protect central areas | Identify how you can position yourself to shut off or invite passing options for the opponent in central areas | Position yourself to block or intercept central passing lanes to disrupt the opponent's attacks. |
| Prevent progression | Try to position yourself to intercept or force an action by reducing the number of options the opponent has to play forward when pressuring the ball directly or indirectly | Intercept or block the opponent's actions to stop them from advancing into the opponent's half |
| Remain compact | Reduce spaces between lines by staying closer to your teammates in a compact shape | Limit spaces between players both vertically and horizontally to prevent gaps. |
| Discipline | Be patient when defending and avoid unnecessary, risky decisions when pressuring the ball directly or indirectly | Stay focused on your task, avoiding over-committing and leaving gaps for the opposition |

The tactical principles presented in Tables 1 to 4 are not intended as an exhaustive or definitive taxonomy of football performance. Rather, they reflect commonly referenced principles across contemporary coach education frameworks and applied coaching literature. These examples are used illustratively to demonstrate how affordance-based intentions may be operationalised within different game phases, rather than to prescribe a universal set of tactical priorities. While certain principles presented in each table align with the FIFA Football Language (FIFA, 2022; FIFA, 2024), it is acknowledged that tactical terminology and conceptual emphases may vary across clubs, leagues, federations, and analytical cultures. The terminology used here, therefore, reflects one commonly adopted reference framework rather than a universal lexicon, and the model is intended to remain adaptable to local vocabulary, coaching language, and contextual performance models.

Designing representative training tasks requires more than recreating game-like conditions. It involves carefully shaping the interaction between players, the environment, and task demands to invite action opportunities. One method for supporting this idea is through directional conditioned games, which replicate competition, while offering variability in rules, space, or task demands. Some evidence suggests that this type of training enhances transfer, attunement to affordances, and the development of self-regulated tactical behavior. Table 3 provides affordance-driven principles for offensive transitions, highlighting decision-making under changing conditions.

**Table 3**: Attacking Transition phase: Tactical Principles and Affordance-based Intentions

| **Tactical Principle of Play** | **Coach Feedback/Challenge** | **Affordance-based Intention** |
|---|---|---|
| Secure the first pass | Try to find a teammate quickly and simply with an early pass | Make a decisive and accurate first pass after regaining possession to exploit immediate forward options and retain possession, avoiding a turnover |
| Play Forward Early | What does the game invite you to do next to progress the attack? | Drive forward when space emerges with a dribble or a pass, creating an advantage before the opponent reorganises. |
| Connect Quickly | Build consecutive passes quickly | Find short, high-speed passing options to maintain attacking momentum. |
| Counter or rebuild | Find the optimal pass or run to break through defensive lines quickly, forcing the opponent to react in real-time to a sudden change of play<br><br>Control the tempo in moments of possession, involving all players in the build up to create a more deliberate and structured attack<br><br>Recognise how to alter tactical approaches depending on the opponent's positioning and level of defensive engagement | Identify opportunities to counterattack quickly with few passes and actions to progress the ball forward behind opposition's defence, or focus on rebuilding the attack by slowing the tempo down to emphasise construction of an attack |
| Switch play | Recognise the moment when the opponent is committed to one side of the field and execute a quick, accurate diagonal pass or circulate the ball with multiple | Identify an area where we can transfer the ball quickly through a direct, diagonal pass across field or a prolonged circulation of passes that play around the opponent to transfer the ball from one side |

| | | |
|---|---|---|
| | passes to shift the attack and exploit space on the opposite side | of the field, and attack on the opposite side |

Table 4 presents affordance-based intentions and coach feedback linked to tactical principles within the defensive transition phase, supporting players' responsiveness during moments of possession loss. Defensive transitions, where rapid recovery and reapplication of shape and pressure are often required, may represent particularly demanding coordination contexts for players.

**Table 4**: Defensive Transition phase: Tactical Principles and Affordance-based Intentions

| **Tactical Principle of Play** | **Coach Feedback/Challenge** | **Affordance-based Intention** |
|---|---|---|
| Recover to shape | Instantly recover into a compact and organized defensive shape, closing down and reducing spaces by quickly positioning yourself to prevent the opponent from exploiting gaps<br><br>How can you identify how to limit their attacking options by marking key areas or players? | Move quickly to defensive shape when possession is lost, closing down dangerous areas and potential threats |
| Deny and delay | How can your positioning and body orientation guide the ball carrier into less threatening zones while denying access to the central areas or wide spaces?<br><br>Try to slow down their momentum, allowing your team to recover and shift into defensive shape | Position yourself to force the ball carrier into less dangerous spaces, slowing their attack and allowing time for your teammates to recover into an organised shape |
| Anticipate Transition | Observe the ball carrier's body intention and the positioning of their teammates to anticipate their next move.<br><br>How can you position yourself to be able to intercept passes or apply immediate pressure when possession is lost, enabling your team to regain control quickly? | Read the opponent's potential passing and movement options before possession is lost, positioning yourself to immediately react and regain control |
| Stop forward passes | Position yourself strategically to intercept or block passes, closing off lanes that could lead to a forward attack | Identify and close off passing lanes to limit the opponent's ability to progress the ball into more dangerous areas |

| | | |
|---|---|---|
| | Try to focus your attention on the opponent's body shape and intention whilst adjusting your positioning to cut off their direct paths into dangerous areas | |
| Set traps | How can you use the sideline or your nearest teammate to direct the opponent into a predictable decision?<br><br>What information in the game tells you it's the right moment to press? | Use the environment, like the sideline or a teammate to force mistakes or predictable passes for a quick regain |

The principles of play outlined in these tables propose a guided discovery approach to frame learning, in line with concepts in ecological dynamics. Each game moment and tactical principle is coupled with affordance-based intentions, designed by coaches to provide opportunities to scaffold player learning through verbal signals and challenges that direct attention without prescribing specific behaviours.

Importantly, the column *Coach Feedback / Challenge* illustrates how transitional feedback (Newell, 2003) can be used to guide players' attentional search toward key affordances during and after performance (Jones et al., 2021). Rather than prescriptively instructing players on *what* to do, this form of feedback is brief, open-ended, and timed around action, helping players *learn how* to attune to relevant information (Gray, 2021) in the environment and co-adapt intelligently. As argued by Jones and colleagues (2021), such feedback supports perception-action coupling by amplifying salient information and helping players perceive opportunities to act on affordances through their own exploratory activities. Consistent with principles of ecological dynamics, coach feedback is conceptualised as a co-adaptive process embedded within the performance environment rather than a linear or purely evaluative intervention (Davids et al., 2022).

The proposed model may support coaches in aligning tactical principles with representative task design, player challenges, and feedback processes. It is also possible that the model may support performance analysts by encouraging interpretation of match events and team behaviours in relation to changing game contexts, affordances, and team intentions. Accordingly, the model offers a shared

framework for linking Game Model development with training design, match analysis and interdisciplinary work in football.

## 6.0. Conclusion

This paper has sought to argue for a reconceptualisation of Game Models in football, suggesting that a shift may be warranted from pre-scripted frameworks to ecological systems that support adaptive player behaviour and team coordination. Grounded in the principles of ecological dynamics, this conceptualisation proposes Game Models as emergent frameworks of affordances, structured by shared tactical intentions but responsive to evolving contextual demands.

Crucially, this evolution in coaching philosophy may reposition the coach from being a transmitter of solutions to designer of learning environments, using representative tasks, constraint manipulation, and transitional feedback to support player perception-action coupling. Tactical principles, rather than being mechanistic rules, serve as attentional anchors that help players regulate their actions under pressure. This view is supported by empirical work (e.g., He et al., 2023), which suggests that adaptable playing styles significantly enhance competitive performance.

To implement this paradigm in practice, training environments must reflect the continuous, nested nature of football's game moments (Tobar, 2013). Through representative design and verbal feedback that guides visual search without prescribing fixed outcomes, coaches can help players learn how to adapt rather than what to repeat. The affordance-based approach ensures that players are attuned to the key informational variables of the game, cultivating resilient, self-regulating teams that adapt to uncertainty. As football continues to evolve in tactical complexity and contextual diversity, the demand for coaching models that reflect this dynamism becomes important. By reconceptualising Game Models through an ecological lens, coaches, clubs, and players are better equipped to meet respond to contemporary performance demands, prioritising adaptation over tradition. This paradigm shift has implications for how coach education and Game Model

development are taught and supported within clubs. This framework may provide a useful foundation for future empirical investigation, particularly in examining how Game Models can support the development of adaptive behaviour across different performance contexts.

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