

Module 3. Coach-Player Interaction. How to Optimise the Exchange of Information and Have a Greater Impact on the Learning Process? Understanding the Environmental Conditions through Which the Player's Naturalised Behaviours Are Facilitated and Generated

Unit 3.1 The Coach is Part of the Learning Environment

The previous module helps us understand the variables and conditioning factors that make up the role of the coach and, at the same time, makes us think about how our vision of this role could change if the stimuli to which it is exposed in its macroenvironment are modified. In this sense, it seems relevant to us to consider the coach as a human being who is related to the environment and who, like the player, acquires skills and abilities to be increasingly efficient in the changing context in which they operate. We cannot make the mistake of predetermining the role of the coach and considering them a mere piece with a pre-established role. It is necessary to understand that a coach also goes through a learning process and coexists with the development process of the players, and that, consequently, they have the same right to explore, to err and to fulfil their own expectations.

Now, what exactly does it mean for the coach to be part of this learning environment? Are not they already, when we assign them to a team, and they must run training sessions and games?

Let us think for a moment about the relevance of this role in grassroots sports practice and in learning the skills required to play football. Is the presence of a coach really essential for players to improve? If we saw how, from children, at school, on the streets

or even at home, the player or players organise themselves to design their own games and set up their own matches, we would understand that the role of the coach is not essential for them to put into practice a football activity.

The example of *street football* (the free and unstructured practice of football, about which we will talk later) also shows us the ability of the player to design a session for themselves and achieve high levels of performance and competition through peer learning. The benefits of this type of practice will be detailed in the next sections, since we consider that these characteristics can be represented in the training sessions designed by a coach and get the maximum benefit from them.

Nevertheless, what does coach-led practice provide us with? Why have the environments in which there is a specialist who guides the training process been promoted when it has been shown that players can learn on their own? This is precisely where the concept of methodology makes sense, since it tries not to focus on the destination itself, but on the process that leads to that destination. Besides, the coach, as a guide to the process, can bring together all the information from the athlete's environment and establish a gradual process so that each of the players can optimise and maximise their development and learning.

In other words, we could say that the presence of a coach who intends to help the player reach their full potential and who understands the constraints extrinsic and intrinsic to them, can speed up their learning process.

In this sense, it is convenient to highlight that, for the latter to reach its highest expression, it is necessary that:

- 1) the intention to help the player is genuine, that is, that it really responds to the training coach's ability to minimise many of the factors present in the environment and focus solely and exclusively on the athlete's comprehensive development;
- 2) we understand that accelerating their learning does not mean that they acquire certain skills defined by us, but that they draw on competencies so that learning expands and continues its course in multiple contexts (the concept of **learning to learn** will be discussed later).

Free Practice and Creativity

Before placing more emphasis on the added value that the coach brings to the learning process and how this can be a generator of optimal environments so that there is a constant exchange of information between the task and the player, we believe it is complementary to describe the conditions given in free practice (or without the coach's supervision), and, thus, introduce those essential characteristics that are required in the context of motor development. In this way, following the thread of the previous section,



the coach will be able to better understand the learning process that the player follows and will be able to take it into account when proposing the training practice (and, as a consequence, optimise and maximise assimilation of the game information by the player).

In the first place, it is intended to clarify that it is not the street game as such that has produced the emergence of talented and creative players (or at least, under the criteria usually referred to, these being the ones that describe a colourful, highly technical and even extravagant player), but rather it is the set of constraints, at different time scales, and the fact that they happened at a specific and determined moment, which has facilitated this association between street play and creative emergency.

Let us say, for example, that, driven by the study of the benefits of street football, it was now proposed to make more football games in the streets. It would be easy to imagine that the people involved in this project would set up a space that resembled an asphalt with two goals (with a *vintage* design), games would begin to be organised, referees, an audience would be added, and so on, until all the necessary elements were available to perform a street football game. Perhaps, even if a good level of performance is reached, the incorporation of *street football* coaches would be proposed, as well as training sessions three times a week to play the official game on the weekend.

With all this, football would be played on the street. But it would not maintain the essence that was breathed in these matches and, probably, the type of game would be very similar to the one we see today (in proportion to the regulations of both). Consequently, it is not a matter of making football fields in the street in the current sociocultural context, since *a priori* this would have little effect if the rest of the constraints are not aligned (type of society, type of jobs, type of fandom for football, type of grassroots football competitions). On the contrary, it is about understanding what factors can be of proven richness, and how these can be transferred to the current type of practice. Street football may not return as such, but, as coaches, can we encourage similar environments to be experienced?

Figure 1: Street Football and Its Adaptations



Source: Luque, F. [User] (2014). Street football and its adaptations. Retrieved from <https://fubolenpositivo.com/el-futbol-en-la-calle-y-la-perdida-de-sus-beneficios/>.

The above example, with a certain irony, reflects our focus on the superficial and not the transcendental. Having said that, it is possible to show interest and some concern for the increase in structured practice and, derived from this, the decrease in free and unsupervised practice, which encourages physical literacy and should be considered an essential element for the psychological, social and motor development of young people (Barreiro and Howard, 2017).

Nevertheless, the differential element of that street practice (and also other unstructured practices) was the player's self-organisation and self-management with respect to the game itself and the participants in it. Consequently, unparalleled conditions were fostered for the emergence of naturalised and creative behaviours, as well as a diversity of interactions between multiple participants, each one with their own unique characteristics.

This was possible, to a large extent, because the game was the main basis for the player to regulate their behaviours and explore those most efficient motor responses to the challenge of overcoming an opponent, passing the ball to a teammate they did not know, or scoring a goal in a goal of doubtful dimensions. Even the use of the walls, the type of surface on which it was played or the size of the ball that was used, became an endless number of new possibilities of action for the apprentice, whose sole objective was to play.

In this regard, the type of design that video games use to be addictive for children is described in a recent article, and many of the characteristics mentioned are not present in sports environments (Lara-Bercial, 2020). For example, excessive control or external *feedback* (and not coming from the game itself), long seasons that maintain similar stimuli for a long period of time, the concentration on the error and its correction, etc., are aspects that have no place in video games. On the contrary, video games stand out for giving constant implicit *feedback* to the game (that is to say, if the objective is not achieved in one-way, new ways must be found to achieve it); being fun and dopamine-supplying (with constant new experiences and modalities); and low risk of failure, as the stimulating thing is to try and try.

Without going into much more detail, this example of *gamification* is one of the elements to consider for the development of people's skills and competencies, regardless of the environment we are in. For example, Rober (2018) precisely expresses the benefits of the game to increase and optimise the learning process. This is an aspect that we can really consider as coaches and ask ourselves, do my players **play** or **train** football? Do we play football games or do exercises and tasks? Here is the essence of this street football, where goals, winning, losing, gave equally joys and frustrations, but surely, they were in the background regarding the importance of wanting and being able to play this great sport.



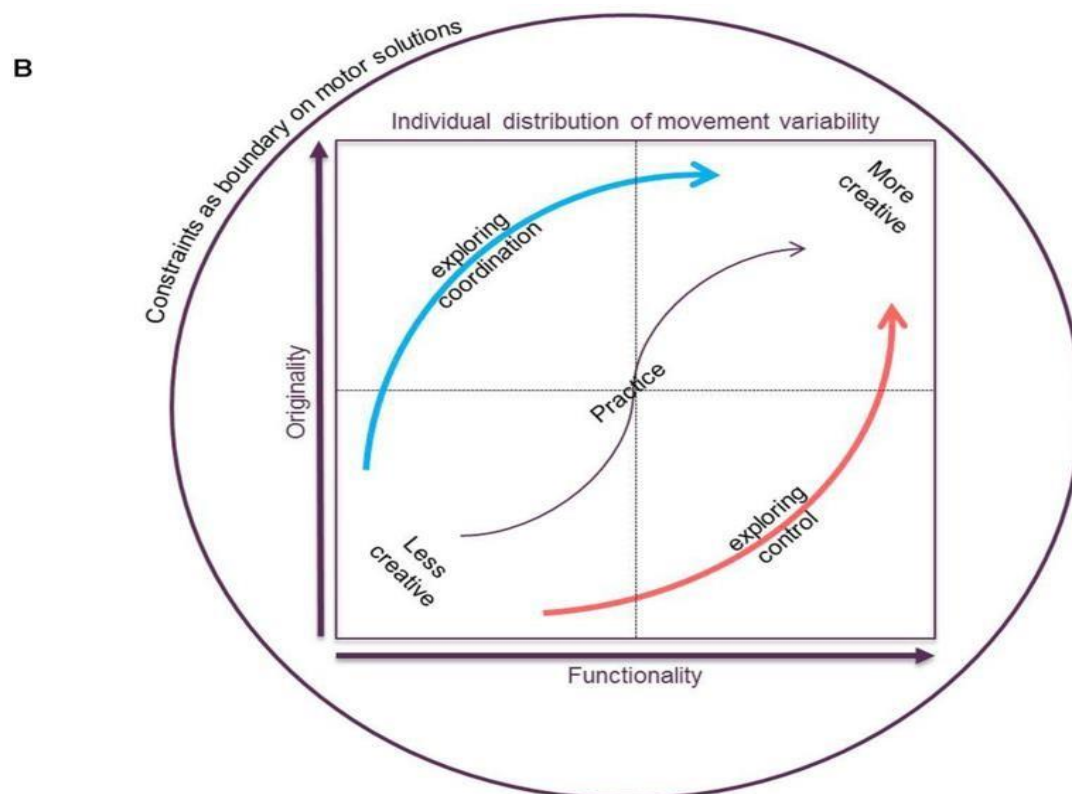
If we return to the development of creativity that happens in contexts of this type, it should be defined what exactly this concept is and when it originates. In this sense, and to understand the role that this free practice plays in the emergence of creative behaviours, the idea of Orth, van der Kamp and Button (2018) serves us when they refer to creative motor actions as an emerging element of variability of the movement. This emphasises the fact that, contrary to how it has usually been proposed (a creative idea originates in a cognitive way and can then be applied to solve a problem), creative actions emerge in the same act, that is, they are not prior to the act.

In this way, a creative expression is that action or interaction that is:

- 1) a new movement pattern for the individual or group, and
- 2) this is functional and efficient, since it adapts to the constraints of the problem that has originated in order to solve it.

It is important to point out the importance of exploration in this creative process, and how it is this which increases the possibilities of varying functional movement patterns to changes presented by the environment. Consequently, given this constant variation that the game of football presents, the participants do not look for creative solutions to solve, but as they interact with the activity and try to satisfy the new constraints that appear, they discover new and efficient actions and interactions (creative).

Figure 2: The Relationship between Originality and Functionality during Practice for the Development of Creativity



Source: Orth, D., Kamp, J., Memmert, D., and Savelsbergh, J. (2017). The Relationship between Originality and Functionality during Practice for the Development of Creativity, p. 4.

That is, just as can be seen in the figure, the more practice and more exploration there is in it (both in coordination and control patterns), the more originality and functionality the movements will find.

And what role does the coach play in this whole process?

The detection, modification and manipulation of existing constraints in practice will be the best tool to regulate, individualise and attract emerging behaviours to new efficient solutions. It is key to understand that designing sessions full of constraints is not enough, but allowing exploration is essential.

That coach who uses constraints to get the players to perform the behaviours he or she wants, has the risk of overloading the learning environment with information (many prohibitions or obligations, or, in general, an excess of regulations) and that the solutions provided are not original or functional, since they would not respond to what the constraints of the environment demand, but to what the constraints of the coach demand.

In order to optimise this creative process, it will be necessary to create contexts in which the emergence of exploratory behaviour prevails, that is, that the coach is not necessarily constantly linked to the result or outcome of the solutions, but their main intention is to establish a framework of reference (great objectives, a collective intention, a playing dynamic), so that the player (or players) can develop in them and manage to find those more efficient interactions, and in a variable way.

Figure 3: Player's Exploratory and Guided Behaviour in Relation to the Coach's Proposal



Source: adapted from Damunt and Guerrero, 2020.



In this practice framework guided behaviour has a place. The fact of having general intentions with regard to the team, leads the coach to present training sessions and preferential simulation situations that are impregnated with their idea of the game and that, consequently, already restrict to some extent the types of interactions that are going to take place (for example, make situations without goals to reduce the completions and increase the chances of passing between teammates because we want to give importance to this aspect collectively). However, if the focus of the coach manages to be on proposing new challenges within that context (constraints) and not on expecting to achieve a predetermined solution, we can be sure that, at least, we are closer to contributing to the development of their creative capacity.

In order to conclude this section, where it is intended to show the importance of the conditions that allow the development of creativity, it seems convenient to highlight the following:

- 1) the definition of **exploration** (Cambridge Dictionary, 2020), which refers to the activity of searching and finding out about something. This is very successful for the subject we are dealing with, and
- 2) the concept of **constraint** and the potential that its use has to generate new degrees of freedom (creativity paradox), as explained in the article by Torrents, Balagué, Ric and Hristovski (2020).

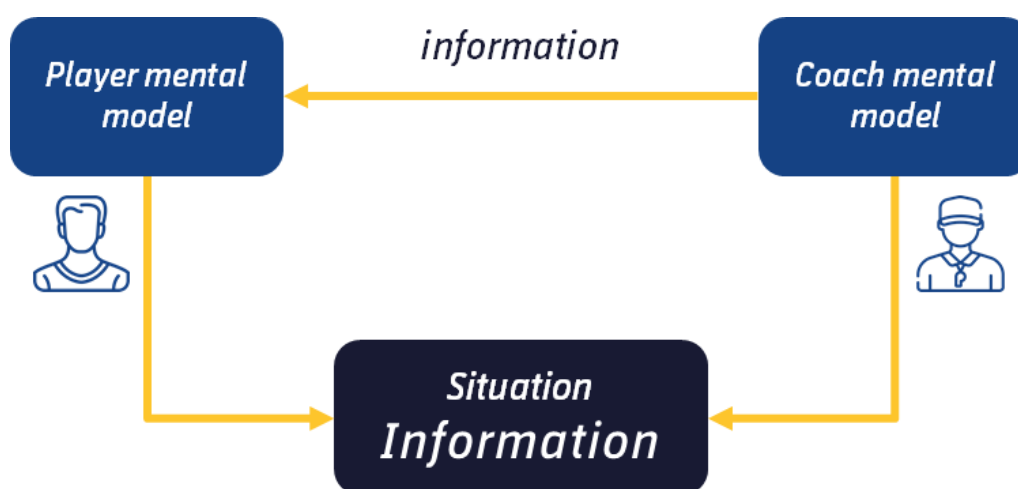


Unit 3.2 The Coach's Information

In the traditional paradigm, the coach is the one who has the knowledge and, therefore, is considered a necessary role for the transmission of this information to the player. This linear and unidirectional process implies the creation of a mental model of the coach related to extensive knowledge about the game and its teaching, and is based on transferring this same model to the player's cognitive scheme, as if it was an empty backpack which must be filled with new knowledge.

Unfortunately, neither the player comes with a backpack empty of experiences, nor is football a game in which verbal information (knowing) can be transferred to practice (know-how). As coaches, we can make a difference if we understand that experiences and situations are new opportunities for the exchange of information that are much richer and more significant.

Figure 4: Information from the Mental Model or from the Situation



Source: adapted from Verheijen, 2019.

That is why, as Damunt and Guerrero (2020) point out, in the new paradigm, the coach has, if possible, an even more transcendental role in the player's learning. They are not only a carrier of knowledge, but these are totally linked to the knowledge of the human being and their potential. Their ability to understand the player, as well as to generate and manage situations, will be decisive in the formation of a competent athlete human

being to relate to the game, in this case, but also to the world that surrounds them.

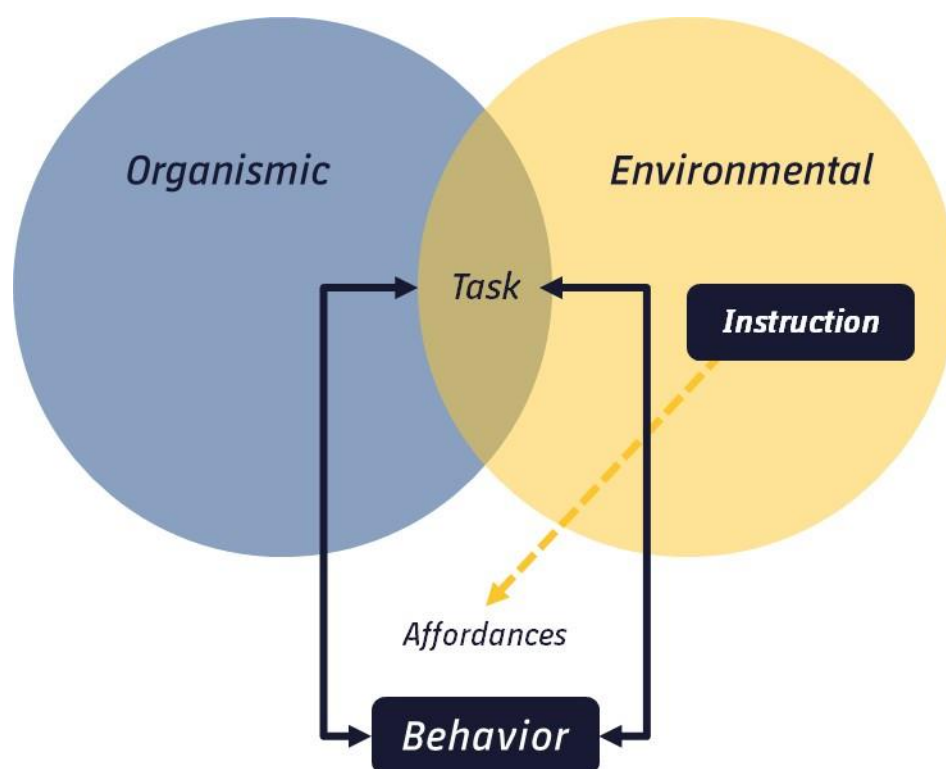
With this objective, it will be essential that the coach, facilitator of player optimisation and generator of optimal learning contexts, is in constant interaction with the players.

However, this interaction will not only be verbal or directive, but, whether through speech, non-verbal communication or the learning task, they will be connected and interrelated with each of the team members. It is important to understand the type of information and the timing of these interactions, since, without having a general formula for all cases, the generation of the aforementioned conditions will be decisive, thus enabling exploratory behaviour.

Balagué, Pol, Torrents, Ric, Hristovski (2019) explain that verbal instructions should be guided, to a great extent, to processes that develop on longer time scales, as well as values, intentions, strategies or great objectives. The instructions related to processes that are given during the game, as well as those that intend to impose a specific type of motor solution (how to dribble, to whom to pass the ball, when to finish), may conflict with the different possibilities of action that the player perceives and be counter-productive.

It is important to note that verbal instruction acts as one more constraint and has an effect on the participant. This can be productive when it is aligned with the intentions and its needs, in its continuous search for motor solutions; but it can be limiting if it overcomes the rest of the constraints and disables the exploration capacity.

Figure 5: Instruction as a Constraint; Alteration of the Perceived Possibilities of Action during the Perception-Action Cycle



Source: Balagué, N., Pol, R., Torrents, C., Ric, A., Hristovsk, R. (2019). Instruction as a constraint; alteration of the perceived possibilities of action during the perception-action cycle, p. 4.

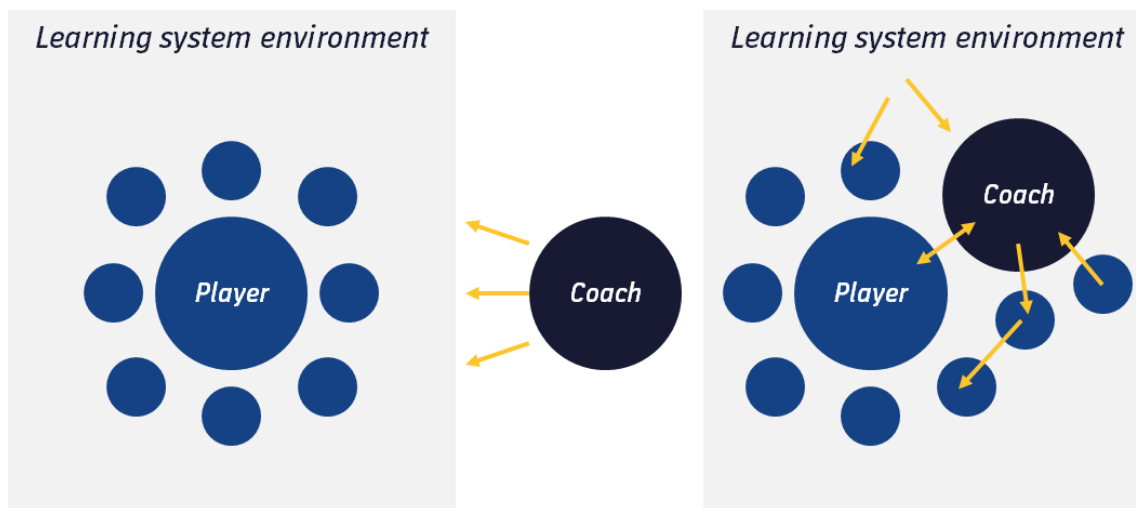
Having said that, it is also important to understand why this type of behaviour on the part of the coach takes place frequently, and what type of role would facilitate the fluidity in the exchange of information between the coach and the player. What seems to be evident is that “when there is interaction between the learner and the teacher, learning increases with respect to the extrinsically controlled *feedback*” (Orth, van der Kamp & Button, 2018, p. 148). Consequently, the importance of the coach-facilitator in the practice environment should not be put aside and it should be considered that their active participation is a fundamental element for the generation of learning contexts.

Now, is this not what already happens in all training areas? Is there not already a teacher, a coach or a group leader who is used to being the one who gives information to students, players or the rest of the members of the group, so that they learn?

According to Orth, van der Kamp and Button (2018), the conceptualisation that is made of the coach, whether in the more traditional pedagogy such as guided learning or caused by constraints, is one in which their role is based on monitoring, controlling and evaluating the designed learning environment. That is, the trainer interacts with the learners through verbal communication and through the task, but the trainer is not part

of this same learning system, but is outside of it and manages it without considering themselves part of it.

Figure 6: Coach's Participatory Difference



Source: adapted from Orth, van der Kamp and Button, 2018.

For this reason, it is important to get away from an antagonistic approach in which we consider that the fact that the player regulates and organises themselves based on the environment, managing to learn by themselves, means that the coach is not useful or essential. Nothing is further from reality. What the new methodological proposals have to invite to is to question the current role of the coach and to transform their leadership and ability to channel all the information present, as long as it can transcend into all the dimensions of the player.

If the coach is limited to deciding the learning objectives, designing the training session, and the constraints and their intervention do the rest; we will miss the opportunity to understand that they also learn, they adapt and recognise new possibilities of interaction in the learning system itself. That is, the coach is part of this context, not only will they be able to invite to exploration and promote the emergence of creative behaviour, but they themselves will be involved in a network of interactions, of which they are a part, and to which they must constantly adapt and, why not, explore new forms of interaction based on what they learn from this environment (also from the players), in order to be increasingly efficient.

As we have said throughout the previous sections, we cannot forget that training also requires the coach to learn different skills. Consequently, what better way to train than to be an active part and one more in the learning process?

Unit 3.3 Generating Optimal Learning Contexts

If we understand that the coach is no longer a mere transmitter of information and that they are also involved in shaping the learning environment itself, that is, they are part of the process and also learn from it, it is worth reflecting on what aspects they can influence in order to generate optimal contexts for the development of the player.

Normally, what prevails in the training of teachers or coaches is the **what**, that is, the contents and the teachings that must be taught in order to ensure that the apprentice achieves the learning required in each area or in each discipline. Sometimes it even includes **how** to do it, through which practice and evaluation activities; or **when**, that is to say, the organisation of the moment in which these educational stimuli will be given, either in the session itself or along the season, and according to the stage in which the apprentice (or player) is.

However, what is lacking in this model is that we forget what is essential. It does not matter so much **what** we want to teach, but **what** we want to generate in our players from the needs and concerns that they can show in the environment in which we operate. Likewise, understanding **what** the human learning process is like, what conditions it needs and how it is enhanced, will help us guide our educational gaze to the generation of optimal environments for learning, and not based on stereotypes or standard teaching models.

Here the relevant thing is to get the player to reach a state through which they can process, in a continuous and prolonged way, the flow of information present in the environment. As Sampaio (2019) mentions, there is no professional who disconnects their skills from the environment. There is no more simplifying way to represent this fact than through the so-called *state of flow*, or, as defined by its original author, Csíkszentmihályi (1997),

the operational state of mind in which a person is completely immersed in the activity that they perform. It is characterised by a feeling of focusing the energy, of total involvement with the task, and of success in performing the activity. This state is achieved by giving total confidence to the subconscious (...), leaving space for the mind to think creatively and strategically about the related task. (p. 79)

If this definition is not enough to understand what state we are referring to, this video can help us.

Video 1. Nirvana - In Bloom - Drum Cover

Source: Nandi Bushell. (2019) Nirvana - In Bloom - Drum Cover [Video file]. Retrieved from <https://www.youtube.com/watch?v=Mlm0qws5kjE>

It shows a girl playing the drums, totally connected to that moment and feeling each of the actions she takes to produce the sounds she wants, without having to think or be aware of what she is doing.

In conclusion, using the metaphor of a racing car driver, the idea is that the car is not an instrument from which the driver performs the actions they need to do to race on the track, but rather that the car becomes part of them, that it is an extension of their body (embodied). In this way, what the car does is the product of the connection between the driver (who does not rationalise that they are driving a car) and the environment in which they operate (that is, the race track).

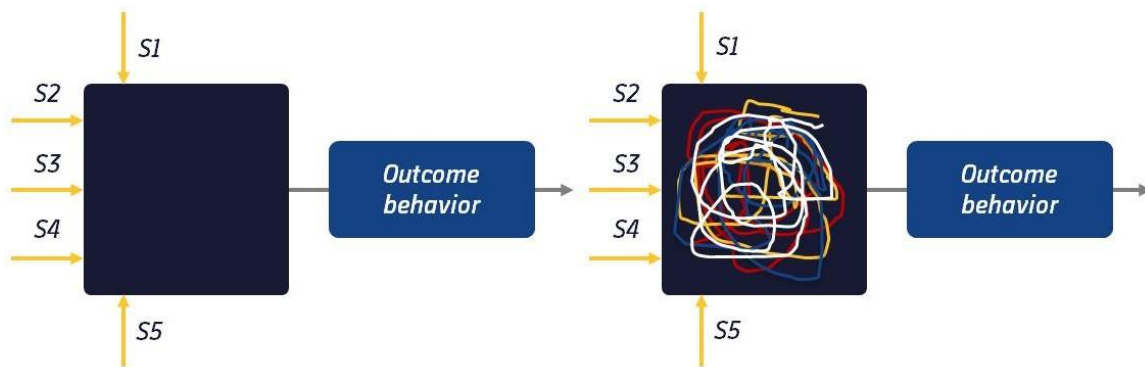
Can we get this feeling with our players?

Can they be fully connected to the game and the many possibilities of action it offers without seeing this connection interrupted? Below, and as a decalogue to make it more tangible, various strategies are proposed to be used:

1) Evaluate the stimulus and not the behaviour

This is a fundamental aspect that refers to the theory of the black box, a metaphor that indicates that in a system we can only observe the *inputs* and *outputs*, but not the internal processes. That is to say, the resulting behaviour comes from the interaction and inaction of many stimuli (some of which we probably do not consider at the time of performing a practice), and it is essential that we keep a look as neutral as possible to understand why these behaviours have emerged and not to judge and try to change them directly.

Figure 7: Stimulus - Answer without Certainty



Source: own elaboration.

As coaches, focusing on constantly making what we have planned happen or having players interact in a predetermined way can be frustrating. Which makes us neglect valuable information that can serve as a reference to continue forming quality learning spaces.

It is possible to reach a level of experience in which, with high probabilities, we know what stimuli can lead to the appearance of a particular behaviour (or series of behaviours). But sticking to this can only lead us to the mistake of promoting situations that are very closed and little permeable to innovation. The coach's emotional detachment from emerging behaviours, that is to say, not wanting to control and modify everything that goes out of the script, becomes a fundamental pillar to guarantee a connection between the player and the environment.

2) Make changes to the environment to encourage exploration through uncertainty and unpredictability

Generating new environments allows the player to be kept in optimal attention conditions, apart from providing a context that favours the emergence of new behaviours transferable to normal practice. Just as Orth, Kamp, Memmert and Savelsbergh (2017) explain, the more open the athlete-environment system, the greater the opportunities for exchange, interactions and exposure to experiences of variety, novelty, complexity and functional imbalance (potential for creative moments), which reaffirms some of the ideas that have been commented regarding the capacity of the coach to imitate conditions similar to those of free and unsupervised practice.

It is important that the design of these new situations is coherent and that it is not about generating an excessive variability, but that the player is able to recognise this new environment as one conducive to developing in the activity that occupies them, and to deal with the new disturbances. For this, it is essential that these environments are characterised by fostering uncertainty,

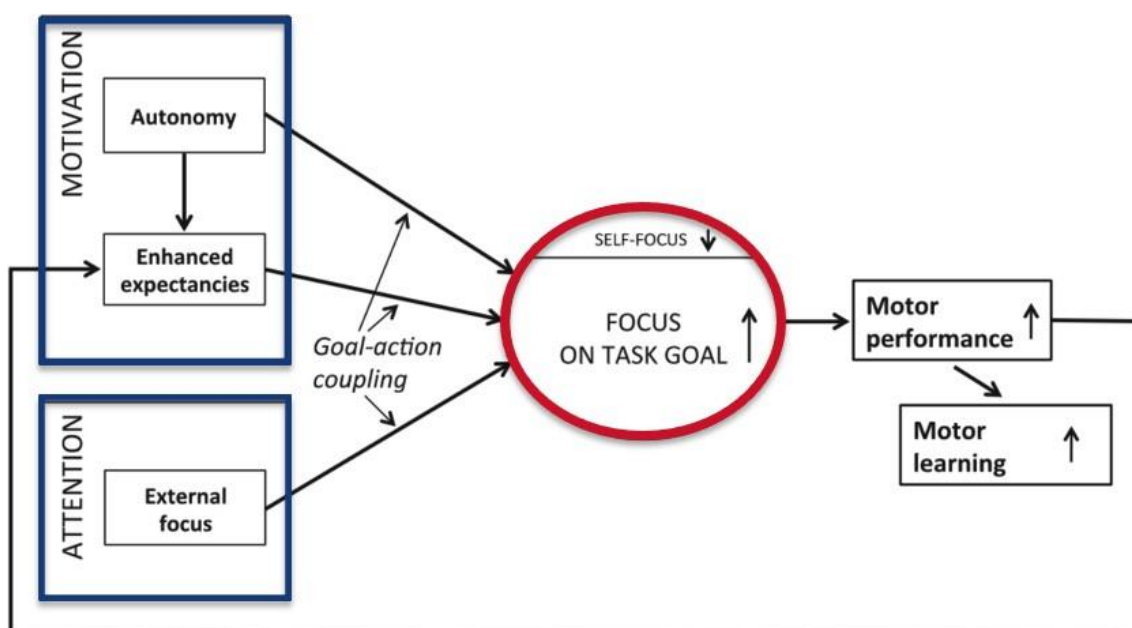
unpredictability and even certain levels of pressure, tension or anxiety; assuming in the player a minimum state of attention and connection with the new context (Ragan, 2019).

3) Increase the focus on the present challenge

The conditions that increase learning and motor performance are closely linked to a focus of attention on the task, its objective and the challenge it implies, and not to a focus on oneself and the movement or behaviour to be performed to get the task done.

In this way, Wulf and Lewthwaite (2016), propose a scheme in which the type of motivation and attention required by the player is related in order to favour the coupling of their actions and interactions with respect to the objective of the task. This focus on the purpose, and not on the way to achieve it (autofocus), increases the levels of performance and motor learning.

Figure 8: Focusing on the Objective of the Task (Strengthened through Motivation and Attention)



Source: Wulf, G., and Lewthwaite, R. (2016). Focusing on the objective of the task (strengthened through motivation and attention), p. 10.

According to this idea, we can refer to the three essential elements for achieving the practice conditions that trigger this process, as well as the different considerations to optimise it:

- Give room to player autonomy: "feeling that we control and have an

impact on the environment in which we operate is a biological necessity” (Wulf and Lewthwaite, 2016, p. 11). Besides, in the way in which we propose learning contexts, we are very close to promoting passive beings who simply receive information and act accordingly. Consequently, this concept of autonomy does not refer to letting the player have the maximum possible degrees of freedom (the paradox of creativity should be remembered: reducing degrees of freedom helps the emergence of new behaviours, provided that they happen in a context where exploration is encouraged), but is based on the trust we place in the player and their ability to take charge of their own learning process and face new challenges.

Thus, it is coherent to think that this possible emotional connection of the coach with the desired behaviours can repress the capacity for self-management and adaptation of the player. If you do not start from the trust in the player and you do not give them the responsibility for their own learning process, it will be unfeasible to attend to the biological need for autonomy.

As indicated in the same article (Wulf & Lewthwaite, 2016), incidental choices as simple as choosing the task you want to do, the partners you want to go with and the moments of receiving *feedback*, greatly increase the feeling of independence.

- Increasing positive expectations is based on creating conditions in which players feel that the challenge before them is achievable and that what they do will allow them to find the solution. “The conviction that one is doing well and the confidence of continuing to be able to do it well in the future (...), are consistent conditions that lead to optimal performance and learning” (Wulf and Lewthwaite, 2016, p 3).
- Contrary to what can be perceived, that there are positive expectations does not mean that everything goes well and that it has not been necessary to go through difficulties, but rather it would be more related to the fact of feeling confident despite the challenges that the task implies. Our role as coaches can have a great impact in this regard, since our knowledge of the players and the game allows us to find the optimal and appropriate level to increase these performance expectations.

Ragan (2019) calls this the desirable difficulties, that exact point where the task is neither too easy nor too difficult, but rather leads the player to metastability conditions (a concept that explains the property of the systems to be in an apparent state of equilibrium, but that can easily



change to a more stable state) and constantly fluctuating with the environment.

There are also other complementary aspects that allow increasing these expectations, for example, we can highlight above all the *videofeedback*, or positive affect, both strategies related to fostering a growth mindset (Dweck, 2006) and allowing the player to take ownership of their own learning process.

- Directing attention to the objective of the task (external focus) promotes a more automatic, rapid and reflex use of movement control processes (the unconscious), and does not give way to a constrained motor system in which there is a freezing of degrees of freedom (paralysis by analysis), a phenomenon that takes place when there is an internal focus (Wulf and Lewthwaite, 2016). In this sense, it is essential to be able to invite the player to focus on what is in front of them and take full advantage of the possibilities of action that are presented in the designed context. Besides, it is essential to accept uncertainty and focus attention on the possible challenges that emerge from it.

From a more individual point of view, when we tell a player to move in a certain way or to pass with a specific surface, we see how the player's attention is no longer directed to the intention of this movement or pass, but which will focus on how to make the gesture. This supposes, in the first place, a loss of information from the environment that can help them solve the problem and, in turn, a decoupling of the perception and action cycle, produced by performing a motor action in a way that is disconnected from the environment.

Collectively, the same happens when we propose tasks in which the objective is to perform a predetermined behaviour and not relate this to the resolution of a problem. This leads to proposing tasks with automated movements or pre-established behaviours or, on the other hand, highly constrained tasks so that the degrees of freedom are reduced to having to do what was wanted. The systematic repetition of the behaviours that occur, without a context that supports their intentionality, will not allow directing attention to the relevant information from the environment, but will be guided to perform the interactions that have been intended to be achieved with the design.

It is essential that, from our role as coaches, we know how to live with the changing aspects of the environment and guide the player through it, and direct their focus of attention (for example, through questions) towards those details present in the game that will bring them a little closer to achieving the task objective.

4) Say what you think, but think what you say

All the aspects previously mentioned do not make any sense if the coach does not really believe in this exchange process. It is common to see coaches perform some of the strategies that we have referred to without the desired effect. How many times have we asked questions, not for the players to reflect and seek their own answers, but to find the answer that we expected? This example does not represent the nature of the question, which seeks to involve the interlocutor and open the possibilities for exploration, but the question is used to imply, not very successfully, what we could say explicitly.

If we do not trust the player and we do not transfer them responsibility for their own learning process, if we are not able to start from this premise, our intention to promote autonomy, increased expectations and an external focus on them will be little fruitful.

A key element is communication, since "behind our words, there is an underlying message that expresses how we think and how we behave" (Harjiv, 2019). People do not grasp the literality of what is said, but we configure the meaning of the message through coexistence in the same context. This means that two people who say the same words can communicate completely opposite things (see irony or sarcasm). We, as coaches, create a context with the actions of the day to day and this behaviour has a much more powerful message than anything we can say.

To be more aware of the use we have of language and what we communicate through it, a series of considerations related to the points previously exposed is proposed:

- Optimise the words we use. Add contingency to the information we use, that empty phrases are not formulated. That is to say, consider if we really give information and if it is also agreed with everyone equally. For example, saying that "we have to create more superiorities" may seem very clear to the coach, but perhaps that meaning of superiority is not shared with the player. Besides, creating superiorities is such an open and interpretable phrase that it really shows the container (something needs to be done) but not the content (what needs to be done).
- Provide an external focus of attention. Relate the words that are used to the intention to be achieved, and not to the way of executing an action or internal aspects of it. The use of action verbs and the phrases related to specific intentions help the individual focus their attention on those aspects that allow them to interact with the environment.
- Avoid judgements. Assuming a role of facilitator and guide leads us to take actions and communicate in an assertive and cooperative way. This does



not happen like that when a corrective instructor role is really assumed, where we are the channel of all verbal information and *feedback* for the player. This means that, even if we transmit positive reinforcement, the coach can send a message of being constantly aware of the player, and that it is they, and not the latter, who has the solution to the problem. It is important to understand that the information that is exchanged with the player is of altruistic origin, that it is done with the intention that they discover ways of being efficient in their interaction with the environment, and that it is not fed by other causes unrelated to this process.

- Give quality to *feedback*. Individualising the information, identifying the ideal moments to give it and specifying its message are key elements to promote an internalisation of *feedback* by the player, and help them generate positive expectations because this information is adapted to their characteristics and the circumstances in which they find themselves. It is frequent to use the same comments and tones with different players, as if this information were assimilated in the same way by all; as well as giving it at moments that perhaps the player themselves has already realised that they have erred. This need to monitor and respond to all actions reduces the player's capacity for autonomy (they do not feel that it is they who have an impact on the environment), does not allow the creation of positive expectations (it does not depend on them to overcome the challenge), and reduces the external focus (they will disconnect from the information of the environment to focus on that of the coach).
- Avoid limiting messages. In conclusion, it is about promoting an open, flexible, reflective and neutral language and communication, with the intention that the player feels that they are the protagonist of their own learning, but that they can count on a guide willing to help them. Here it is necessary to differentiate what it is to limit the player to explore and discover new forms of expression (use of constraints), from sending continuous limiting messages, and promoting a fixed and rigid mentality (Dweck, 2006).

In order to end this long section, reference is made to the role of the coach as the help and support that is present, but is not invasive. That is to say, they are not intrusive, but they are involved.

We think the following video can serve as a metaphor. In it we see a bear that climbs with his baby up a snowy mountain. The mother manages to reach the top, and save herself from the snow avalanche, while the cub keeps trying, again and again (with several unsuccessful attempts), to climb up to where the mother is. Despite the dramatic scene, the mother's attitude is based on staying there at the top, showing the baby that she is there, waiting, armed with patience and without losing her temper; until at the end, the little bear manages to reach her. In this way, without needing much more, neither her approval nor congratulations, he has managed to solve the problem he had

in front of him by himself, with the support of his mother.

Video 2: Heroic Fight of a Baby Bear to Climb a Snowy Mountain

Source: Estate un rato (User) (2018). *Heroica lucha de un bebé oso por escalar una montaña nevada* [Video file]. Retrieved from https://youtu.be/GzonNdi7_RU.

Unit 3.4 Form a Team and Consider the Macro and the Micro

During the present course, constant reference has been made to the exchange between coach and player. Besides, we have simplified the diversity of interactions that may exist between the different components of a collective sport modality. In this way, it is intended to highlight the need to individualise the process and reinforce the idea that our role is based on relating to sports humans and that we have the chance to generate a great influence on their personal and sports development.

Nevertheless, these individualised interactions happen in a team context and, therefore, it seems a utopia to think about being efficient and, at the same time, meeting the needs of each one of them. How do you manage to combine the organization of a group while giving room to the player's naturalised behaviours and preferential interactions between players?

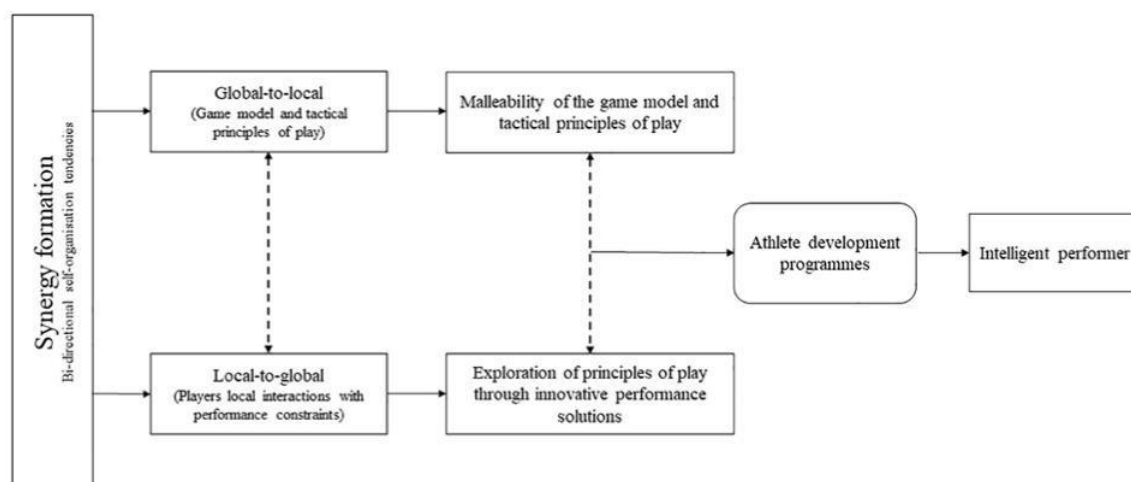
Continuing with this change of paradigm, Ribeiro, Davids, Araújo, Guilherme, Silva and Gargata (2019) point out that training programmes have traditionally been dominated by designs in which collective trends are organised through a macro-to-micro process imposed by the coach, leaving aside the opportunity to cause the emergence of micro-to-macro organisations that are born from spontaneous interactions between players.

Again, it will be through the meticulous manipulation of constraints, the way in which "coaches can help the members of a team to perceive shared possibilities of action (*shared affordances*) that are in relation to the desired collective behaviours" (Ribeiro et al., 2019, <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02213/full>).

Consequently, here comes into play the coach's ability to promote and manage flexible and adaptive behavioural tendencies on the part of the players; beginning, on the one hand, from a framework of intentions (macro or game idea), and, on the other, from a pedagogical approach that allows the exploration of new solutions, consistent with the proposed game principles and the local and effective interactions developed (micro or naturalised behaviours).

Here it is convenient to understand the importance that the role of the coach acquires, since it represents the continuous link between the collective intentions proposed in the idea of the game and the emergent interactions of the players in the development of the practice. Thus, the exchange between the coach and the player will not start from a dimension full of degrees of freedom, but the information will be subject to a framework of reference previously agreed upon - in the best of cases -.

Figure 9: Global - Local Synergies in the Formation of a Team



Source: Ribeiro et al. (2019). Global - local synergies in the formation of a team, p. 6.

In conclusion, if what is intended is to form an intelligent and adaptive team, the greatest challenge that the coach will have to face is the creation of synergies between the collective intentions and each player’s individual properties. In order to do this, it will be necessary to develop a sensitivity for the learning process and for the player’s autonomy, apart from building a malleable frame of reference through which the players will be able to self-regulate and self-organise under the same idea that is shared by all.

Learning to learn

In this module, a constant reference has been made to the player's learning process without specifying exactly what learning is. In fact, to be able to define it, we surely need, in the first place, to question what the true objective of this process is.

For instance, questions such as when is learning considered to have been assimilated?, at what point does learning stop?; or is this a finite and achievable process that we have in all areas? can help us reconsider the classic definition of learning, normally related to the acquisition of particular skills or behaviours that serve to perform an activity.

Based on all the information shared so far, the definition of Claxton (2001) seems more accurate, who considers that learning: “is what we do when we do not know what to do” (p. 137), leaving proof of the need for exploration and discovery in order to learn something new, as well as considering the continuity of this process throughout our lives. In addition, he points out the necessary adaptability that we must show before the changes to which we are exposed every day.

This evaluation is also valid for the field that concerns us, although it should not be dismissed that what we learn in our own discipline can be positively transferred to other disciplines or even to other fields. In our case, the multitude and infinity of situations that we face, whether they are games or not, suppose a constant need to adapt and change our behaviour patterns. Which allows us to be increasingly effective and efficient in the environment in which we operate.

It could be said that, in our attempt to optimise the player, it is essential to encourage them to "be better at knowing when, how and what to do when they do not know what to do" (Claxton, 2001), or, in other words, learning to learn. Consequently, learning a skill defined by its usefulness in a particular context will be insufficient if this does not give you new tools to continue relating to the changes that the environment undergoes. Learning to learn means developing skills and competencies that allow us to apply again the knowledge acquired to new situations.

From this perspective, we must recognise that being coaches is similar to taking a leap of faith, since we really do not get to perceive what phenomena occur during the learning process nor when, but, even so, we have the certainty and the belief that we have a direct impact on the development of new skills and abilities in players. Let us imagine for a moment that, in a period of three weeks, in which three training sessions and one game are performed per week, there was a certain learning or, in the coach's eyes, an improvement in the team. This chronological and linear process would probably invite us to consider that, thanks to the training sessions that have been performed and thanks to the application of what has been learned in them in the subsequent game, the team has increased its level of competence and experience.

Nevertheless, the same assumption can be made and analysed from other perspectives. Can we assure that this has been a summing process in which, as learning environments have been proposed, it has been able to solve a greater number of problems? If we had subtracted the training sessions that took place between games, would a similar level of coordination between players have been reached in the last of the games? What if the players have learned to play better together because of the time they have spent together outside the training fields and not because of the tasks performed together?

From our point of view, the only existing reality is that, in the first instance, we cannot predict what will bring what we propose, nor assess, *a posteriori*, that what has happened was originated from what we proposed. That is to say, all the examples discussed could be simultaneously influenced and affected by this learning process; a complex, non-linear and immeasurable process.

For this reason, it seems essential to us to understand that, as coaches:

- 1) We cannot be in control of all the factors that have an impact on the player in their learning process.

- 2) The player only spends a limited time with us and at a specific moment in their sporting history, and that, for this reason,
- 3) the player does not come to us with an empty backpack that must be filled, but it is already full of experiences that we must take into consideration to contribute to their journey.

Consequently, according to Seymour Papert (1998), “all skills will become obsolete except one, the ability to respond correctly to situations that are beyond the scope of what we were taught” (<http://pirun.ku.ac.th/~btun/papert/childpower.pdf>). This puts us in front of the immense challenge of stimulating in the players, not only football experiences, but curiosity, autonomy and critical thinking, as well as the ability to continually overcome the new challenges that both their sports career and their life will bring to them.

In this sense, we have the opportunity to share with them valuable time in the sport that unites us, to leave a mark on their process of self-formation as footballers. Let us take advantage of it and let us not let it get away.



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