Towards a contemporary player learning in development framework for sports practitioners
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For instance, constraints could be misinterpreted as negative influences that limit skill development by over- or under-constraining practice designs for athletes during development and performance preparation.

The term "non-linear" refers to the notion that small changes in system properties (e.g. the physical, psycho- logical and emotional characteristics of an individual; a team's practice conditions) can lead to large changes in emergent behavior and vice-versa. In other words, changes are non-proportionate in non-linear systems, in that slight changes can have large effects on how a complex system behaves.

For example, manipulating a task constraint, such as changing the mass and size of a football in youth soccer, may lead to the emergence of qualitatively 'new' actions for exploiting gaps and spaces, which may not emerge when players practice with footballs of different properties.

Essentially, the CLA explains how aspects of each individual, the environment and task interconnect with each other. This forms a complex system that shapes learning in development. These interconnected system features can be conceptualized as constraints because they guide or channel the direction and rate of development by providing the boundaries within which learning happens. A key point here is that constraints do not determine an individual's learning and performance behaviors, but continually interact to guide and shape them.

Key principles of NLP can be summarized as: the designing of representative learning environments that facilitate opportunities for learners to develop and adapt relevant information-movement couplings, manipulation of constraints, repetition without repetition (functional movement variability) and the promotion of an external focus of attention (for detailed overviews and practical interpretations of a NLP, see literature5,28).

In building toward his theory of Direct Perception, James Gibson differentiated between 'knowledge of' and 'knowledge about' the environment.

Gibson asserted that knowledge about the environment reflects an abstracted and indirect response to things or states of affairs. This type of knowledge is typically evident in verbalized responses to questions about things or in the presentation of pictures or symbols representative of them (i.e., whiteboard scribing that shows players about their positioning in a football game). In sport, such knowledge, developed through verbal responses to questions or coach-provided declarative instruction, may be useful when describing performance ex situ. However, while such knowledge may help initially orient an individual in unfamiliar regions, it does not necessarily support a performer's capability to wayfind during performance, in the same way that reading a recipe does not mean an individual can actually cook or that reading about a plant signifies gardening skill.

For example, global-to-local (i.e., top-down) processes were amplified in a coaching culture, where team organization and the notion of an 'optimal' technique had previously been prioritized over developing players' knowledge in the game. To soften these path dependencies, there was a need for contemporary, theoretically driven frameworks of player development, which were able to transcend historical or cultural tendencies.

Coaches at AIK are encouraged to dampen the sociocultural constraints (previously identified traditional perspectives) that advocate a constant prescription of declarative knowledge about the game, to become a facilitator of activities that place the performer-environment interactions at the core of their practice designs.38 In doing so, learners are actively encouraged to explore the information that is available in their performance land- scapes, deepening their knowledge in the game and its possibilities for (inter)action.

As explained earlier, the coach can manipulate task constraints and shape intentions to (re)frame a player's perception-action coupling.

Something for the coach to reflect on when planning practice task designs throughout these different timescales (weeks, months, years), is that the perception of affordances changes as an individual's capability for action changes. This is because, although an affordance is always available in the environment, its value and meaning for each individual may change as the individual matures, develops and grows.
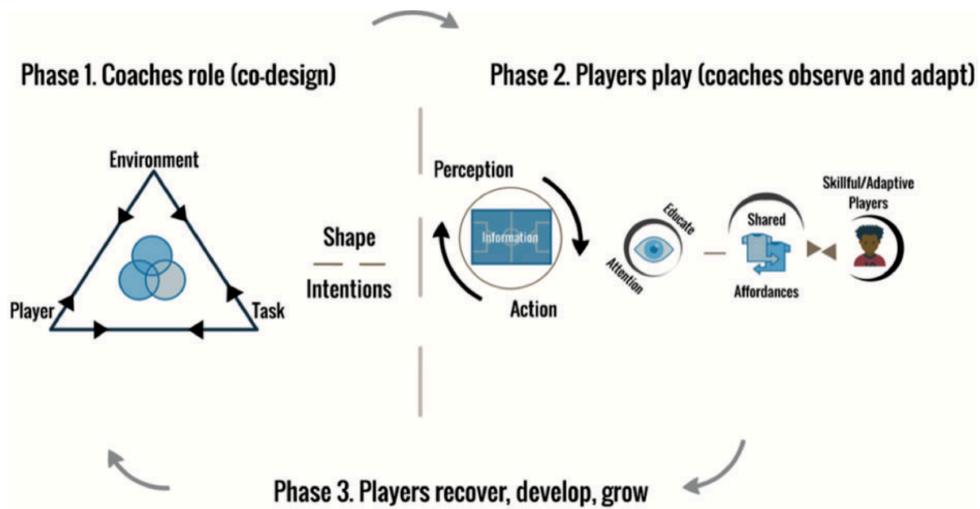
Figure 2. The three phases of the Player learning IN development framework, part of AIK football club's player development cycle.