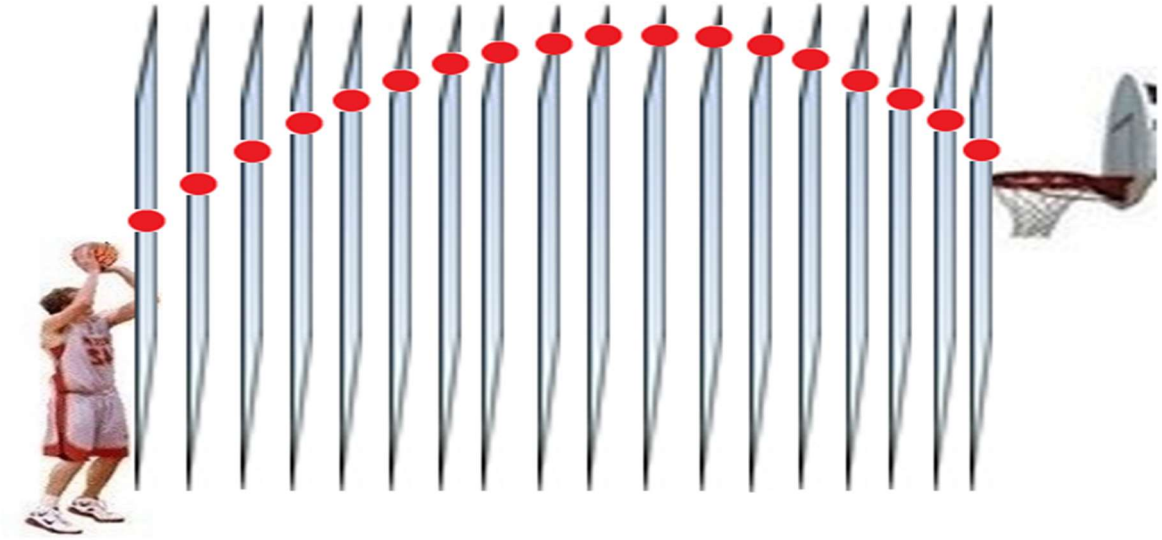
BASKETBALL

Within the free throw we always first construct a perceptual image of a latent action trajectory shape out of the perspective of the basketball – The scientific evidence



Caught In A Line
The explanatory model of all motoric movement actions

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Introduction

The explanatory model of the motoric movement action provides a universal explanation of all functional perception processes within all goal-directed actions. It demonstrates that performing any conceivable action always requires the simultaneous perception of three autonomous foci[1], in accordance with J.J. Gibson's theory, which includes both the movement of the animal/organism and the movement of the environment. When executing the free throw in basketball, one autonomous focus remains engaged with (the movement of) the basket as the environmental object, universally representing a catching action. The other two autonomous foci are concerned with the perception of movement within the egocentrically executed action, i.e., the movement of the basketball along an action trajectory shape (toward the basket), which universally represents a throwing action.
This article specifically focuses on the two foci belonging to the egocentric throwing action of the basketball in relation to the free throw in basketball. The explanatory model shows that every conceivable throwing action requires a compelling cooperation between an autonomous internal focus and an autonomous external focus. This insight, that two autonomous foci are present instead of a single undivided motor action, not only allows a final and ending specification of all individual perception processes but also reveals as a novelty that a coupling within the egocentric throwing action itself is capable to occur[2].
The explanatory model of the motoric movement action thus provides a complete description of the *tau*-coupling process, wherein the essence of the task, the primary focus, is executed through (the perception of) the movement of the basketball over a pre-planned action trajectory shape between the current position of the ball and the basket[3]. This perceptual image is therefore determined in advance within a tactical consideration and involves identifying the future sequential positions the basketball must occupy to achieve a successful action. Sequential positions of any object effectively always create line segment shapes, and when the action is actually executed, the current position of the basketball is going to fill in that perceptual image step by step. Thus, it can be observed within a line segment shape that the *gap* of the latent positions P gradually disappears and, in full accordance with the findings of D.N. Lee, produces the *tau*-value, which plays a crucial role in the completion of the motor action in cooperation with the secondary focus[4].
The explanatory model of the motoric movement action partly relies on logical reasoning but also presents scientific evidence. This chapter provides scientific proof that within the free throw in basketball, we always first create a perceptual image of a latent successful action trajectory shape before we actually perform any action.

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[1] The cortical streams mediate the grasping of a cup equal as they mediate within the nerve spiral (youtube.com) https://www.youtube.com/watch?v=QP4vPVAw-Yg

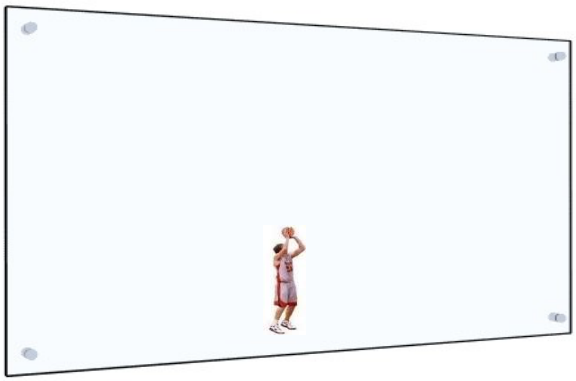
[2] D.N. Lee did indeed identify the *tau*-value associated with the primary focus, but he considered the egocentric action as one indivisible whole. His lifelong quest to find the phenomenon it should be connected to remained unsatisfied because he never realized that the coupling occurs within the egocentric action itself.

[3] https://www.researchgate.net/publication/376723068_The_free_throw_in_basketball_-_Scientific_evidence_that_random_motor_activity_implicitly_leads_to_the_factual_occurrence_of_an_internal_and_an_external_focus_and_how_their_dominancy_can_be_reversed

[4] https://www.researchgate.net/publication/376032837_Within_the_free_throw_in_basketball_the_ball_moves_within_an_external_action_trajectory_shape_and_dictates_all_internal_sensorimotor_perception_processes_The_tau-coupling_process_shows_that_we_absolut

The scientific evidence

The evidence is very straightforward. You can verify it yourself through an empirical study where you are the test subject or you ask a test subject to execute classic free throws in basketball. The only instruction given is to only execute the free throw if the test subject believes there is a realistic possibility of actually getting the ball into the basket.

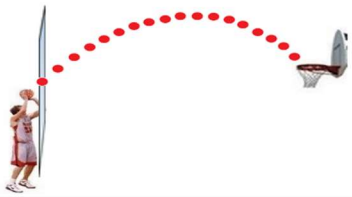


Images: The scientific proof is based upon the competence to visualize a giant huge glass shopping window. The left image shows a normal dimension of such a window. In relationship to the scientific proof you need to magnify that image 10 to 20 times. Like in the right image.

Choose a random basketball court with a random placed basket and create the following circumstances:

Situation 1:	Do not alter the environment (zero measurement). Let the test subject execute classic free throws under normal circumstances.
Situation 2:	Place a giant huge glass shopping window (height 20 meter x width 30 meter) between the basketball and the basket, close to the ball.
Situation 3:	Place a giant huge glass shopping window (height 20 meter x width 30 meter) between the basketball and the basket, close to the basket.
Situation 4:	Place a giant huge glass shopping window (height 20 meter x width 30 meter) between the basketball and the basket, at any random position P.

Situation 1



Situation 2

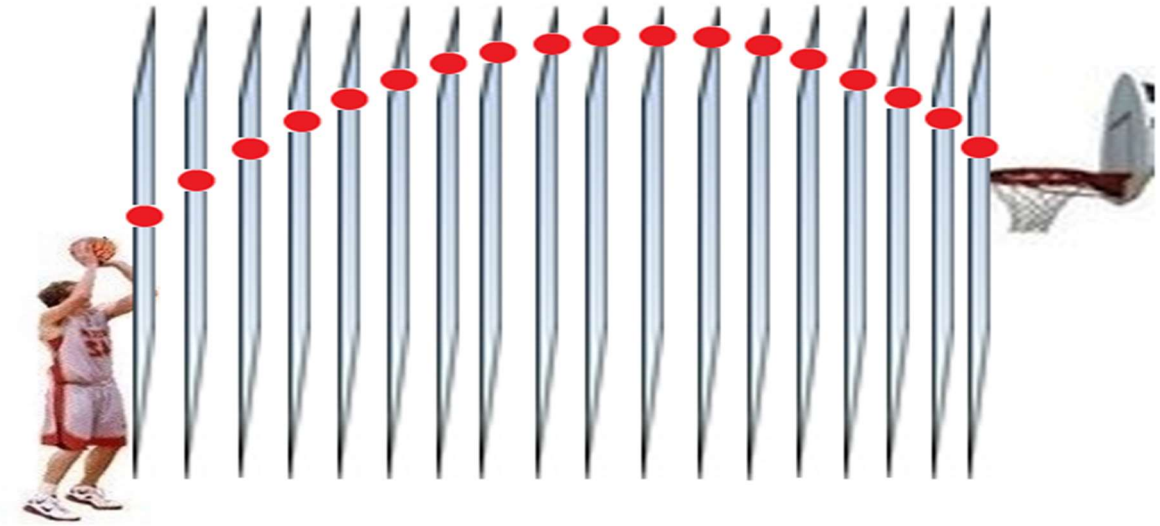
Situation 3

Images: In situation 1 a test subject will normally execute free throws. In situations 2 and 3, where a giant glass storefront is placed between the basketball and the basket, the test subject will not start a throwing action with the intent to actually score. This is because there is *one* (!) position P that is perceived as blocking the basketball.

Conclusion:

In situation 1, you and/or the test subject will just execute common free throws. In situations 2, 3, and 4, you and/or the test subject do not initiate a throwing action with the intent to let the basketball end

up in the basket. Situations 2 and 3 do not provide significant insight on their own, but situation 4 clarifies everything. Whether the giant glass shop window is placed near the basketball or near the basket makes no difference to the test subject. If there is a large shop window anywhere clearly present, the test subject will not initiate a throwing action with the intention to make a score. This applies to every conceivable position P of the shop window, from the very first position P(0) near the basketball to a shop window occupying the last position P(n) just before the basket.



Situation 4

Image: In situation 4, it becomes clear that prior to the actual execution, we consider all consecutive *future* (!) positions of the basketball. It doesn't matter where the shop window is positioned between the ball and the basket; the action is not performed. Mathematically, one can argue that an uninterrupted series of consecutive positions P creates a line segment or line segment shape (action trajectory shape). The image provides a perfect visual representation that within a throwing action, we first form a perceptual image of the entire latent action trajectory shape before we actually execute anything.

This means that we assess every position P(0-n) between the basketball and the basket beforehand, clearly determining whether each position P allows the basketball to pass through so that it can ultimately reach the basket. In relationship to which it can be observed that if one position P is not *empty* (!), the mission is aborted. Upon which you can draw the factual conclusion that we will have *to look at* (!) c.q. we will have to perceive every position P(x) between the ball and the basket beforehand if that specific position P(x) is also allowing the physical dimensions of the basketball to pass. Mathematically, an uninterrupted series of consecutive positions P can be designated as a line or line segment shape (action trajectory shape). This completes the scientific proof that within a throwing action, we first form a perceptual image of the entire latent action trajectory shape before we actually execute anything.