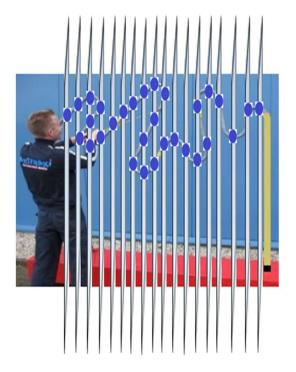
## THE NERVE SPIRAL GAME

Prior to executing a nerve spiral we always first construct a perceptual image of a latent action trajectory shape out of the perspective of the ring – The scientific evidence





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

N.J. Mol May 2024 ©

## 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<sup>1</sup>, in accordance with J.J. Gibson's theory, which includes both the movement of the animal/organism and the movement of the environment. When playing the nerve spiral game, one autonomous focus remains engaged with (the movement of) the spiral 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 ring attached to a handle along an action trajectory shape (toward the end of the spiral), which universally represents a throwing action.







This article specifically focuses on the two foci belonging to the egocentric throwing action of the ring in relation to playing the nerve spiral game. 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<sup>2</sup>.

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

<sup>&</sup>lt;sup>1</sup> 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

<sup>&</sup>lt;sup>2</sup> 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.

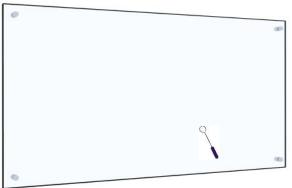
perception of) the movement of the ring over a pre-planned action trajectory shape<sup>3</sup> between the beginning and the end of a spiral<sup>4</sup>. This perceptual image is therefore determined in advance within a tactical consideration and involves identifying the future sequential positions the ring 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 ring 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<sup>5</sup>.

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 nerve spiral game, we always first create a perceptual image of a latent successful action trajectory shape out of the perspective of the ring before we actually perform any action.

## 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 the nerve spiral game. The only instruction given is to only execute the action if the test subject believes there is a realistic possibility of actually getting the ring to the end of the spiral.





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 nerve spiral game and create the following circumstances:

Situation 1: Do not alter the environment (zero measurement). Let the test subject just execute the game.

Situation 2: Place a giant huge glass shopping window (height 20 meter x width 30 meter) between the beginning and the end of the spiral, close to the beginning.

Contact: kwilling@gmail.com Website: https://www.researchgate.net/profile/Nj-Mol – N.J. Mol 3

<sup>&</sup>lt;sup>3</sup> It is essential to understand that the catching action (1 focus) and the throwing action (2 foci) are autonomous and entirely separate parts. Thus, even though we constantly see a spiral unfolding before our eyes (as part of the catching action) and it seems redundant, we still create a perceptual image of a latent action line shape from the perspective of the ring (as part of the throwing action).

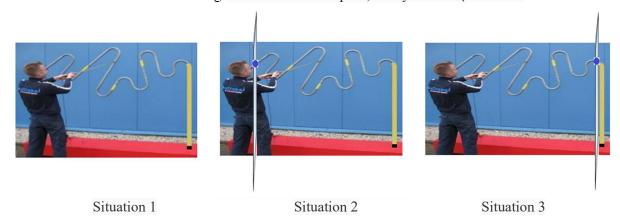
<sup>&</sup>lt;sup>4</sup> https://www.researchgate.net/publication/376888581 The nerve spiral demonstrates that random motor activity implicitly generates an internal and external focus and provides scientific evidence that the external focus can guide the action due to the in

<sup>&</sup>lt;sup>5</sup> https://www.researchgate.net/publication/375902347 The execution of an external action trajectory shape over which the ring moves dictates all internal sensorimotor perception processes within the nerve spiral The tau-coupling process shows that we do

Prior to eating soup we always first construct a perceptual image of a latent action trajectory shape out of the perspective of the spoon bowl – The scientific evidence

Situation 3: Place a giant huge glass shopping window (height 20 meter x width 30 meter) between the beginning and the end of the spiral, close to the end.

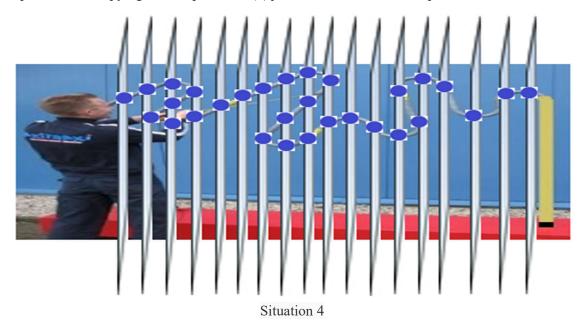
Situation 4: Place a giant huge glass shopping window (height 20 meter x width 30 meter) between the beginning and the end of the spiral, at any random position P.



Images: In situation 1 a test subject will normally execute the nerve spiral game. In situations 2 and 3, where a giant glass store window is placed between the beginning and the end of the spiral, the test subject will not start a moving action with the intent to actually get to the end of the spiral. This is because there is *one* (!) position P that is perceived as blocking the ring.

## Conclusion:

In situation 1, you and/or the test subject will just execute the nerve spiral game. In situations 2, 3, and 4, you and/or the test subject do not initiate any action with the intent to reach the end of the nerve spiral. 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 beginning or near the end makes no difference to the test subject. If there is a large shop window anywhere clearly present, the test subject will not initiate a motoric task with the intention to a successful action. This applies to every conceivable position P of the shop window, from the very first position P(0) near the beginning of the spiral to a shop window occupying the last position P(n) just before the end of the spiral.



Contact: kwilling@gmail.com Website: https://www.researchgate.net/profile/Nj-Mol - N.J. Mol 4

Image: In situation 4, it becomes clear that prior to the actual execution, we consider all consecutive *future* (!) positions of the ring. It doesn't matter where the shop window is positioned between the start and the finish of the spiral; 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 an entire latent action trajectory shape before we actually execute anything.

This means that we assess every position P(0-n) between the start and finish of the spiral beforehand, clearly determining whether each position P allows the ring to pass through so that it can ultimately reach the end of the spiral. 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 start and the end of the spiral beforehand if that specific position P(x) is also allowing the physical dimensions of the ring to pass. Mathematically, an uninterrupted series of consecutive positions P(x) can be designated as a line or line segment shape (action trajectory shape). Which completes the scientific proof that when executing the nerve spiral game, we first construct a perceptual image of the entire latent action trajectory shape out of the perspective of the ring before we actually execute anything.