

The structure of the human world: Brunswik's organism-environment-model

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The background and the framework for all descriptions of Brunswikian human process-characteristics consist of his structural organism-environment model which was frequently utilized throughout his whole scientific work.

Brunswik's structure model (which must not be confused with the lens model) was first presented in 1939 and was modified 13 years later. The recognition of this structure-model is a prerequisite for the understanding of his whole theory, especially with regard to many process-characteristics of Brunswik's theory (for example for the understanding of the lens model process). My description of the organism-environment-model is based on two original illustrations by Brunswik (1939, p. 37; 1952, p. 51), and on one summarizing illustration by Wolf (1995, p. 23).

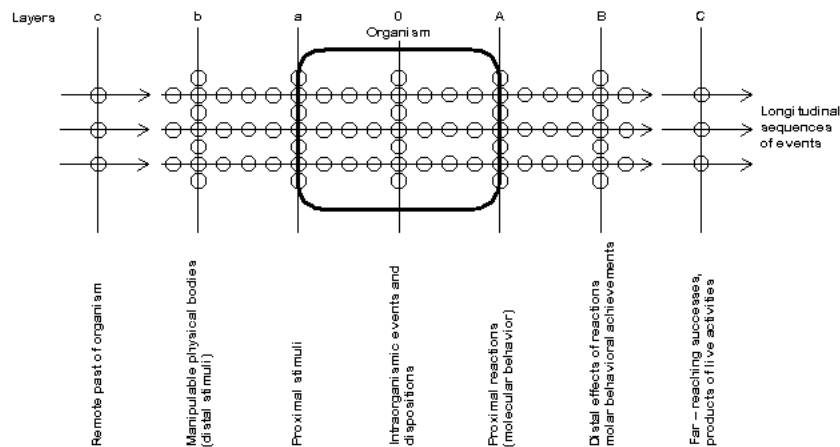


Figure 1
Scheme of the organism in its surroundings

Figure 1. Scheme of the organism in its surroundings (Brunswik, 1939, p. 37)

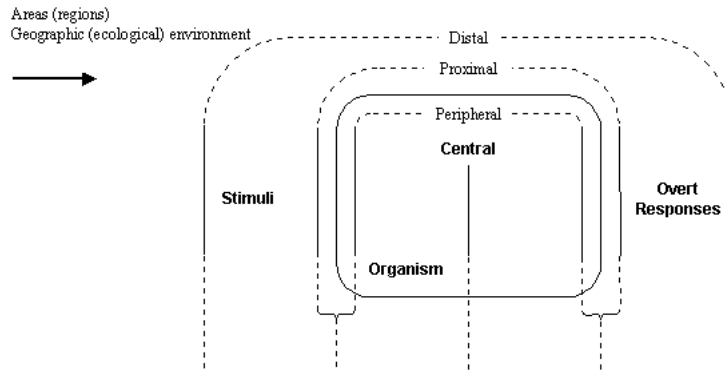


Figure 2
The organism-environment-model according to Brunswik (1952)

Figure 2. The organism-environment-model (Brunswik, 1952, p. 51)

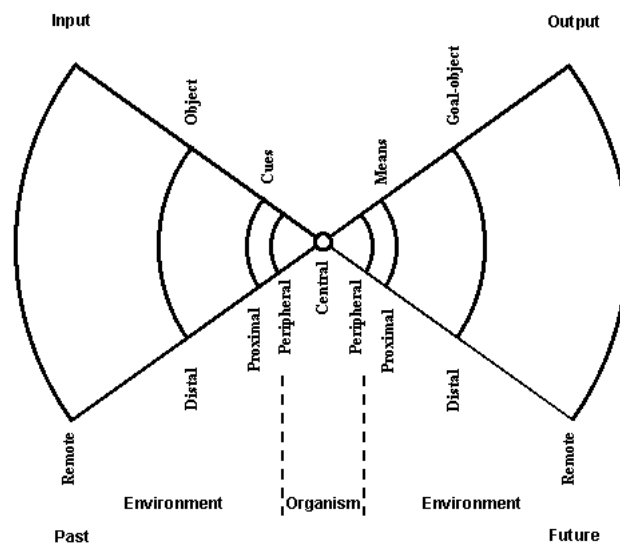


Figure 3
Summarized description of Brunswik's organism - environment - model

Figure 3. Summarized description of Brunswik's organism - environment - model (Wolf, 1995, p. 23)

Brunswik's structure model can be described in the following way:

- Organism and environment are equally important in this model. In some respect the expansion of the environment is evaluated even as broader than that of the organism. This great emphasis of the environment is unusual for psychological theories which normally focus on the individual.
- Brunswik's structure model is twofold and directed from the left to the right side in the illustrations. On the left side of the organism you will find in spatial respect four regions

which are characterized by the act of receiving or input. In temporal respect the same left side of the model additionally refers to the past. Therefore aspects of space and time are mixed in the same left area of this model.

- The analogous mixture is true for the right side of the structure model. In spatial respect we find here four regions of response or effect or output. Simultaneously in temporal respect this area is directed to the future. Besides the whole right side is characterized by the orientation towards goals.

- Consequently space and time are partly inseparably interwoven in Brunswik's structure model. Within the context of a psychological theory these regions are always applied to the organism in the center. In spatial respect there is a continuum from "within the organism" over "very close to the organism" over "middle distance" to "far remote from the organism". In correspondence to this the broad temporal aspect reaches from "long ago in the past" over "immediately present" to "far away in the future".

- Referring to former papers of Heider (1926, 1930) and Koffka (1935) Brunswik places on each of both sides of the central part of the organism four regions which can be simultaneously interpreted in spatial and/or temporal terms: The following nine types of regions are decisive in Brunswik's theory:

- the environmental region remote (or far remote) from the organism on the input side

- the distal region on the input side (part of the environment which is in a middle-sized distance away from the organism)

- the proximal region on the input side (outside of the organism, but near to it)

- the peripheral region on the input side (which is still one part of the organism)

- the center of the organism

- the peripheral region on the output side (which is still one part of the organism)

- the proximal region on the output side (outside of the organism, but near to it)

- the distal region on the output side (part of the environment which is in a middle-sized distance away from the organism)

- the environmental region remote (or far remote) from the organism on the

output side

- Within these nine symmetrically ordered regions emphasized foci are, according to Brunswik, placed on (1) the distal input, (2) the center of the organism, and (3) the distal output. The significance of these three regions can be better understood on the basis of Brunswik's lens model.
- Typical concepts in Brunswik's psychology as, for example,
 - "object" (input side: distal region)
 - "goal-object" (output side: distal region)
 - "cues" (input side: proximal region)
 - "means" (output side: proximal region)

can be definitely assigned to specific regions in the organism-environment model.

- Ecological validity. There exists no uniform concept of ecological validity in scientific literature. Brunswik (1943, 1952), Bronfenbrenner (1979), and Patry (1990) have defined three distinct conceptions of ecological validity which are not compatible (cf. Hammond, 1996). Within this essay I only refer to Brunswik's concept of ecological validity - which is a part of the organism-environment-model - with respect to the process characteristic of vicarious functioning (cf. "[Vicarious Functioning as a Central Process-Characteristic of Human Behavior](#)"). Ecological validity (in the sense of Brunswik) means the necessarily restricted amount of distal-proximal correspondence on each of both sides of the organism. Brunswik (1952, p. 22) expresses this concept in the following way:

"The probability character of intra-environmental relationships, their limited 'ecological validity,' becomes of concern in two regional contexts: on the reception or stimulus side as the equivocality of relationships between distal physical or social objects and proximal sensory stimuli or cues, and on the effection or reaction side as the equivocality of relationships between proximal outgoing behavioral responses, or means, and their more remote distal results and effects."

The core of Brunswik's concept of ecological validity lies in the unavoidable limitation, the preliminary steps and the misjudgment of the organism-environment transaction between the proximal and distal regions ("equivocality"). Concerning this conception of ecological validity the role and meaning of vicarious functioning is decisive because ecological validity - which is always limitative, but at the same time object-approximating - can be enriched, improved and corrected by the results of the process of vicarious functioning (cf. "[Vicarious Functioning as a Central Process-Characteristic of Human Behavior](#)").

Brunswik's basic conception of the structure of the human world, his organism-environment-model has been seldom perceived or recognized, even by researchers in the Brunswik-tradition. It must be stated that many of Brunswik's theoretical elements are embedded in his organism-environment-model which is the central framework of his psychological system. Besides it could be proven whether this model should be utilized in other fields of psychology.

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