

ON THE INTEGRATION OF GESTALT THEORY

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The work of the founders of gestalt theory was concerned primarily with the three spatial dimensions in their stationary and their mobile forms. To this end they detached the time dimension of past experience, which they liked to reduce to mechanical repetition -- an inferior procedure. They cited the experiments of Kurt GOTTSCHALDT. Done around 1927 at the Psychological Institute of Berlin University, they are quoted in all general statements of the founders as representative of the gestalt approach. They were said to prove the inferiority of past experience when it was limited to the mechanical repetition of an identical item.

GOTTSCHALDT used pairs of geometrical figures. The A figure, relatively simple, as in Fig. 1, was contained in the more complex B figure, as in Fig. 2, in such a way that it hid the first figure structurally to make it invisible. In one of the experiments observers were presented 520 times with a brief exposure of Figure A and thereafter with a showing of Figure B, which they were then asked to describe. The theory to be tested and which was expected to be disproved was that the accumulated exposure of Figure A would not strengthen its influence on Figure B. In fact, this turned out to be the case.

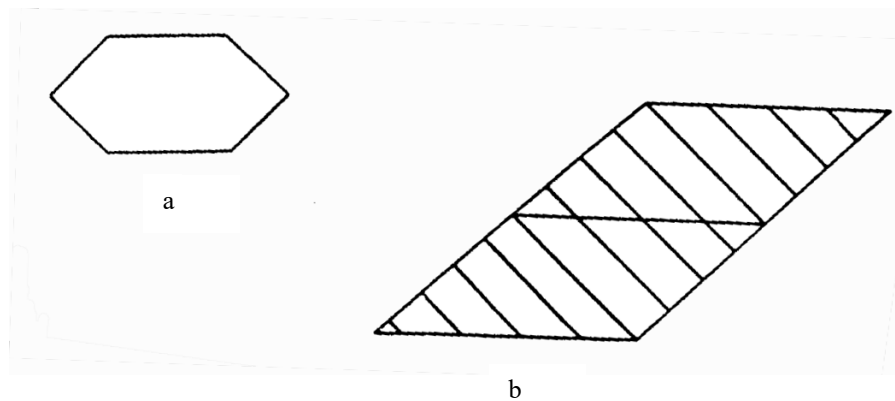


Figure: a and b

The result of these experiments, supposedly showing that past experience does not affect the structural organization of present experience, were cited in the basic statements of gestalt theory.

GOTTSCHALDT's demonstration, however, seems to me unconvincing, and this for various reasons. First of all, the mere repetition of an identical stimulus is not perceived as an accumulation of things but as the persistence of a single blink or noise. Therefore it cannot be described, as GOTTSCHALDT does, as an increasing empowerment of experience. Secondly, I would object to the assertion that the B figure contains the A figure. It does so in a merely physical sense, but we are dealing here not with physics but with sensory perception. It is precisely gestalt theory that tells us that in terms of structural organization the A figure is not contained in the B figure. Therefore, when in GOTTSCHALDT's experiments the A figure is not found in the B figure, this does not happen because past experience is ineffective but because under these conditions it is not called upon.

Furthermore and most importantly, it is of course the gestalt theorists who have offered the finest examples of past experience when it is at its best. The general approach recommended by WERTHEIMER in *Productive Thinking* calls for grasping the structure of what is objectively given. Therefore intelligent problem solving must avoid „blind“ behavior -- WERTHEIMER's pet peeve. By blindness he meant the participants' inability to realize what was required by the situation they were facing.

In his own presentations he always envisages concrete situations. Remember his story of the two boys playing badminton, which, as usual, is half observed and half constructed. The difference between the older, more highly trained boy and his younger partner produces an unbalanced situation made up of the older and better prepared player, who at first enjoys his winning „blindly“, unaware of the frustration of his younger partner. This unbalance is straightened out when the unhealthy competition is turned by the new insight of the older boy into a satisfying balanced co-operation. They change their procedure.

The general gestalt principles of which this is a particular example apply of course to an infinity of fields, be it the composition of a painting or the organization of a business office. I want to conclude by saying that the gestalt principles do not serve only in their particular applications but also when it comes to present the system of gestalt theory itself as a whole. There have been many of these presentations, from the early ones by KÖHLER, KOFFKA, or METZGER to recent ones. Some are very generic, others quite detailed. One of the criteria by which they are to be evaluated is whether or not they themselves are integrated by gestalt principles in their own structural organization.

Summary

Much of the early gestalt work is concerned with the organization of spatial figures. The time dimension is reduced to the mechanical repetition of singular stimuli. The inferiority of „past experience“, documented with GOTTSCHALDT's experiments, whose validity however is contested in the present article. Past experience at its best is given in the gestalt examples of problem solving. The gestalt principles applied in such cognitive examples hold more broadly and lead to a more integrated conception of gestalt theory.

Zusammenfassung

Die frühen Gestaltarbeiten befassen sich vorwiegend mit der Organisation raumähnlicher Figuren. Die Behandlung der Zeitdimension ist auf einen singulären Stimulus reduziert. Die Minderwertigkeit von „past experience“ wird mit GOTTSCHALDTs Experimenten belegt, deren Gültigkeit jedoch hier bestritten wird. Erfahrung zeigt sich vielmehr aufs beste in den Gestaltbeispielen von produktivem Denken. Die dort verwendeten Gestaltprinzipien gelten ganz allgemein und erlauben eine vollere Integration der Gestalttheorie.

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