

Supplementary Remarks on the Concept of Gestalt*

§1 Purposes of the Subsequent Table

1. Illustration of some fundamental concepts used in the above analysis of 'Gestalt' (as distinguished from 'determinational system')¹.
2. Illustration of their general applicability, and thus of interconnections (Unity of Science!) between various fields as exhibited by the horizontal arrays.²

§2 Brief Explanation of the Table³

1. The plan of a house (as a *complex*) is its *Gestalt* with respect to a *transposition* by a change of the scale of measurement; for the plan is an invariant with respect to that transposition. – Quite analogous statements may be made for any other column of the table.
2. The example taken from physics corresponds to 5.4.3 of the main text, where it serves to illustrate a 'determinational system' ['*Wirkungssystem*']. It may however also be taken as an example of a Gestalt as defined in 4.1; thus illustrating the connections between Gestalten and determinational systems as pointed out in 5.6. For the further examples mentioned in the table see also 4.3.

* Reprinted from *Erkenntnis* 7, 1937/38, pp. 357–59 with the kind permission of Professor Felix Oppenheim. See "Translator's Note" to the preceding paper (p. 192 above).

§3 Remarks Suggested by a Discussion

Remarks suggested by a discussion in which the following members of the Congress participated: Dürr, Frank, Gomperz, Hollitscher, Jörgensen, Mannoury, Naess, Neurath, Steinhardt.

1. Which field of science do the above considerations belong to?

First, the extension of certain concepts, such as 'isomorphism' and 'structure', belongs to *pure logic*.

Second, the above application of these and other concepts belongs to *applied logic*, more particularly, to the descriptive semantics of the language of empirical science.

2. The purpose of the above paper is to determine the logical structure of the concept 'Gestalt' as actually used in science, but not to decide to which extent, say, the concept of determinational system is useful in explaining experimental data of Gestalt psychology.
3. The concept 'Gestalt' as a generalization of 'structure' must be well distinguished from 'shape' or 'form' as special cases; hence, it must be given a name of its own. It seems to be of secondary importance whether the original term 'Gestalt' is maintained, or a new one is adopted; the decision depending upon whether one wants to avoid the danger of metaphysical associations or rather to maintain historical continuity in terminology.
4. The concept 'classifier' is not quite the same as Carnap's concept 'functor' (since the latter can only have numerical values), whereas it coincides with the concept 'name-forming functor' [*namenbildender Funktor*] as introduced by the Polish logicians (in particular by Ajdukiewicz).

fundamental concepts	everyday life	theory of music	logic	geometry	physics	chemistry	psychology
complex	a house	a sequence of tones	an expression	a triangle	oil in alcohol	a molecule	black dots on white ground
state-classifier	'material'	'pitch'	'kind of symbol'	'co-ordinates'	'kind of liquid'	'kind of atom'	'colour'
argument of the state classifier	place in space	place in the sequence of tones	place in the expression	corner of the triangle	place in the vessel	place in the structure	place in the visual field
value of the state-classifier	stone	c	implication-symbol	$x=0, y=1$	oil	H	black
correspondence	relation between model & house	equality with respect to melody	syntactical equality	geometrical similarity	equality in shape of the separating surfaces	chemical equality	equality in phenomenal grouping
transposition	change of scale of measurement	transposition	replacement of round brackets by square ones	similarity-transformation	change in the ratio of the quantities	heating	a certain change in the distances of the points
Gestalt ('Gestalt-quality')	plan of the house	Blue Danube-waltz-melody	the syntactical shape ' $p \supset p$ '	equilateral form	spherical form of the separating surface	benzene constitution	the phenomenal grouping
quality of a Gestalt	symmetrical	triple time	analytic	regular	minimal surface	cyclic	stable

Notes

- ¹ Prof. Heinrich Poll, Berlin, aims, in a theory called 'Melistik', at improving and extending the present form of Gestalt-theory which is the only object of our analysis. One of the authors, K. Grelling, was for years in a close scientific contact with Prof. Poll; for this reason, Dr. Grelling's contributions to the present paper contain certain 'melistic' elements, mainly with respect to the concept 'articulation' [*Gliederung*], a concept to which one is automatically led when dealing with Gestalt-theory. – The other author, P. Oppenheim, is highly indebted to Dr. J. H. Woodger and Dr. C. G. Hempel for many very stimulating discussions of the subject.
- ² Not all the fields mentioned in the table have yet been examined by the authors with equal thoroughness. Though, consequently, certain reservations must be made in this respect, the table might fulfil its purpose. Under the same reservations it may be added that interesting extensions of the table, e.g. to crystallography, biology and sociology seem to be possible.
- ³ For lack of space, only some of the explanatory remarks given at the meeting can be repeated here. – For the same reason, the table has been simplified by omitting any special indication to the effect that, e.g., in the second column "stone" is only an example (so to speak, of second degree) relatively to the example "house" (which is, so to speak, of the first degree).