Gestalt Theory and Its Reception
An Annotated Bibliography

The list which follows is intended as a comprehensive bibliographical survey of the wider Gestalt tradition from Graz and Berlin to Padua, Frankfurt and New York. The diagram overleaf provides some indication as to what I take this tradition to be. Both the lines representing teacher-pupil relationships and also the groupings into schools should however be taken with a pinch of salt. One may in certain cases be dealing with little more than indirect influences or loose associations of contemporaries. The alphabetical ordering, superficially the least perspicuous of all possible compromises, has been adopted simply because of its neutrality in comparison with the various (thematic or chronological) alternatives. Its defects have, it is hoped, been rectified by the provision of a comprehensive index on pp. 479ff. below.

I have included, as far as possible, all the classic texts of the Gestalt psychological tradition, together with the more important translations and reprints thereof. Works outside this central core have been included either because they have a particular philosophical or historical relevance to the Gestalt tradition as a whole, or because, even though written by secondary figures within the tradition, they fall squarely within the fields of theoretical and perceptual psychology. I have included secondary Gestaltist literature outside these fields only in very special cases. Thus I have not ventured into areas such as social and animal psychology, developmental and educational psychology, psychopathology, etc., except where individual items seemed to be of particular historical importance. Purely experimental works have also not been listed, though exceptions have been made in certain cases (above all Benussi, Rausch, Witasek, Musatti, Kanizsa) where it seemed important to aim for completeness. In relation to a limited number of topics I have included also works by authors outside the Gestalt tradition, but only
where these seemed to me to be crucial to the understanding of im­
portant theoretical currents within Gestalt theory proper. This is the case
in relation to the following themes:

- the concepts of Prügnanz or ‘good form’ and related treatments of aesthetic
  phenomena and of pattern recognition
- cognitive processes and problem-solving
- criticisms of Gestalt theory
- phenomenal causation
- figure-ground relations, phenomenal boundaries, subjective contours
- phenomenal motion
- perceptual constancies
- philosophical inquiries into the nature of ‘configuration’, ‘relation’, ‘structure’,
  etc., and writings on psychological holism (but only insofar as these relate
directly to the literature of Gestalt psychology proper).

Readers interested in the last, in particular, may turn to the bibliography

The annotations are intended only as a very rough and ready first guide
through the literature. They should not be looked upon as a substitute for
standard reference works and no significance should be awarded to the
absence of annotations in relation to any particular item. An enterprise of
this nature could be carried forward ad infinitum, and a more or less
arbitrary boundary had to be drawn around the material annotated even
at the risk of a certain unevenness in the configuration which results. In
relation to the larger and more comprehensive items – for example the
textbooks of Köhler and Koffka – it has been possible to provide at most
only brief indications in relation to one or two of the issues treated.
Where, however, the attempt has been made to summarize the main
theses or arguments of a work, then the views expressed are intended to
represent those of the author of the work in question and not those of the
compiler of this bibliography.

I am grateful to Mitchell Ash (Iowa), Niels Bokhove (Utrecht), Horst
Gundlach (Passau), Kevin Mulligan (Geneva), Csaba Pléh (Budapest)
Michael Stadler (Bremen), and Natale Stucchi (Geneva) for their help in
the compilation of this list (though the responsibility for the errors is of
course all my own). I should also like to thank the librarians of that eighth
wonder of the philosophical world, the University Library of Erlangen,
who made it possible.

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Schools and Influences within the Gestalt Tradition
<table>
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<tr>
<th>Author(s)</th>
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<th>Title</th>
<th>Journal/Book</th>
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<tr>
<td>Abelskaya, R. and</td>
<td>1929</td>
<td>&quot;Die Erscheinungsweisen der Zeitgestalten&quot;,</td>
<td><em>Tohoku Psychologica Folia</em> (Sendai, Japan), 1, 1-36. Qualitative experiments on time-perception in the spirit of the Würzburg school and influenced by Benussi, Witasek and Katz. Time as perceived is not homogeneous: all perception of time manifests one or other variety of Gestalt structure.</td>
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<td></td>
<td>1932</td>
<td><em>Finale Qualität und Objektion</em>, Archiv für die gesamte Psychologie, Ergänzungsband 2, Leipzig: Barth.</td>
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<td></td>
<td>1932a</td>
<td>&quot;Das Kompensations- oder Produktionsprinzip der Identifikation. Ein psychologisches Grundgesetz&quot;, in G. Kafka, ed., Bericht über</td>
<td></td>
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Ackerknecht, E. 1913

“Über Umfang und Wert des Begriffes ‘Gestaltqualität’”, Zeitschrift für Psychologie, 67, 289-293. Defence of production theory along the lines of Witasek 1910. Conceives the Gestalt quality as ‘a quite specific, purely sensational synthesis of several simultaneous or immediately successive sense impressions within one and the same sense region, which goes beyond the mere content of these sense impressions and manifests a pronounced feeling tone’. Gestalt qualities constitute a quite new and important stratum of psychic processes. (p.289)

Ackermann, A. 1924

“Beiträge zur Psychologie der Gestalt. IX [ed. by K. Koffka], Farbschwelle und Feldstruktur”, Psychologische Forschung, 5, 44-84.

Adams, P. A.

see Köhler and Adams.

Ajuriaguerra, J. de 1954


Akio Ono 1960


Akishige, Y. 1958

“Studies on Constancy Problem in Japan”, Psychologia, 1, 143-57.

1961

“Theoretical Considerations on the Problems of Perceptual Constancies”, Bulletin of the Faculty of Literature, Kyushu University, no.7, 1-58.

1965

“Perceptual Constancy and the Law of Conservation of Perceptual Information”, Bulletin of the Faculty of Literature, Kyushu University, no.9, 1-45.

1967

“Mind-Body Monism on the Base of the Theory of Perceptual Constancy”, Bulletin of the Faculty of Literature, Kyushu University, no.10, 177-91.

Allesch, G. J. von 1910  "Über das Verhältnis der Ästhetik zur Psychologie", Zeitschrift für Psychologie, 54, 401-536. See esp. the discussion of Witasek, Stumpf and Meinong. Allesch was Köhler's first assistant in Berlin, though he referred to Stumpf and Meinong as his most important teachers.

1921  Wege zur Kunstbetrachtung, Dresden: Sibyllen.


1931  Zur nicht-euklidischen Struktur des phänomenalen Raumes (Versuche an Lemur mongoz mongoz L.). Aus dem psychologischen Laboratorium der Universität Greifswald, Jena: G. Fischer

1939/40  "Die Begriffe Ganzheit und Eigenschaft", Archiv für die gesamte Psychologie, 105, 36-57.


Allport, F. H. 1954  "The Structuring of Events. Outline of a General Theory with Applications to
Sensory qualities and dimensions seem to have been slighted in the gestalt theory of perception. Much has been said about the fact that they are affected by field changes and are subservient to the laws of the whole; but these statements do not do them justice...They cannot be explained by isomorphism since they are merely continuances or 'spreads' of a homogeneous quality or dimension; and they are without form or articulation...In throwing out elementarism gestalt theory has not been successful in covering the phenomena of which the elementarists tried to give some account. (p.139)
against the background of Meinong’s ontology. Since Gestalten are founded contents, it follows that they are ideal, i.e. outside space and time. In this respect they are like relations of similarity and difference. Thus they cannot be perceived; they must be grasped by an intellectual act of ‘Vorstellungsproduktion’.


Amin, I.

1973 Assoziationspsychologie und Gestaltpsychologie: Eine problemgeschichtliche Studie mit besonderer Berücksichtigung der Berliner Schule, Bern/Frankfurt: Lang. Begins with a historical treatment of theories of association, especially those of Aristotle and of the British empiricists. This is followed by a study of the turn to holistic modes of thought around 1890 (Wundt, James, Dilthey, Ehrenfels), concluding with a survey of the work of Wertheimer, Köhler, Koffka and Lewin.

Anderson, N. S., Pine, S. M. and Rosenfield, A.


Angyal, A.

1931 “Über die Raumlage vorgestellter Örter”, Archiv für die gesamte Psychologie, 78, 47-94. On the illusions of orientation e.g. in finding one’s way around a city, and on the interplay of different factors in our conceptions of direction.


Anschütz, G.

1909 Über Gestaltqualitäten, Erlangen: Junge and Sohn (Dissertation, München, under Lipps). Historical survey of the work of Ehrenfels, Meinong, Cornelius, etc., in the spirit of Lipps. Anschütz affirms, against Ehrenfels, that the activity of the ego is the presupposition of the unification of presentations: ‘It is the absolute Ich which creates those peculiar total-qualities
which are "categorial determinations of objects". (p.53)

1926 "Untersuchungen über komplexe musikalische Synopsie", Archiv für die gesamte Psychologie, 54, 129-274.


Anson, R.

see Rock and Anson.

Anttila, R.


(forthcoming) "Dynamics in Morphology", Acta Linguistica Hungarica (the essay is titled after Köhler 1940).

Anzyferowa, L. I. and Mansurow, N. S.


Arezzo, G.


Arnaboldi, M.

1966 Genesi della forma, Padua: Marsilio.

Arnheim, R.


1943 "Gestalt and Art", Journal of Aesthetics and Art Criticism, 2, 71-75.

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1960 “Gestalten von gestern und heute”, in Weinhandl, ed., 79-85. Eng. trans. “Gestalten—yesterday and today”, in Henle, ed., 1961, 90-96. Account of later developments in Gestalt theory against the background of Ehrenfels’ views. The essay includes a brief discussion of the Berlin school view of time and memory phenomena and Arnheim draws attention in particular to the variability in objective duration of that experienced temporal boundary which is the present:

...the range of the psychological present is determined by the strength and boundary of the Gestalt context. A passage of music, for example, which is conceived by the listener as an indivisible unity, appears to be “in the present”. (p.93)

1961 “Contemplation and Creativity” in Festschrift Kurt Badt zum 70. Geburtstag, Berlin: de Gruyter, 8-16; repr. in Arnheim 1966, 293-301. On some theoretical implications of the perception of simple geometrical figures.
1966

1969

1971

1975
"Anwendung gestalttheoretischer Prinzipien auf die Kunst", in S. Ertel, ed., 278-84.

1981
"Bemerkungen zu Keilers Aufsatz über Isomorphie", Gestalt Theory, 3, 269-73.

1983
"Style as a Gestalt Problem", *Gestalt Theory,* 5, 3-15.

Arno M. D.

Artemov, V.A.

1928

Asch, S. E.

1946
"Forming Impressions of Personality", *Journal of Abnormal and Social Psychology,* 41, 258-90. repr. in Henle, ed. 1961, 237-85. Subjects were presented with lists of traits and asked to form an impression of the type of person who would be associated with the given traits. Principles of organization they employed are summarized by Asch as follows:

1. There is an attempt to form an impression of the entire person. The subject can see the person only as a unit;... even when the factual basis is meager; the impression then strives to become complete, reaching out toward other compatible qualities...

2. As soon as two or more traits are understood to belong to one person, they cease to exist as isolated traits, and come into immediate dynamic interaction... the traits order themselves into a structure... The representation in us of the character of another person possesses in a striking sense certain of the qualities of a system.

3. In the course of this process some characteristics are discovered to be central... These set the direction for the further view of the person and for the
concretization of the dependent traits. As a rule the several traits do not have equal weight. And it is not until we have found the center that we experience the assurance of having come near to an understanding of the person.

4. The single trait possesses the property of a part in a whole. A change in a single trait may alter not that aspect alone, but many others—at times all. As soon as we isolate a trait we not only lose the distinctive organization of the person; the trait itself becomes abstract. The trait develops its full content and weight only when it finds its place within the whole impression.

5. Each trait is a trait of the entire person. It refers to a characteristic form of action or attitude which belongs to the person as a whole. In this sense we may speak of traits as possessing the properties of Ehrenfels-qualities. Traits are not to be considered as referring to different regions of the personality, on the analogy of geographical regions which border on another.

6. Each trait functions as a representative of the person. We do not experience anonymous traits, the particular organization of which constitutes the identity of the person. Rather the entire person speaks through each of his qualities, though not with the same clearness.

7. In the process of mutual interaction the concrete character of each trait is developed in accordance with the dynamic requirements set for it by its environment. There is involved an understanding of necessary consequences following from certain given characteristics for others. The envy of a proud man is, for example, seen to have a different basis from the envy of a modest man.

8. On this basis consistencies and contradictions are discovered. Certain qualities are seen to cooperate; others to negate each other... Disturbing factors arouse a trend to maintain the unity of the impression, to search for the most sensible way in which the characteristics could exist together, or to decide that we have not found the key to the person...

9. It follows that the content and functional value of a trait change with the given context... A trait central in one person may be seen as secondary in another. Or a quality which is now referred to the person may in another case be referred to outer conditions (p.284f.; p.276ff. of reprint)


1980a "Experimental Psychology in Germany before 1914: Aspects of an Academic Identity Problem", Psychological Research, 42, 75-86.


1984 "Disziplinentwicklung und Wissenschaftstransfer – Deutschsprachige Psychologie in der Emigration", Berichte zur Wissenschafts-
Asmus, W.

Attneave, F.


Asmus, W.

Attneave, F.


1955 “Symmetry, Information, and Memory for Patterns”, American Journal of Psychology, 68, 209-22. That symmetrical dot-patterns are not easier to remember than asymmetrical patterns with the same information content is held to throw light on the Gestalt doctrine that figural goodness is favourable to memory.


1956

1959

2012

2012

2012

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Bartley, S. H.  see Wheeler, et al.


Becher, E. 1911  Gehirn und Seele, Heidelberg: Winter. Utilizes psychological data derived in part from form-perception as a means of refuting then current ideas in neurophysiology and, more generally, of establishing the non-physical reality of the psychical. Defends an interactionist conception of psychical causality similar to that of Stumpf.

1921  "W. Köhlers physikalische Theorie der physiologischen Vorgänge, die der Gestaltwahrnehmung zugrunde liegen", Zeitschrift für Psychologie, 87, 1-44 (dedicated to Benno Erdmann). Sympathetic exposition and critique of Köhler 1920 stressing chemical and biological aspects of Köhler's work. Becher argues that it is necessary to distinguish three different kinds of physical Gestalten according to the different kinds of causal coherence they involve. He distinguishes 1. physical Gestalten manifesting no causal coherence (e.g. a shadow, three pieces of wire lying side by side on a table); 2. those manifesting local causal coherence, in which only the neighbouring parts can influence each other (e.g. an electric circuit); and 3. those manifesting universal causal coherence (e.g. an ionized solution, where all parts and moments have effects on all the others). There are Gestalt structures not reducible at all to universal causal coherence, but these are to be found only in the sphere of animate organisms (and particularly of the psyche), and never in inanimate nature.
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<th>Author</th>
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<tr>
<td>Becker, J. and Rausch, E.</td>
<td>1952</td>
<td>“Visuelle Gebilde mit koordinierten Gliedern”</td>
<td><em>Acta Psychologica</em>, 8, 300-321. Investigation of conditions governing visual formations whose elements appear to have equal weight – i.e. appear in such a way that no single element or group of elements predominates.</td>
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<tr>
<td>Benary, W.</td>
<td>1923</td>
<td>Review of Selz 1922, <em>Psychologische Forschung</em>, 3, 417-25. Accuses Selz of propounding a machine-theory of the processes of thinking, i.e. a theory which is, from the perspective of the Gestalt-psychologists, still bound to a certain sort of associationism which ignores factors of meaning or significance and pays too little attention to the structures of the objects of thought.</td>
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“Beobachtungen zu einem Experiment über Helligkeitskontrast”, *Psychologische Forschung*, 5, 131-42, extracted in Ellis, ed. as “The Influence of Form on Brightness Contrast”, 104-108. The influence of contrast upon one part of the field depends not simply upon the kind, amount and proximity of the parts, but also upon figural relations between the given part and its surrounding whole. The experiment stems from Wertheimer.

Benda, H. v. 1968


Bentley, I. M. 1902


Benussi, V. 1902


1904


1904a “Ein neuer Beweis für die spezifische Helligkeit der Farben”, in Meinong, ed., 473-80.


1905 “La natura delle cosiddette illusioni ottico-


1906 “Experimentelles über Vorstellungsinadäquatheit. I. Das Erfassen gestaltmehrdeutiger Komplexe”, *Zeitschrift für Psychologie*, 42, 22-55. The notion of presentational inadequacy is introduced by Benussi in order to avoid the ambiguity of the term ‘illusion’. The latter can signify either the incorrect judgment or belief associated with an act of perception or the perception itself. Benussi wants to concentrate exclusively on properties of presentations. He shows that presentational inadequacy can be present even without associated false judgments or beliefs, and he shows also that geometrical illusions are not confined to optical phenomena but are to be found also in the tactile and auditory spheres.

1906a “Die Psychologie in Italien”, *Archiv für die gesamte Psychologie*, 7, 141-80. Survey of Benussi’s own work on perception of ambiguous Gestalten and of the work of the Florence School.


1908 "Zur experimentellen Analyse des Zeitvergleichs. II. Erwartungszeit und subjektive Zeitgröße", *idem*, 13, 71-139.


1910 "Über die Grundlagen des Gewichtseindrucks (Beiträge zur Psychologie des Vergleichens)", *Archiv für die gesamte Psychologie*, 17, 1-185. Study of comparison of impressions of weight: objects such as difference and Gestalt are lacking in reality; as such they are of course incapable of having effects on other real existing things, that is they are incapable of causing anything, and they are also incapable of affecting our sense organs. If, in spite of this, we have knowledge of them, and if we can acquire such knowledge only on the basis of an involvement of presentation, and if, on the other hand, our senses cannot be involved in the occurrence of this presentation, then we are forced to make processes other than sensory ones responsible for the occurrences of such presentations. (p.8)

On p. 95 Benussi argues that all relational judgements are judgements of Gestalt: that is, they have an intellectual rather than an intuitive character.

1911 "Über die Motive der Scheinkörperlichkeit bei umkehrbaren Zeichnungen", *Archiv für die gesamte Psychologie*, 20, 363-96. Reflects influence of Stumpf, Husserl and the Würzburg school and a gradual move away from Meinong. Perception is conceived by Benussi as a purely presentational activity, involving neither judgemental moments nor moments of belief.

Psychologie der Zeitauffassung, Heidelberg: Winter. Experimental methods developed in relation to visual phenomena extended to the sphere of temporal experience. See esp. the discussion of temporal analogues of the Müller-Lyer illusion and the discussion of 'foundation ambiguity' (when time intervals are separated by tones, the fact that tones can be grouped together in different ways leads to different sorts of errors in comparison of the lengths of the intervals involved).

1913a “Kinematohaptische Erscheinungen (Vorläufige Mitteilung über Scheinbewegungsauffassung auf Grund haptischer Eindrücke)”, Archiv für die gesamte Psychologie, 29, 385-88.


1914a “Gesetze der inadäquaten Gestaltauffassung. (Die Ergebnisse meiner bisherigen experimentellen Arbeiten zur Analyse der sogen. geometrisch-optischen Täuschungen [Vorstellungen außersinnlicher Provenienz])”, Archiv für die gesamte Psychologie, 32, 396-419. The totality of that which is given via any particular sense organ is not unambiguously determined in the way it will be apprehended by the psychic subject. Hence the process of making determinate what is ambiguous cannot be a sensuous process, which implies the existence of 'presentations of extra-sensory provenance' (p.400). This latter notion replaces the earlier notion of production, which had proved resistant to analysis or clarification.


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1914e “Die Atmungssymptome der Lüge”, *Archiv für die gesamte Psychologie*, 31, 244-73.


1925a “La suggestione e l’ipnosi come mezzi di analisi psichica reale”, *Rivista di Psicologia*, 21, 1-22. Investigates the possibility of employing hypnosis as an instrument of psychological investigation, carrying forward the ideas and results of Benussi’s earlier work on Gestalt. Contains a large number of experimental hypotheses in relation to a range of problems from psycholinguistics to psychology of
perception, hypotheses whose implications have still to be investigated.


A complete bibliography of Benussi’s writings to 1928 is to be found in Musatti 1928c. Benussi’s Nachlaß is to be found in the Institute of Psychology of the State University of Milan. See Stucchi 1988.


The formula that wholes are more than the sums of their parts has four important good meanings. The first is that... the composition rules of a theory are themselves empirical laws, so that, for instance, the laws of the process undergone by two interacting systems cannot be deductively derived from the two laws alone, which describe the processes the two part systems would undergo in isolation. The corresponding bad meaning is the belief, propounded with varying degrees of explicitness and confusion, that there are no composition rules; that every new complexity, or at least some levels of complexity, introduce some ill-defined novelty or emergence.

The second good meaning is that every closed system is an instance of dynamic interdependence or interaction. This means that as long as we do not know...
the formula for the process of a closed system, we must be prepared to find that the value at a certain moment of any of its relevant variables actually depends on the values of all these variables at an earlier moment. The corresponding bad meaning is the dogma of total dynamic interdependence, that is, the a priori denial of the existence of relative autonomies and of all similar or related features of theories and of the closed systems to which they apply.

The third good meaning is that the adequate description of the state of a system contains, in addition to the adequate descriptions of its subsystems, also the relational statements necessary to determine how the latter 'lie to each other'. The worst thing here is the illusion that only Gestaltists appreciate the point. Newton, as far as I know, did not ignore the distances between the sun and the planets.

The fourth good meaning is best explained by an illustration. Other things being equal, a subject's response $R$ to a stimulus $S_1$ presented by itself may be and sometimes is different from the response $R'$, made to $S_1$, when the latter is presented as part of a pattern, say, simultaneously with $S_2$, as in color contrast. The point is that $S_1$ itself is the second time exactly what it was the first and that one can nevertheless explain why the second response to it is different from the first. The corresponding bad meaning is, accordingly, the belief that $S_1$ itself has changed merely by becoming part of a whole, this being one of those fabled wholes that determine the nature of their parts. (pp.450f.)

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Birkhan, G.  see Reimann.


1966a  “Psychophysik der Raumwahrnehmung”, in Metzger and Erke, eds., 307-408.

1966b  “Stellungs-, Spannungs- und Lagewahrnehmung”, in Metzger and Erke, eds., 409-96. On the perception of one’s own body, of position and motion, and on the psychological relevance of the basic concepts of muscular physiology.

Bochorishvili, A. T.  1957/59/62  *Psik’ologis prints’ipuli sakit’khebi* (Fundamental Problems of Psychology), Tbilisi: Georgian Academy of Sciences, 3 vols. Described as a history and critique of bourgeois psychology; vol.2 deals with the phenomenological and holistic bases of Gestalt psychology.


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1928  I problemi attuali della psicologia del tempo, Milan: Istituto editoriale scientifico.

Bönisch, R.  

1939  "Über den Zusammenhang seelischer Teilstrukturen", Neue Psychologische Studien, 15, 1-144.

Boring, E.F.G.  


1930  "The Gestalt Psychology and the Gestalt Movement", American Journal of Psychology, 42, 308-315. On the confused reactions to Gestalt psychology in America; Boring claims that Gestalt psychology feeds on and cultivates a fictitious opposition between itself and earlier views.


1936  "Psychophysiological Systems and Isomorphic Relations", Psychological Review, 43, 565-87: 'there seems to be nothing more to isomorphism than the tautology that, since introspection means (is determined by) an antecedent neural system, the meaning of introspection is that neural system' (p.583).


Bosinelli, M.  

1975  "Osservazione su alcuni casi di trasparenza fenomenica realizzabili con figure e tratto" in Flores d'Arcais, ed., 88-110.

Bosinelli, M., Canestrari, R. and Minguzzi, G. F.  

1960  "Beitrag zum Problem der gekreuzten und ungekreuzten Bewegungen", Psychologische Beiträge, 5 (Metzger FS), 8-22. On the ambiguity between crossing and non-crossing
movement where the entire stimulus frame is in motion and/or subject to stroboscopic effects.


Bouman, J. C. 1968 *The Figure-Ground Phenomenon in Experimental and Phenomenological Psychology*, Stockholm: Fallmarks.


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<th>Author(s)</th>
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<tr>
<td>Bradley, D. R.</td>
<td>1983</td>
<td>“Nuove osservazioni sui margini soggettivi”,</td>
<td>Giornale Italiano di Psicologia, 10, 329-58.</td>
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<tr>
<td>Brentano, F.</td>
<td>1892</td>
<td>“Über ein optisches Paradoxon”,</td>
<td>Zeitschrift für Psychologie und Physiologie der Sinnesorgane, 3, 349-58, rep. in Brentano 1907. Early study of the Müller-Lyer illusion which is explained by Brentano as a consequence of the overestimation of smaller and the underestimation of bigger angles.</td>
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<tr>
<td>1913</td>
<td>Brod, M. and Weltsch, F.</td>
<td><em>Anschauung und Begriff. Grundzüge eines Systems der Begriffsbildung</em>, Leipzig: Wolff. A detailed examination of the ways in which acts of naming and of grasping concepts, relations and Gestalt-qualities have their foundation in a bed of underlying ‘hazy presentations’ (‘<em>verschwemmene Vorstellungen</em>’). Ch. 8 on “Relations and Acts” discusses the theories of Gestalt qualities put forward by Meinong, Höfler and Gelb. The work closes with a treatment of the genesis of scientific concepts.</td>
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Brunswig, A. 1910 *Das Vergleichen und die Relationserkenntnis* (Dissertation, Munich), Leipzig and Berlin: Teubner. On the ontology of relations as founded entities and on our experience thereof, especially via different sorts of comparison.


Brunswik, E. 1929 “Prinzipienfragen der Gestaltpsychologie”, in Brunswik, et al., 79-149. Thorough survey, in part historical. Brunswik stresses the importance of sensations as field-filling qual-
Brunswik, E. (cont.)

ities, and argues that these cannot be conceived merely as dependent moments of surrounding structures, as the Berlin school would claim. Conceives Gestalten themselves as *moments of experiences*.

1933

"Untersuchungen über Wahrnehmungsgegenstände [E. Brunswik, ed.], 1. Die Zugänglichkeit von Gegenständen für die Wahrnehmung und deren quantitative Bestimmung", *Archiv für die gesamte Psychologie*, 88, 377-418. (See also Holaday, Eissler, Klimpfinger.)

1934

Wahrnehmung und Gegenstandswelt. *Grundlegung einer Psychologie vom Gegenstand her*, Leipzig and Vienna: Deuticke, extracted in Hammond, ed., 514-34. Dedicated to his teacher Bühler and influenced by Brentano. Puts forward a psychology of perception oriented towards the object, summarizing results of experiments of object-constancy (*Dingkonstanz*). This goes beyond the Berlin Gestalt psychologists by analysing and describing two types of invariance of structure (two types of transposability) which they ignore: sum-transposability, which relates to the constancy of additive properties of e.g. surfaces and volumes through variations in form; and index-transposability, which relates to those cases where different marks or symptoms of a property can stand in for one another (as e.g. shadows, perspective, colour-distortions, etc. can all serve as significant indices in the perception of distance). Brunswik goes beyond the actualism of the Berlin school to consider not merely relational structures involving actually existing elements but also functional correlations involving virtual elements. He also draws a distinction between casual distance and intentional depth, thereby stressing the double structure of the layered environment of the organism. He criticizes Brentano and Husserl for employing the notion of intentionality in such a way that objective reality is never quite reached.

1935 Experimentelle Psychologie in Demonstrationen, Vienna: Springer.


1938 “Die Eingliederung der Psychologie in die exakten Wissenschaften”, Einheitswissenschaft, 6, 17-34.


Considering the most characteristic core of problems actually treated by Gestalt psychology in the field of perception, the chief difference as compared with traditional psychophysics lies in the extention of the notation of the stimulus to that of a stimulus pattern... Gestalt psychology [is] still fragmentary insofar as it is, in its most elaborate parts, a psychology from the retina inward, so to speak.

1940 “Thing Constancy as Measured by Correlation Coefficients”, Psychological Review, 47, 69-78.


stimulus situations over a natural ('ecological')
array if experiments are not to falsify their
subject-matter.

1949
“Remarks on Functionalism in Perception”,
Journal of Personality, 18, 56-65, repr. in J. S.
Bruner and D. Krech, eds., Perception and
Personality: A Symposium, Durham, N. C.:

1952
The Conceptual Framework of Psychology
(International Encyclopedia of Unified Science,
1, no. 10), Chicago: The University of Chicago
Press.

1956
Perception and the Representative Design of
Psychological Experiments, Berkeley: University of California Press, (Part I is a reprint of
Brunswik 1947; Part II is entitled “Percep-
tion: The Ecological Generality of its Distal
Aim”).

1957
“Scope and Aspects of the Cognitive Problem”
in Contemporary Approaches to Cognition,
Cambridge, Mass.: Harvard University Press,
5-31.

1959
“Reasoning as a Universal Behavior Model
and a Functional Differentiation between
‘Perception’ and ‘Thinking’” (Read at the
International Congress of Psychology in

1953
Brunswik, E. and Kamiya, J.
“Ecological Cue-Validity of ‘Proximity’ and
of other Gestalt Factors,” American Journal of
Psychology, 66, 20-32. Proximity is a learned
cue: it is not innate, as orthodox Gestalt psycho-
logy maintains.

1929
Brunswik, E. and Kardos, L.
“Das Duplizitätsprinzip in der Theorie der
Farbenwahrnehmung”, Zeitschrift für Psycholo-
gie, 111, 307-20. On Bühler’s duplicity
principle, according to which phenomenal
colour is dependent not on the single factor of
illumination but on the dual factor of figural
illumination and ground illumination.

1938
Brunswik, E. and Reiter, L.
“Eindruckscharaktere schematisierter Ge-
sichter”, Zeitschrift für Psychologie, 142, 67-
134.


1913 *Die Gestaltwahrnehmungen: experimentelle Untersuchungen zur psychologischen und ästhetischen Analyse der Raum- und Zeitanschauung*, 1 (only volume published), Stuttgart: Spemann. Characterization of Gestalt-perception as perception of proportions. Bühler begins with a survey of theoretical reflections on Gestalt qualities from Mach and Ehrenfels to Witasek, Benussi and Lipps. There follows a largely experimental treatment of the perception of visual Gestalten such as straightness, curvedness, symmetry, etc. Includes an early presentation of the idea of (psycho-)physical Gestalten.


1922 *Die Erscheinungsweisen der Farben (Handbuch der Psychologie. I. Struktur der Wahrnehmung, 1)*, Jena: Fischer.

school of being theory blind and of treating Gestalt as a maid-of-all-work.


1927 Die Krise der Psychologie, Jena: Fischer (2nd ed., 1929, repr. Frankfurt: Ullstein, 1978). On the conflict between behaviourism, the psychology of conscious experience (‘Erlebnispsychologie’) and psychology as Geisteswissenschaft. Includes statement of Vienna school ‘compromise’ as between Berlin and Graz Gestalt psychology according to which Gestalten would be accepted as objects of experience alongside elementary sensations. Gestalt ambiguity is resolved not, as on the Graz production theory, by special intellectual processing on the side of the subject. Such ambiguity is resolved rather by dynamical structures in the objective sphere which condition certain effects.


Burke, L. 1952 “On the Tunnel Effect”, Quarterly Journal of Experimental Psychology, 4, 121-38, repr. in Michotte et al. 1962, 374-406. Observers are presented with two similar objects in successive movement in the same plane in such a way that the end of the first movement and the beginning of the second are hidden by a screen (tunnel). Under proper experimental conditions, the impression received is one of continuous and uniform movement by a single object passing behind the screen. Phenomenal dilation of the time required for completing motion is also experienced.

Burkhardt, H. 1925 Zum Problem der Ganzheit. Ein Beitrag zur Theorie des Psychischen, Dissertation, Leipzig; inspired by F. Krueger. Distinguishes three theories of the way in which psychic wholeness arises: (i) production theories (Graz school, Schumann, G. E. Müller’s attention theory); (ii) physical theories (Berlin school); (iii) psychical theories (Driesch, Leipzig school). According to (iii), psychical wholeness is a reflection of the mind or soul; mental totalities manifest a sui generis and inexplicable qualitative peculiarity.

1934 “Theoretisches zur Gestaltproblematik”, Archiv für die gesamte Psychologie, 91, 490-506.


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<th>Author(s)</th>
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<tr>
<td>Burton, A.</td>
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<td>Canestrari, R.</td>
<td>1975</td>
<td>“A Further Study of the Phenomenon of the ‘Rotating Trapezoidal Window’”, in Flores d’Arcais, ed., 157-65. Criticizes cognitive explanations of the Ames illusion (i.e. explanations in terms of unconscious inferences on the basis of past experiences), pointing out that the same phenomenon can be obtained in relation to rotating elements void of any prior significance. See also Bosinelli, <em>et al.</em></td>
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<td>Cappellina, A.</td>
<td></td>
<td>see Gemelli and Cappellina.</td>
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<tr>
<td>Carpenter, P.</td>
<td>1965</td>
<td>“Musical Form Regained”, <em>Journal of Philosophy</em>, 64, 36-47. Music as temporal Gestalt.</td>
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<tr>
<td>Cassirer, E.</td>
<td>1910</td>
<td><em>Substanzbegriff und Funktionsbegriff</em>. Berlin: 3rd ed., Darmstadt: Wissenschaftliche Buch-</td>
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gesellschaft, 1969, Eng. trans. as *Substance and Function*, New York: Dover, 1953. The final section (ch. 8 “Zur Psychologie der Relationen”) has a commentary on the Graz school (pp.433ff.).


Chattaway, L. D. see Kennedy and Chattaway.


Clayton, T. see Rock, Halper and Clayton.


265

Coren, S.


Cornelius, H.


1900  “Über ‘Gestaltqualitäten’”, *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*. 22, 101-21. Defends a human treatment of the recognition of similarity of contents. Because certain complex contents may manifest similarity even despite the lack of any similarity-relations among their parts, we are led to postulate new characters called ‘Gestaltqualitäten’ (p. 113). But where for Ehrenfels irreducible similarity of complexes is an argument for the existence of Gestalt qualities, for Cornelius our talk of Gestalt qualities is merely a roundabout way of referring to such similarity (p. 115). Attempts to reduce Gestalt qualities to relations or to feelings (cf. Mach) are mistaken, since both relations and feelings are themselves varieties of Gestalt qualities (116ff.)


1906  “Psychologische Prinzipienfragen. I”, *Zeitschrift für Psychologie*. 42, 401-13. Defends the view that what is immediately given in consciousness is a flow or stream, that Gestalt qualities are a reflection of the gradual organization of this flow in time.


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<th>Name</th>
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<tr>
<td>Crabbé, G.</td>
<td>1962</td>
<td>“Rivalité entre différents types d'organisation structurale de causalité perceptive”, in Michotte <em>et al.</em>, 259-74. See also Michotte, Thinnès and Crabbé.</td>
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<td>de Groot, A. D.</td>
<td></td>
<td>see Frijda and de Groot, eds.</td>
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<td>Dénes, M.</td>
<td>1933</td>
<td><em>A târgy problémája Brentanonal és Meinongnál</em> (The Problem of <em>Gegenstand</em> in Brentano and Meinong), Budapest: Elek. Esp. the treatment of the relation between <em>Gegenstandstheorie</em> and psychology.</td>
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<tr>
<td>Author</td>
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<td>Title and Details</td>
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<td>Diack, H.</td>
<td>1921</td>
<td>“Das Köhler-Wertheimer’sche Gestaltprinzip und die moderne Tierpsychologie”, Lotos (Prague), 69, 143-227, with discussion, 227-42: see Kraus 1921.</td>
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<td>Dieker, J.</td>
<td>1971</td>
<td>see Stadler and Dieker.</td>
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<td>Dinnerstein, D.</td>
<td>1971</td>
<td>see Köhler and Dinnerstein.</td>
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<tr>
<td>Dodwell, P. C.</td>
<td>1970</td>
<td>Visual Pattern Recognition, New York: Holt. Ch.1 is critical of Köhlerian Gestalt theory, both empirically and theoretically.</td>
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<td>Dreistadt, R.</td>
<td>1971</td>
<td>“Towards a Unified Helmholtz and Koffka</td>
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1926  "Kritisches zur Ganzheitslehre", Annalen der Philosophie, 5, 281-304.

1927/28  "Ganzheit und Wohlordnung", Annalen der Philosophie, 6, 274-83. Since all experiences are in some sense well-ordered, talk of a 'tendency' to Ganzheit in experience is inappropriate.

Dumais, S. see Bradley and Dumais.

Dun, F. T. 1959  "Some Reconsiderations of the Integrative Action of the Nervous System in Special Reference to the Psychology of Gestalt and Development", Zeitschrift für experimentelle und angewandte Psychologie, 6, 394-409. Criticizes three basic concepts of neurophysiology (synapse, reflex arc, and reflex), arguing that the nervous system is not a passive machine but manifests spontaneity.
Duncker, K.  
1926  “A Qualitative (Experimental and Theoretical) Study of Productive Thinking (Solving of Comprehensible Problems)”. The Pedagogical Seminary and Journal of Genetic Psychology. 33, 642-708.

1929  “Über induzierte Bewegung (Ein Beitrags zur Theorie optisch wahrgenommener Bewegung)”. Psychologische Forschung. 12, 180-259. extracted in Ellis, ed. as “Induced Motion”, 161-72. How is it possible that stationary objects are usually seen as stationary even when our eyes are moving? How is it possible that the spatio-temporal distribution of stimuli on the retina yields both the perception of an external world and the perception of the state of motion of the perceiver? (A question later considered by J.J. Gibson.) The ‘induced motion’ of the title is the phenomenon which occurs e.g. when one is sitting in a railway carriage and a nearby train moves off, so that it seems for a time as if one’s own train were moving in the opposite direction. This phenomenon shows that the things upon which one’s regard is directed supply a system of reference for visual space into which the moving glance is inserted.


1935  Zur Psychologie des produktiven Denkens. Berlin: Springer, repr. 1963. Eng. trans., “On Productive Thinking”, Psychological Monographs, 1945, 58/5. Definitive Gestalt-theoretical study of problem-solving. Criticizes assumption that the relation between founding and founded contents implies a genetic priority of the former, and shows how the proper establishing of the dependence and derivation relations and of the relative weights of the various factors involved in a given structure is crucial both to creative thinking and to proving and inferring. Includes an affirmation of the Husserlian theory of the material a priori:
...we do not reduce the synthetic a priori to prescriptions of reason [Verordnungen] invested in the object, but conceive this a priori as intrinsic in the nature of the objects themselves. (Eng. trans., p.55)

1937

1939

1939a

1947

Duncker, K. and Krechevsky, J.
1939

Duncker, K. and Wolff, W.
1934

Dunlap, K.
1912

Eberhardt, M.
1924

1924
Größenrelationen und Zahlen. Eine psychologische Studie. (Dissertation, Graz). On presentations of relations of number and magnitude (similarity, comparison, relations of more and less).


“Weiterführende Bemerkungen”, in Ehrenfels 1922, 95-112, and repr. in Weinhandl, ed., 47-60. Considers five difficulties raised by the theory of Gestalt-qualities: 1. How is it possible, given the radical heterogeneity between tones and the ‘determinations of place’ which provide the foundation for a spatial shape [‘Raumgestalt’], to employ for both the same concept of Gestalt? 2. Is it possible that the foundation for a Gestalt quality should be given in consciousness without the Gestalt quality itself, as the production theorists claim? 3. What is to be said about the constituent part-melodies
which would seem to be involved whenever we hear a whole-melody? 4. How is the difference between Gestalt quality and relation strictly to be characterized? Via the intuitive character of the former? 5. Are Gestalt qualities real entities, existing also outside our presentations? And if Gestalt qualities exist in time, when, precisely, would the melody exist, which is made up of these presently sounding tones.


Ehrenstein, W.


1934  *Einführung in die Ganzheitspsychologie*, Leipzig: Barth.


1938  “Untersuchungen über Bewegungs- und Gestaltwahrnehmung. V: Versuche über
Bewegungssehen ohne Dunkelpause", Zeit­
schrift für Psychologie, 144, 261-70.

1940 “The region of the vision-field within which arbitrary reversion of ambivalent figure-ground patterns is possible”, Journal of Experimental Psychology, 27, 699-702.


1960 “Christian von Ehrenfels’ Kriterium der Gestalthöhe” in Weinhandl, ed., 121-31. ‘That the quality fitting to the whole [zum Ganzen passend] should impress itself on one is the decisive foundation of aesthetic appreciation.’

1983 “Über die Bedeutung von Leibniz’ Psychologie der Gestalt und Ganzheitspsychologie” (Lecture, first delivered in 1946), Gestalt Theory, 5, 77-82.

1935 “Gestalttheorie, Gestaltpsychologie und Ty­pologie. I: Der Gestaltbegriff der Berliner Schule unter naturphilosophischem und experimentell-psychologischem Gesichtspunkt”, Zeitschrift für Psychologie, 136, 209-61 (Dissertation, Marburg). Criticizes Berlin school for employing an over-general concept of Gestalt, not rooted adequately either in physics or in ordinary experience. Ascribes the success of the Berlin school experiments to the fact that the subjects were normally themselves persons trained in the doctrines and methods of Gestalt psychology. Somewhat superficial.

1938 “Gestalttheorie, Gestaltpsychologie und Ty­pologie. II: Das Vorgestalterlebnis unter


Ekman, G. see Künnapas and Ekman.


Ellis, W.D. 1930 *Gestalt Psychology and Meaning*, (Dissertation, Berkeley: Sather Gate). Interesting review of early work on Gestalt, presenting an interpretation of Gestalt ideas in behavioural terms influenced by Tolman. Ellis pays particular attention to problems of language and meaning in relation to Gestalt theory. The book includes also a glossary of Gestalt terminology and an appendix on philosophical background.


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<td>1977</td>
<td>Epstein, W.</td>
<td>“Historical Introduction to the Constancies”, in Epstein, ed., 1-22. See also Hatfield and Epstein.</td>
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| 1898 | Erdmann, B. and Dodge, R. | Psychologische Untersuchungen über das Lesen auf experimenteller Grundlage, Halle: Niemeyer. Seminal study of reading and word-memory. A letter (or indeed a word) ‘is the whole we perceive not only on the basis of the optical components into which it can be analysed, but also and primarily as a result of the characteristic configuration of these components’.
| 1942 | Erickson, R.W. | “Isomorphism as a Necessary Concept”, Journal of General Psychology, 26, 353-58. Accuses Boring’s 1936 of willful confusion, pointing out that the psycho-physical identity theory defended by Boring has to face just the same difficulties as a theory based on isomorphism. |

1975 “Gestaltpsychologische Denkmodelle für die Struktur der Sprache”, in S. Ertel, *et al.*, eds., 94-105. Interesting comparison of grammatical structures of sentences with different sorts of carrier/dependence structures (including structures of the sort investigated by Michotte in his work on perceived causality).


1981 “Wahrnehmung und Gesellschaft. Prägnanz­tendenzen in Wahrnehmung und Bewusstsein”, *Zeitschrift für Semiotik*, 3, 107-41. Early Gestalt ideas on perception are brought together with information-theoretical work on entropy-reduction and applied to Prägnanz-tendencies on higher cognitive levels (e.g. in language, in ideologies, in map-making). Includes an illuminating chart of pragnant and non-pragnant expressions of qualities in different dimensions.

Ertel, S., Kemmler, L. and Stadler, M., eds. 1975 *Gestalttheorie in der modernen Psychologie*, Darmstadt: Steinkopff (Metzger Festschrift). Includes chronological survey of Gestalt psychology (pp.9-12).


Ein Beitrag zur intellektuellen Biographie", in Fabian, ed., 1-63.


La fenomenologia della percezione, Milan: Società Editrice 'Vita e pensiero'. With preface by Gemelli. Part I is on the theory of association; Part II on Gestalt theory ("La nuova teoria della forma"), with chapters on normal perception, perception of space and motion, and on pathologies of perception. The work concludes with a detailed critique (333-438).


"Contributo alla misura psicofisica della 'buona forma'", Bollettino della Società Italiana di Biologia sperimentale, 41, 1506-09.

see Brown and Fedar.

Beiträge zur musikalischen Gestaltanalyse, Graz/Innsbruck/Vienna: Akademische Druck- und Verlagsanstalt. The central chapter is on musical form as totality.

see Helson and Fehrer.

"Philosophical Embarrassments of Psychology", Psychologische Beiträge, 6 (Köhler Festschrift), 340-64.

Das Problem der Gestaltilqualität in der Musik, (Dissertation, Vienna).

"Untersuchung über Wahrnehmungsgegenstände [E. Brunswik, ed.], VII. Dressursversuche an der Farbenwahrnehmung", Archiv für die gesamte Psychologie, 96, 467-95.

Intellectual knowledge and discursive insight play no role in colour perception which is a primitive, relatively autonomous system. On the importance of the depth articulation resulting from the organization of the visual field and the changes in colour caused thereby. Expansion of Fieandt 1936, on the basis of experiments carried out in Vienna.

1938a “Über Sehen von Tiefengebilden bei wechselnder Beleuchtungsrichtung”, Psychologisches Institut der Universität Helsinki. On the part played by direction of illumination in the perception of depth.


1974 “Some Psychological Constituents and Aspects of Object Perception”, in MacLeod and Pick, eds., 72-83. On the error of regarding the stimulus basis of perception too physically and ignoring what Gibson calls ecological aspects. Special attention is paid to the phenomena of identification and anticipation in the building up of the perceptual world. (The author refers particularly to Kaila, Michotte, Ternus.)


1975a “Some Perceptual Determinants of Sentence Construction”, in Flores d’Arcais, ed., 344-73. Experimental investigation of the ways in which figural characteristics of stimulus configuration may affect the structure of sentences used to describe the configuration; refers particularly to the effects of relative size and location on the use of active/passive constructions.


Förster, N.

1930  "Die Wechselbeziehungen zwischen Gesichts- und Tastsinn bei Raumwahrnehmung", *Psychologische Forschung*, 13, 64-78.

Fraisse, P.


1942/43  "La reproduction des formes rythmiques", *Année psychologique*, 43-44, 103-43.


1947  "De l'assimilation et de la distinction comme processus fondamentaux de la connaissance", in *Miscellanea Psychologia Albert Michotte*, Louvain: Editions de l'Institut Supérieur de Philosophie, 181-95.

1948  "Rythmes auditifs et rythmes visuels", *Année psychologique*, 49, 21-42.


1956  *Les structures rythmiques Etudes psychologiques*, Paris: Erasme (with preface by Michotte). On rhythm forms, their laws of
organization and the tendency to good Gestalt in their reproduction.


1966 “Zeitwahrnehmung und Zeitschätzung”, in Metzger and Erke, eds., 656-691. On the physical, physiological and psychological factors involved in the perception of temporal sequences and in the estimation of temporal intervals.


underlying simple tactual perceptions (peripheral excitations).


1922 "Über Farbenänderungen unter dem Einfluß von Gestaltauffassungen", in K. Bühler, ed.,
“Untersuchungen über die psychologischen Grundprobleme der Tiefenwahrnehmung [E. Schumann, ed.] III. Experimentelle Untersuchungen über das experimentelle Hintereinanderschreiben auf derselben Schichtung”. Zeitschrift für Psychologie, 91, 145-235. Extracted in Ellis, ed. as “On Transparency”, 89-94. When I look through a transparent object do I really see a complete, unbroken surface in front and at the same time another, more distant surface behind? Such simultaneous perception of two objects is shown to be possible only when the boundary lines of the proximate object protrude beyond those of the more distant object, and is a function of the figural adequacy (unity) of the two objects. It does not occur if the subject concentrates on either object.

“Experimentelle Untersuchungen über die Änderung von Farben unter dem Einfluß von Gestalten (‘Angleichungsscheinungen’)”. Zeitschrift für Psychologie, 92, 249-325. Extracted in Ellis, ed., as “The Influence of Form on the Assimilation of Colours”, 95-103. The simultaneous perception of two colours in the same visual direction is possible when both objects are seen as independent Gestalten, one protruding beyond the other, but then the nature of this protrusion is shown to influence the colour of the overlapping area.


Galli, A. and Zama, A. 1931  "Ricerche sulla percezione di configurazioni geometriche piane mascherate in tutto o in parte di altre configurazioni", in Contributi del Laboratorio di Psicologia, Università Cattolica del S. Cuore, Milan, VI (Series 5), 29-77.


1970 "Good Patterns have Few Alternatives", American Scientist, 58, 34-42.


Gelb, A. 1911 "Theoretisches über 'Gestaltqualitäten'", Zeitschrift für Psychologie, 58, 1-59. Study from
the Institute of Psychology in Berlin of early work on Gestalt qualities from Ehrenfels to Lipps, Marty and Stumpf, with special reference to the Graz production theory and to the question whether a specific mental exertion is necessary for the apprehension of Gestalt qualities (e.g. of relations of identity and difference). Gelb argues in particular that the relations between elements must belong to the foundation of a Gestalt, in addition to the elements themselves: (a) because relations too can have the force of stimuli; (b) because such a view explains how transposability is possible. From this it follows that Gestalt qualities cannot themselves be relations but something *sui generis*, for a Gestalt such as a melody would otherwise be not a unity but a multiplicity. Cf. Pupp 1932.

1914

“Versuche auf dem Gebiet der Zeit- und Raumschauung”, in F. Schumann, ed., *Bericht über den 6. Kongreß für experimentelle Psychologie in Göttingen, 1914*, Leipzig: Barth, 36-42. The tendency to good Gestalt draws attention to itself in the fact that, in certain conditions, Gestalt ‘improvements’ are in actuality deteriorations, since they hinder our perception of what is really there. Thus for example when three successive points of light are given at equal spatial distances but unequal temporal distances, there is a tendency for the experienced temporal distances to even out.

1922


1929

“Die ‘Farbenkonstanz’ der Sehdinge”, *Handbuch der normalen und pathologischen Physiologie*, A. Bethe, et al., eds., 12/1, 594-677, Berlin: Springer. extracted in Ellis, ed., as “Colour Constancy”, 196-209. Thorough survey of literature on colour constancy (on the reasons why white paper is seen as white whether seen in daylight or in moonlight).


Gemelli, A. 1928 "Über das Entstehen von Gestalten. Beitrag zur Phänomenologie der Wahrnehmung", Archiv für die gesamte Psychologie, 65, 207-268. Emphasizes esp. the role of meaning or significance in the perception of Gestalten and employs a principle of greatest economy (or energy equilibrium) as a means of understanding the organization of sensory data.


1933  "Adaptation, After-Effect and Contrast in the Perception of Curved Lines", Journal of Experimental Psychology, 16, 1-31. Discovery of figural after-effects, i.e. the phenomenon according to which certain visual patterns, after prolonged observation, are changed, and other figures afterwards presented in the same region are also altered.


1937a  "Adaptation with Negative After-Effect", Psychological Review, 44, 222-44.


1941a  "Visual Organization in Relation to Camouflage", in W. S. Fernberger, ed., Perception (Psychological Bulletin, 38), 432-68.

in natural situations suggests that there is a much greater agreement in how people see the world than psychologists have generally supposed. Gibson defends a causal theory of perception as a means of guaranteeing the correctness of our perceptions in ordinary circumstances.

1951 “What is a Form?”, *Psychological Review*, 58, 403-12, repr. in Gibson 1982, 303-16. Distinguishes various meanings of ‘form’ in relation to perceived objects; opposes solid and surface forms, which are real, to outline forms, pictorial, plan, and perspective forms, which are representations only.


1967 “New Reasons for Realism”, *Synthese*, 17, 167-72. repr. in Gibson 1982, 375-83. On the epistemological implications of the new theory of perception as a matter of picking up properties of the environment invariant over time. Gibson argues that there is sophisticated support for the naive belief in the world of
objects and events, and for the simple-minded conviction that our senses give knowledge of it' (p. 168).

1968 “What gives rise to the perception of motion?”, *Psychological Review*, 75, 335-46, repr. in Gibson 1982, 180-93.


Gilchrist, A. see Rock and Gilchrist.
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psychology and of the Piaget school as the two main rivals of American behaviourism.


Goldmeier, E. 1937  “Über Ähnlichkeit bei gesehenen Figuren”, Psychologische Forschung, 21, 146-208. By student of Wertheimer. Perceived similarity is not simply a matter of agreement of parts nor of relations between parts. It depends much rather upon a grasp of Gestalt properties of perceived stimuli, for example their tendency to completion or closure. This view explains for example how similarity can be perceived even through certain kinds of deformations and transformations (as e.g. in caricature).


1972  Similarity in Visually Perceived Forms, New York: International Universities Press. Expanded version of Goldmeier 1937 with a foreword by I. Rock. In an additional chapter on similarity spaces, Goldmeier argues that certain dimensions of a similarity space may admit of only a small number of discrete values.


1934  Der Aufbau des Organismus. Einführung in die Biologie unter besonderer Berücksichtigung der Er­fahrungen am kranken Menschen, The Hague: Nijhoff; Eng. trans. as The Organism. A
Holistic Approach to Biology Derived from Pathological Data in Man, with a Forward by K S. Lashley, New York: American Book Co., 1939. Especially ch.8 on physical Gestalten. Whilst sharing in common with the Berlin Gestalt psychologists a holistic methodology, Goldstein criticizes the latter for concentrating too narrowly on certain partial aspects of experience and neglecting the organism as a whole:

The Gestalten which are given in perception through one sensory organ are Gestalten which belong to a very definite condition of the organism, namely to an isolated stimulus utilization in one part, while the rest of the organism is artificially kept relatively constant. (Eng. trans. p.374)

Thus Goldstein sees e.g. the tendency to good Gestalt as a ‘tendency to the preferred and most suitable behavior of the whole organism in specific situations’ (p.380). See also Gelb and Goldstein.

Gomperz, H. 1905/08 Weltanschauungslehre, vols. 1 and II/1 (only volumes published), Jena and Leipzig: Diederichs. See e.g. II/1, pp.106ff.

Goodman, N. 1978 Ways of World-Making, Hassocks: Harvester Press. See the discussion of Kolers on the perception of motion (ch.5).

experimental procedure in such a way as to give rise to an active rather than a passive attitude of the subject is of much greater significance. The paper includes a discussion of the phenomenal characteristics of 'internal unity' in general (i.e. of the question: what is it to perceive something in something else?).

1929

"Uber den Einfluß der Erfahrung auf die Wahrnehmung von Figuren, II. Vergleichende Untersuchung über die Wirkung figuraler Einprägung und den Einfluß spezifischer Geschehensverläufe auf die Auffassung optischer Komplexe", *Psychologische Forschung*, 12, 1-87, extracted in Ellis, ed., 123-35. Repeats the investigations of part I, which involved cases of high figural cohesion, in regard to cases where internal cohesion is lower. Again shows that the idea that there are automatic lasting effects of earlier experience has to be rejected.

Gowin, D.B. 1954


Granit, A. R. 1921

"A Study on the Perception of Form", *British Journal of Psychology*, 12, 223-47. See also Gelb and Granit.

Graßl, W. and Smith, B. 1986


Graumann, C.-F. 1960

*Grundlagen einer Phänomenologie und Psychologie der Perspektivität*, Berlin: De Gruyter.

Graumann, C.-F. ed. 1985


Green, R.T. and Courtis, M.C. 1966


Gregg, F.M. 1932


Grelling, K. and Oppenheim, P. 1937/38a “Supplementary Remarks on the Concept of Gestalt”, Erkenntnis, 7, 357-59; in this volume, 207-10.


1939a “Concerning the Structure of Wholes”, Philosophy of Science, 6, 487-8 (comment to Angyal 1939).

consists in the naive transfer of a model taken specifically from perceptual psychology to an object domain that is specifically cognitive (p.139). Groeben considers the possibility of employing the Gestalt theory of productive thinking and other, related approaches for the development of a more adequate psychology of science.


1977 “Structures versus Sets: The Philosophical Background of Gestalt Psychology”, Crítica. Revista Hispanoamericana de Filosofía, 9, 3-21. Structures are identical if and only if (a) their non-relational parts are identical, (b) their relational parts are identical, and (c) the non-relational parts stand in the same relations to each other. Parts of structures thus have relational properties which they would not have in isolation. Includes a somewhat one-sided criticism of Stumpf's account of co-variation.


Grubissa, B. see Kanizsa and Grubissa.


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<th>Author(s)</th>
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<tr>
<td>Guillaume, P.</td>
<td>1925</td>
<td>“La psychologie de la forme”, <em>Journal de Psychologie normale et pathologique</em>, 22, 768-800.</td>
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<td>1947</td>
<td>“Peut-on décrire un phénomène?” in <em>Miscellanea Psychologica Albert Michotte</em>, Louvain: Editions de l'Institut Supérieur de Philosophie, 1-12. Phenomenal causality is experienced to the same degree whether subjects are asked to concentrate exclusively on what is given phenomenally or on the physical cause of the events perceived. In both cases the responses are determined by the temporal interrelationships of the perceived events.</td>
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<tr>
<td>Gulick, W. L.</td>
<td>1985</td>
<td>see Smith, W. M. and Gulick.</td>
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| Gurwitsch, A.      | 1929 | “Phänomenologie der Thematik und des reinen Ich. Studien über Beziehungen von Gestalttheorie und Phänomenologie”, *Psychologische Forschung*, 12, 279-381. (Dissertation, Göttingen); Eng. trans. as “Phenomenology of Thematics and of the Pure Ego: Studies of the Relation between Gestalt Theory and Phenomenology”, in Gurwitsch, 1966, 175-286. Historically important comparison; see esp. the discussion of Husserl’s notion of horizon and of the relation theme/thematic field (a generalization of the relation of figure/ground). See also the distinction between two sorts of Gestalt-connection (i) between theme and associated thematic field, (ii) within a single object or Gestalt serving as theme. Argues that the Gestaltists’ rejection of the constancy
hypothesis yields a position close to phenomenology, since it implies the necessity of studying 'the phenomena themselves', independently of their objective conditions.


1955  “The Phenomenological and the Psychological Approach to Consciousness”, Philosophy and Phenomenological Research, 15, 303-19, and in Gurwitsch 1966, 89-106. On Gestalt theory and the Husserlian concept of noema: the percept, as it is conceived after the constancy hypothesis has been dismissed, is just the noema, the perceptum qua perceptum.


Halper, F.  see Rock, Halper and Clayton.

Hamburger, R. 1927 Neue Theorie der Wahrnehmung und des Denkens, Berlin: Stilke. Attempts to develop an account of the nature and role of phenomenal Gestalten on the basis of a Machian theory of minimal exertion of psychic energy.


1957 The Psychology of Perception. A Philosophical Examination of Gestalt Theory and Derivative Theories of Perception, London: Routledge and Kegan Paul. Criticizes Gestalt theory, including the work of Michotte and Gibson, for confusing conceptual and empirical claims. Hamlyn stresses the role in perception of learned classificatory abilities and of cultural and social factors generally, concluding with a discussion of uses of 'seeing as'.


Hänsel, L. 1960 “Der Gegenstand des Begriffs und die Logik”, in Weinhandl, ed., 160-77. Objects as apprehended through concepts are Gestalten (or founded objects in Meinong's sense). Wittgenstein-influenced study of Meinongian ideas.


1932  “Organization in Higher Mental Processes”, *Psychologische Forschung*, 17, 56-120. Study of Gestalt properties of jokes and related material. Argues that phenomena of segregation and integration, strong and weak Gestalten and various types of closure are present also in nonperceptual consciousness. Structural properties are shown to be conducive to memory.

1936  “Some Factors Determining Figure-Ground Articulation”, *British Journal of Psychology*, 26, 407-24.


Hartmann, G. W.  1932  “Configural Factors in the Understanding of Actions”, *Journal of General Psychology*, 7, 438-52.


\begin{quote}
The particular model of brain activity advocated by the Gestalt psychologists has long since been discarded, and a new account of the minimum process based on contemporary knowledge of the brain has not been formulated. Nevertheless, a number of contemporary investigators have concluded that an excessively atomizing approach to physiological psychology is bound to fail, and that the problems of neurophysiology require confronting the theoretical and experimental perspectives demanded by the global, statistical or Gestalt aspects of the nervous system. (p.179)
\end{quote}


Hayek, F. A. von 1952 \textit{The Sensory Order. An Inquiry into the Foundations of Theoretical Psychology}, London: Routledge and Kegan Paul. Study of the interrelations of the senses. Implies that all mental qualities are so interrelated that any attempt to give an exhaustive description of one of them would make it necessary to describe the relations existing between all of them.

1963 “Rules, Perception and Intelligibility”, \textit{Proceedings of the British Academy}, 48 (for year 1962), repr. in Hayek’s \textit{Studies in Philosophy, Politics and Economics}, London: Routledge and Kegan Paul, 1967, 43-65. On the idea of mechanisms allowing the transference of the capacity to discern abstract orders or arrangements from one subject or field to another,
and on the implications of this idea for the understanding of e.g. language-learning, imitation and the perception of emotions. The essay concludes with a discussion of the analogies between rules for perception and rules for action and of the tacit knowledge involved in our comprehending the meanings of the actions of others.


Haybreder, E. 1933 *Seven Psychologies*, New York: Appleton-Century-Crofts. Ch.9 is a survey of Gestalt psychology, especially in relation to other schools.

Heider, F. 1920 *Zur Subjektivität der Sinnesqualitäten*, (Dissertation, Graz). Do sense qualities – as opposed to acts of presenting sense-qualities – exist? How does it come about that we assume that sense qualities or phenomena correspond to a noumenal reality? To answer these questions Heider introduces an opposition between *thing* and *medium*, calling in aid Meinong’s theory of dispositions: the thing is distinguished from the medium by the fact that it is the foundation of dispositional properties.

1926 “*Ding und Medium*, *Symposion*, 1, 109-57 and also as *Separatum*. Eng. trans. (slightly shortened) as “*Thing and Medium*”, in Heider 1959, 1-34. (Revised version of second part of Heider 1920.)

When the ticking of a watch is the object of perception, the vibrations of the air mediate between the watch and the ear. Could [the two processes, i.e. the ticking and vibrations] exchange their roles in the process of perception? Does the one process act as medium only because it is closer to the ear than the other process? Or are there differences in the physical structures themselves (regardless of the possible relations to a
perceiving organism) which determinate whether they play the role of objects or mediators? (Eng. trans., p.1f.)

Heider suggests that there are such differences and examines the structures of objects and mediators both in the different sensory modalities and in the linguistic domain. Objects are cores exhibiting higher intrinsic unity, i.e. their parts are mutually dependent, and serving as causal centres, moulding what they are surrounded by in its forms and processes. The latter sometimes yields spurious units, but these are intelligible only by reference to the unitary cause; its parts are mutually independent. ‘It is the task of the apparatus of perception to construct out of the manifold of impinging offshoots something that is coordinated to core events.’ (Op.cit., p.34)


Th: The vitally relevant environment (we often call it “the world of things,” but people, events, etc., also belong to it).
M: The mediating environment, the stimuli which directly impinge on the organism.
M’: The processes in the organism correlated to the stimuli; they can be experienced under certain conditions, e.g. as reduction color.
Th’: Experiences which refer to things...

Ambiguity of the local stimulus means: to a certain segregated part of the region M’ correspond different events in region Th’. [Or more generally:] the regions MM’, the regions of mediation, do not exactly correspond to the two regions ThTh’ which are correlated to each other and which so to speak, hold hands across the mediation region.

The paper seeks to gain a better understanding of these regions, appealing to Gestalt notions and to the work of Bühler in a way which recalls the Graz school production theory (Heider was Meinong’s last doctoral student in Graz).


1959a “The Function of Economical Description in Perception”, in Heider 1959, 53-60. Compares ideas in Heider 1926, 1930, with work of Russell on perception and causality and of Mach on economy of thought. ‘If it is true that perception often exhibits a tendency toward “Pragnanz” or toward “economical description”, how can we relate this feature to the fact that perception, on the whole, leads to veridical results?’


Heider, G.M.  

Held, R.  

Helm, J.  
see Köhler, Held and O’Connell.

Helson, H.  
1960  “Über Gestalttheorie und Persönlichkeits­  
         Hogrefe, 357-90.

         A list of more than 100 ‘Gestalt laws’.


1969  “Why did their precursors fail and the gestalt psychologists succeed? Reflections on theories 
         and theorists”, *American Psychologist*, 24, 1006-11, repr. in M. Henle, *et al.*, eds. 1973, 74-
         82 and in Ertel, *et al.*, eds., 13-20. Among the points Helson makes is:

         ...the Gestalters anticipated the tremendous surge in physiological psychology we are witnessing today. 
         Granted that their physiologizing was subject to the most telling criticism (cf. Lashley, Chow, and Semmes 
         1951), the fact that they looked for and postulated physiological correlates of Gestalt phenomena shows 
         their approach was in tune, if not with the times, at least with future trends. In this they were aided by the fact 
         that the concept of Gestalt lent itself to physiological models, something that was not true of the concepts 
         of their precursors and contemporaries: Akt, Gestaltqualität, objects of higher order, etc., conceived as psychic 
         or the products of mental processes or contents, did not inspire physiological work or thinking. (p.17 of Ertel, ed.)


1944 "An Examination of Some Concepts of Topological and Vector Psychology", *Character and Personality*, 12, 244-55.


1957 "On Field Forces", *Journal of Psychology*, 43, 239-49. Critique of ego-centred theories of motivation; defence of the notion of a field of forces as a means of coming to terms with the diversity and specificity of human motivation.

1962 "On the Relation between Logic and Thinking", *Psychological Review*, 69, 366-78, repr. in Henle 1986, 190-206. On the distinction between process and result in logic and on Köhler's opposition between good errors and stupid errors (the former may be absolutely appropriate to the situation although they solve the problem no more than do the latter).

1974  "On Naive Realism", in MacLeod and Pick, eds., 40-56. Naive realism à la Gibson consists in the view that most of our perceptions are veridical in the sense that we are, in our experiences, in contact with the physical world. Henle’s critical realism, in contrast, holds that we are in direct contact with the phenomenal world only, we have a relation to the physical world only indirectly.


1977a  "On the Distinction between the Phenomenal and the Physical Object", in J.M. Nicholas, ed., *Images, Perception and Knowledge*, Dordrecht: Reidel, 187-93, repr. in Henle 1986, 3-9. Naive realism denies the distinction between phenomenal and physical object; it results when one overlooks the processes that are responsible for perception. Indeed by the failure to consider the phenomenal object in its own right and on its own terms we are forced into subjectivism.


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<td>Year</td>
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<td>1922/23</td>
<td>“Zur Theorie der stroboskopischen Bewegungen”</td>
<td>Hillebrand, F.</td>
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adaptation (work of I. Kohler, J. J. Gibson) and of event perception (work of Johansson, Michotte, Duncker).


1966  "Representative Sampling and the Purposes of Perceptual Research. Pictures of the World and the World of Pictures", in Hammond, ed., 361-80. Sympathetic critique of Brunswik. 'What we accept as "adequately representative" is not independent of the particular theories we bring to be tested by the sampling procedure.' (p.379)


1974  "Organization and the Gestalt Tradition", in Handbook of Perception, vol. I, Historical and Philosophical Roots of Perception, E. C. Carterette and M. P. Friedman, eds., New York/San Francisco/London: Academic Press, 179-210. The Gestalt 'laws' (law of good continuation, law of proximity, law of symmetry, etc.) constitute a 'set of loose prescriptions about the way in which figure-ground segregation will occur' (p.193). They have no predictive power, since we have no way of determining in any case which law will outweigh the others (which implies that there is a need to supply measures). Moreover, laws can act in consort or in conflict, and every pattern will involve the application of several laws. Hochberg points out further, in echo of the production theory that

The 'laws' are not determinants: i.e., by voluntary effort, the observer can alter and reverse figure and ground in some way that is not taken into account at all by a 'brain-field' explanation of figural organization. (p.188)

Further: the Gestalt theorists have not seriously addressed the fact that 'our perception of single figures requires us to integrate successive
glimpses into a single perceived object". (p.191)

We tend to perceive things in such a way that there is the smallest number of separate edges and contours:

The figure-ground properties are a good qualitative fit to what we would expect if the visuomotor system were prepared to treat peripherally viewed lines as though they were surface edges. (p.201)


Hochheimer, W. see Galli and Hochheimer.

Hochleitner, A. 1940 "Die philosophischen Voraussetzungen und Konsequenzen der Gestaltpsychologie", *Archiv*.
für die gesamte Psychologie, 107, 71-124. Detailed and sober critique of Gestalt psychology, especially in relation to Köhler’s isomorphism theory and to the problem of perception of transcendent objects when the psychic realm is ‘materialized’ and ‘biologized’.

Gesetzzlichkeit bei stroboskopischen Alternativbewegungen (Psychologische Arbeiten 10), Frankfurt: Kramer. Interesting application of graph-theoretical techniques, by student of Rausch.


1981 "Zur Diskussion des Prägnanzbegriffs", Gestalt Theory, 3, 200-206. Argues that the specific processes involved in the recognition of Prägnanz must be specified if the concept is not to remain entirely empty.

Höfler, A.


1896a "Zur Analyse der Vorstellungen von Abstand und Richtung", Zeitschrift für Psychologie und Physiologie der Sinnesorgane, 10, 223-34. Distance and direction as components of the relation of difference between spatial positions.

1897 Psychologie, Vienna and Prague: Tempsky, 2nd ed., Vienna and Leipzig: Hölder, 1930. Energetically distinguishes Gestalt qualities and relations (e.g. against Marty, and later against Gelb). Includes the first treatment of transposability as an independent Gestalt criterion. Contains also an interesting treatment of velocity and other derived physical phenomena as Gestalt qualities.

1899 "Die abgeleiteten physikalischen Grössen und ihre Dimensionen", Zeitschrift für den physikalischen und chemischen Unterricht, 12,
14-25. Further treatment of velocity, along with density, intensity, force, work, energy, as Gestalt qualities (i.e. as ‘a new content of presentation, over against time and path’ and admitting of transposition: p.18).

1912 “Gestalt und Beziehung – Gestalt und Anschauung”, Zeitschrift für Psychologie, 60, 161-228. Thorough survey. Höfler argues in particular that, while a Gestalt quality is not identical with a relation or a sum of relations, still ‘Gestalt qualities obtain nowhere where relations do not also obtain’ (p.200). The grasping of the relation can then contribute to the grasping of the Gestalt quality.


1921 “Tongestalten und lebende Gestalten”, Sitzungsberichte der kaiserlichen Akademie der Wissenschaften in Wien, 196/1, 94pp. The composer does not create new and original Gestalt structures; he is rather caught up in the web of pre-existing natural Gestalten, which are then reflected in his music.


Hofstätter, P. R. 1955 “Über Ähnlichkeit”, Psyche, 9, 54-80. By pupil of Bühler and Brunswik.
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<th>Year</th>
<th>Author(s)</th>
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<tr>
<td>1956</td>
<td>Holaday, B.E.</td>
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<td>1972</td>
<td>Holenstein, E.</td>
<td>Phänomenologie der Assoziation. Zu Struktur und Funktion eines Grundprinzips der passiven Genesis bei E. Husserl</td>
<td>Hague: Nijhoff. Holenstein summarizes Husserl’s criticism of Gestalt psychology as follows: with its naturalism, its unphenomenological causal explanation of Gestalten, an explanation which does not conform to consciousness, its conception of Gestalten as ‘finished objects’ which passes over their genetic constitution, and with the immediatism of its assumption of Gestalten as that which is directly given in consciousness [the Gestalt theory] has not, in the end, gone beyond the old categories of sensualism. (p.278)</td>
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1927 “Laut und Sinn”, in *Festschrift Meinhof. Sprachwissenschaftliche und andere Studien*, Hamburg: Kommisionsverlag von L. Friederichsen, 239-48. Argues against the view according to which the relation between sound and linguistic sense is an arbitrary one. Hornbostel seeks to show that sound determines sense (that sound is originally fully adequate to the sense it expresses), by means of a discussion of ‘acoustic Glanz’.

1930 “Gestaltpsychologisches zur Stilkritik”, in *Studien zur Musikgeschichte. Festschrift für Guido Adler zum 75. Geburtstag*, Vienna: Universal (2nd ed. 1971), 12-16. The style e.g. of Brahms cannot be described: it must be conveyed by ostension. This does not mean that it is somehow vague. Nor does it mean that perception of it demands a special sort of intuition – it calls merely for the attention to the whole, the suspension of the analytic attitude.
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<tr>
<td>Houssiasdas, L.</td>
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<td>see Brown and Houssiasdas.</td>
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<tr>
<td>Hubbell, M. M.</td>
<td>1940</td>
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<td>&quot;Configurational Properties Considered 'good' by Naive Subjects&quot;, American Journal of Psychology, 53, 46-69, repr. in Beardslee and Wertheimer, eds., 171-87. Study of Prägnanz. Subjects were asked to produce good visual configurations by making changes in a wide variety of figures. There is a steady increase in the chances that a change of some sort will take place as the figures go from the most closed and symmetrical to the most open and asymmetrical.</td>
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<td>1924a</td>
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<td>&quot;The Psychology of the 'Gestalt'. Some Educational Implications&quot;, Journal of Educational Psychology, 15, 401-12.</td>
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<td>1933</td>
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<td>The Nature of Learning in Relation to the Living System, London/New York:</td>
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<td>1948</td>
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<td>Directed Thinking, New York: Dodd, Mead.</td>
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<td>1951</td>
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<td>Thinking. An Introduction to its Experimental Psychology, New York: Wiley, esp. ch.6, &quot;The</td>
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Gestalt Theory of Thought. Humphrey supplies the following summary of the Gestalt theory of thinking:

(1) Pre-Gestalt theory concerned itself mainly with verbal problems, and relied largely on Association to supply both (a) the material, which was past experience, and (b) the mechanism of thinking, primarily the reproductive tendencies...

(2) The Gestalt theory maintains that the best thinking is not reproductive but productive. That the thought-activity is not energized even in part by the tendency of the present to reproduce the past.

(3) It proposes the hypothesis that when the organism is faced by a problem, stresses are set up which will work themselves out in organic activity, usually known as Thinking or Problem-solving.

(4) These activities ordinarily include both experience (conscious processes) and action.

(5) Perceptual reorganization (restructuring, re-centering), is a constituent part of the total process.

(6) Accompanied by this reorganization is, according to some of the workers, an experience known as Insight. The term is reserved by Köhler for the 'experience of determination'...

(7) The general result of the interaction of problem-stresses is a kind of activity (i.e. experience and action) which may be called, at least relatively, “new”.

(8) The energizing motivation is thus “internal” to the problem-as-perceived. (pp. 18ff.)

1956


Humphrey, G. and Stringbett, B. M.

1946


Hunter, W.S.

1913


Hüppe, A.

1984


Husserl, E.

1891

1893 "Anschauung und Repräsentation", first publ. in Husserl 1979, 269-302. Includes a study of the perception of melodies and of the hierarchical structure of higher order Gestalten.


For a detailed treatment of Husserl and Gestalt psychology see Holenstein 1972.


Iritani, T.: see Nozawa and Iritani.


Jääskeläinen, M. 1981 "Gestalt Theory in the Psychology of Eino Kaila", Gestalt Theory, 3, 244-54.
Jackendoff, R. S. 1983 Semantics and Cognition (Current Studies in Linguistics), Cambridge, Mass.: MIT Press. Treatment of semantic theory emphasizing the role of semantics as a bridge between the theory of language and theories of other cognitive capacities such as visual perception and motor control. The basis of the work is an ontology—built around the categories thing, place, direction, action, event, manner, and amount—of what Jackendoff calls the projected world. Reference to projected world entities is achieved by using markers, thus: `$ $`. Jackendoff points out, for example, that perceived $wholes$ are often greater than the sum of their $parts$. The explanation is that, of the mental information that is projected as the $whole$, only those components that are independently projectable can result in perceived $parts$. The presence of the rest can be sensed intuitively through the disparity between the $wholes$ and the $parts$, but its nature cannot be revealed in any simple way by introspection alone. (p.35)

Gestalt ideas are employed throughout the work, esp. in the discussion of principles of grouping in ch.8:

We have seen...that the characteristics of preference rule systems are found everywhere in psychological processes, all the way from low-level perceptual mechanisms to problems so prominent in our conscious life as to be of social and political concern. Thus there is no obstacle in principle to adopting them as part of a theory of word meanings. Yet the notion of a preference rule system has not been recognized as a unified phenomenon, except perhaps by the Gestalt psychologists. (p.156£.)


1911 Über die Wahrnehmung des Raumes. Eine experimentell-psychologische Untersuchung nebst Anwendung auf Ästhetik und Erkenntnistheorie (Zeitschrift für Psychologie, Ergänzungsband 6), Leipzig: Barth. Dedicated to
G.E. Müller. Reveals also some influence of Husserl. Includes an application of the theory of space-perception to the analysis of impressionist painting.


Jansson, G. see Johansson, Hofsten and Jansson.


1950a “Configurations in the Perception of Velocity”, Acta Psychologica, 7, 25-79. The experienced velocity of a visible object in motion is influenced by the motion of another object in the same perceptual field. The essay is an examination of the factors governing this influence.


1966 “Geschehenswahrnehmung”, in Metzger and Erke, eds., 745-75.


1971 Visual Motion Perception, University of Uppsala Reprint Series, 98.

1973 “Visual Perception of Biological Motion and a Model for its Analysis”, Perception and Psychophysics, 14, 201-11.

1974 “Projective Transformations as Determining Visual Space Perception”, in MacLeod and Pick, eds. 1974, 117-38. Because the eyes of an active observer are always (or very nearly always) moving relative to the environment, and because the environment often displays some kind of motion or other change, we can never speak of a ‘retinal image’ but only of an ever-changing optical flow.

1977 "Spatial Constancy and Motion in Visual Perception", in Epstein, ed., 375-420. How can constant objects be perceived given continuously changing optical patterns? Johansson substitutes for the traditional theory founded on an absolute (Euclidean) metric a theory based on the invariant relations under changes of figural form.


Junker, H. 1924 "Die indogermanische und die allgemeine Sprachwissenschaft", in J. Friedrich, et al., eds., Stand und Aufgabe der Sprachwissenschaft (W. Streitberg FS), Heidelberg: Winter, 1-64. Remarkable account of linguistic structures, building on ideas of Bühler, Hönigswald, Selz and Koffka. Junker puts forward a view of language as consisting of hierarchies of Gestalt qualities, both above and below the sentential level. Various semantic sentence-schemata of the sort later to be analysed in work on case structure and generative semantics are described by Junker within this framework. Of particular interest is the treatment of Gestalt-structures of emphasis and of the dependence-relations amongst the parts of a sentence. The paper also anticipates Jakobson's demonstration that there are correlations between the sequences in which linguistic structures are acquired and the sequences in which they are lost, e.g. in pathological disturbances.
Kaila, E.


1923a "Gegenstandsfarbe und Beleuchtung". Psychologische Forschung, 3, 18-59. On the opposition between the relatively constant colour of objects and their changing, non-thing-like illumination.

1928 Beiträge zu einer synthetischen Philosophie. Turn Yliopiston Julkaisuja, Annales Universitatis Aboensis, Series B, IV, no.3, Turku. Sympathetic criticism of Köhler 1920: argues that the neural equivalents of psychic Gestalten are additive. Describes Gestalt theory as the germ of a philosophy of emergent monism, embracing organic and inorganic nature as well as mental phenomena within a single category.

1932 "Hahmopsykologia" (Gestalt Psychology). Iso Tietosanakirja (The Encyclopedia), 4, Helsinki: Otava, section 239.


1936a Review of Bühler 1932, Erkenntnis, 6, 65-68.


1943 “Kvantiteorian filosofinen problematiikka loogillisen empirismin valossa” (Philosophical Problems of Quantum Theory in the Light of Logical Empiricism), Ajatus, 12, 41-127. Takes as its motto a phrase derived from Dirac: ‘All important things in our experience appear as the invariants of certain transformations’. Concludes with a remark ‘on the possibility of applying the mathematical apparatus of wave-mechanics to an analysis of the Gestalt-qualities of perceptions and other mental phenomena. Kaila thought that the quantum-theoretic interpretation of these qualities as “vibrations” in the neural system might yield a physicalist explanation of the psychophysical Gestalt-laws’ (von Wright in Kaila 1979, p.xxxvi).


1945 “Hahmoprobleemasta, ynnä muutamista muista teoreettisen psykologian ongelmista” (The Gestalt Problem and Some Other Problems in Theoretical Psychology), Ajatus, 13, 5-89. ‘Scientific’ psychology must be behaviourist – it must aim ‘to give a structural description of intersubjectively observable phenomena – including phenomena of Gestalt-character. This emphasis on “structure” and “intersubjectivity” is connected with a criticism of attempts to give a phenomenologically satisfying description of the Gestalt-qualities’. The work suggests a new solution to the problem of psychophysical parallelism. ‘Instead of looking for neural equivalents in macro-physical
inter-cellular constellations in the brain, one should look for them in micro-physical intra-cellular fields, a suggestion which aims at connecting the foundations of psychology with the field theories of atomic physics (cf. von Wright in Kaila 1979, p. xxiif.).


1960 Die perzeptuellen und konzeptuellen Komponenten der Alltagserfahrung (Acta Philosophica Fennica, 13), Helsinki. English translation of original Finnish version as “The Perceptual and Conceptual Components of Everyday Experience” in Kaila 1979, 259-312. On the constitution of the physical world on a phenomenal basis. The essay was originally planned as part of a longer work entitled Hahmottuva maailma (The World as a Structured Whole).


Kamiya, J. see Brunswik and Kamiya.


1954 “Il gradiente marginale come fattore del aspetto fenomenico dei colori”, Archivio di Psicologia, Neurologia e Psichiatria 15, 251-64.

1955 “Margini quasi-percettivi in campi con stimolazione omogenea”, Rivista di Psicologia, 49, Fascicolo 1, 7-30. On the notion of virtual contour. Characterizes the conditions which give rise to such contours in terms of a Gestalt tendency towards closure, i.e. towards completion of figures lacking some part.


1956 “Il fattore empirico nella percezione”, Rassegna di Psicologia generale e clinica, 1, 3-9.

1960 “Randform und Erscheinungsweise von Oberflächen”, Psychologische Beiträge, 5 (Metzger Festschrift), 93-101, Eng. trans. “Margins and Color”, in Kanizsa 1979, 135-42. On the dependence of the appearance of the colour of an enclosed surface on the structure of the enclosing boundary. If, for example, the straight edges of a rectangle are replaced by zigzag lines, this results in changes of brightness, saturation and texture.


against Mussati (1958a) that it is possible to set up experiments to decide between the empiricist and Gestaltist explanations of paradoxical figures. Kanizsa points to a range of circumstances in which perceptual organization imposes itself against expectation and past experience.

1970  "Amodale Ergänzungen und 'Erwartungsfehler' des Gestaltpsychologen", Psychologische Forschung, 33, 325-44, Eng. trans., "The Gestaltist's Error and other Expectation Errors", in Kanizsa 1979, 72-91. On the surprise felt by a Gestalt psychologist when a perceptual phenomenon does not correspond to expectations raised by the schematic application of Gestalt laws. The paper identifies what Kanizsa calls an 'inference error', the tendency to interpret perception not as direct experience but as the result of inference.


1974 "Contours without gradients or cognitive contours?", Italian Journal of Psychology, 1, 93-112, repr. as "Anomalous Contours and Surfaces", in Kanizsa 1979, 192-221. Anomalous contours (also called cognitive or subjective contours) are contours that have no counterpart in the stimulus. In a phenomenal field containing figures with certain sorts of gaps there arises the impression of just that opaque surface that permits the amodal completion of these figures.

1975 "Prägnanz as an Obstacle to Problem Solving", Italian Journal of Psychology, 2, 417-25, repr. in Kanizsa 1979, 238-53. Problem-solving may be conceived as a series of restructurings of
cognitive material. Kanizsa shows how organizational factors may lead to premature closure, rather than to a solution of the problem.

1975a “The Role of Regularity in Perceptual Organization”, in Flores d’Arcais, ed., 48-66. repr. in Kanizsa 1979, 92-112. Demonstrates the limitations of regularity (or Pragnanz) as a principle of Gestalt organization.


1975c “Amodal Completion and Phenomenal Shrinkage of Surface in the Visual Field”, *Italian Journal of Psychology*, 2, 187-95, repr. as “Phenomenal Shrinkage and Expansion of Visual Surfaces” in Kanizsa 1979, 181-91. Amodal or non-phenomenal completion (completion other than via perceptual modes), e.g. through induced figure-ground segmentation, imagined presence of a continuation, of the rear side of an object, etc.


1978 “La teoria della gestalt: distorsioni e fraintendimenti”, in Kanizsa and Legrenzi, eds., 39-61. Eng. trans. “Gestalt Psychology: What it is not”, in Kanizsa 1979, 55-71. The essay is concerned to refute a series of mistaken conceptions of Gestalt psychology, including 1. the view that Gestalt psychology is basically a psychology of perception; 2. conceptions of Gestalt psychology as reductionist, nativist, vitalist; 3. the view that Gestalt psychology rejects analysis and the scientific method; 4. views according to which Gestalt psychology denies the importance of motivational factors and the influence of past experience; 5. the
misunderstanding of ‘Pragnanz’ as ‘symmetry’. With regard to the last, Kanizsa points out that the most ordered, stable, balanced state possible in a system will involve symmetry only in the most simple of cases.


1979b “The Polarization of Gamma Movement”, in Kanizsa 1979, 113-34.


Kanizsa, G. ed.

Kanizsa, G. and Gerbino, W.

1976 “Convexity and Symmetry in Figure-Ground Organization”, in M. Henle, ed. 1976, 25-32. On Bahnsen’s stripe figures and on the role of convexity in figure-ground organization.

1981 “Il completamento amodale tra vedere e pensare”, Giornale Italiano di Psicologia, 8, 279-307. Completion phenomena as a means of distinguishing between perception and non-sensory representation. Perceptual completions are not only phenomenally different from represented completions, but they also give rise to well-defined effects.

Kanizsa, G. and Grubissa, B.


Kanizsa, G. and Legrenzi, P. eds.


Kanizsa, G., Legrenzi, P. and Meazzini, P.


Kanizsa, G. and Luccio, R.

1981 “Stima del numero e impressione di numerosità”, Reports from the Institute of Psychology, University of Trieste.
<table>
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<th>Year</th>
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<tr>
<td>1981a</td>
<td>Kanizsa, G. and Minguzzi, G. F.</td>
<td>“L’incompleteness figurale come fattore di sottostima della numerosità”, <em>Reports from the Institute of Psychology</em>, University of Trieste.</td>
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<td>1984</td>
<td>Kanizsa, G. and Tampieri, G.</td>
<td>“La pregnanza e le sue ambiguità”, <em>Reports from the Institute of Psychology</em>, University of Trieste. Wide-ranging study of the opposition between Pragnanz as singularity and Pragnanz as tendency towards organization in the pre-categorial level of perceptual processing.</td>
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Kardos, L.

1928 “Dingfarbenwahrnehmung und Duplizitäts-theorie”, Zeitschrift für Psychologie, 108, 240-314. On the relations between thing as intended object and thing as causal (stimulus) of sensory experience. A theory will produce a Deckung (coincidence) of the former and the latter only if the environment (medium) is taken into account.


1931 “Diskussionen über Probleme des Farbensehens”, Archiv für die gesamte Psychologie, 78, 185-214 (with reply by Katz, pp. 215f.).

1934 Ding und Schatten. Eine experimentelle Untersuchung über die Grundlagen des Farbensystems (Zeitschrift für Psychologie, Ergänzungsband 23), Leipzig: Barth. Classic study of the structure of shadows. Affirms that there is no shadow without a penumbra (p. 53): even those special cases of shadows which appear to have sharp contours appear less focused when compared with contours of things or geometrical figures. Kardos therefore considers the possibility that a gradient of penumbra, even where not phenomenally present, nevertheless exerts its effect (as it were virtually) on shadow perception. Cf. Metelli 1975b.


1957 “Az alakléktan birálata” (A Critique of Gestalt Psychology), Magyar Filozófiai Szemle, 1, 124-40 and 272-304. Survey and criticism.
particularly of the theory of Prägnanz and of the nativism of the Gestalt theorists, whom Kardos charges with neglecting the role of evolution.

1962 Grundfragen der Psychologie und die Forschungen Pawlows, Budapest: Akadémia Kiadó. Ch.15 contains a critique of Gestalt psychology from a behaviourist point of view.


Kardos, L., ed. 1974 Alaklektan (Gestalt Psychology). Budapest: Gondolat. Large collection of Hungarian translations of works by Gestalt theorists from Ehrenfels and Gelb to the Berlin School and Lewin, with a comprehensive introduction by the editor. See also Brunswik and Kardos.


1925  “Experimente über die Größenkonstanz: 
Ansätze zu einer Analyse der Gesichtswahrnehmung”, Zeitschrift für Psychologie, 97, 
215-52.

1926  “Experimentelle Untersuchung über simultane 
und sukzessive Gesichtswahrnehmungen”, Psychologische Forschung, 7, 226-56.

1926a “Die simultane und sukzessive Wahrneh­ 
Kongreß für experimentelle Psychologie in 
München, 1925, Jena: Fischer, 179-81.


1940 Organizing and Memorizing, New York: 
Columbia University Press.

1906 “Experimentelle Beiträge zur Psychologie des 
Vergleichs im Gebiet des Zeitsinns”, Zeitschrift 
für Psychologie und Physiologie der Sinnes­ 

1911 Die Erscheinungsweisen der Farben und ihre 
Beeinflussung durch die individuelle Erfahrung, 
Zeitschrift für Psychologie, Ergänzungsband 7; 
rev. ed., as Der Aufbau der Farbwelt, Leipzig, 
1930; abridged Eng. trans. by R. B. MacLeod 
and G.W. Fox as The World of Colour, London: 
Kegan Paul, Trench, Trubner, 1935. Influenced 
by Helmholtzian associationism, by G. E. 
Müller, by E. Hering and also, at least 
methodologically, by Husserl (see p.30). The 
new title of the second edition reflects Katz’s 
conclusion that ‘individual experience’ is 
relatively unimportant as a factor influencing 
our perception of (most) colour-phenomena.

The book introduces the distinction between 
surface colours, which are attached to objects, 
and film colours, which appear to float freely in 
space. Katz deals also with phenomena of 
transparency, reflection, lustre, luminescence, 
glow, etc.

1913 “Über individuelle Verschiedenheiten bei der 
Auffassung von Figuren. (Ein kasuistischer

1925 Der Aufbau der Tastwelt (Zeitschrift für Psychologie, Ergänzungsband 11). Leipzig: Barth, repr. Darmstadt: Wissenschaftliche Buchgesellschaft, 1969. On the ‘almost inexhaustible richness of the touchable world’. Katz pleads for the cognitive primacy of touch (i.e. pressure data) over sight and hearing, reflecting the objective indispensability of the former. He reveals a parallel to the film/surface difference in the world of touch, deals with haptic cognition of spatial depth, transparency (the possibility of touching through e.g. liquids, soft tissue), and discusses the figure/ground opposition in relation to touch.


1949 “Gestalt laws of mental work”, British Journal of Psychology, 39, 175-83. The duration and degree of reliability of a given process of mental work are conditioned – according to laws analogous to Gestalt laws in the perceptual sphere – by the nature of the whole task into which this process fits as a part.

1951 “Edgar Rubin: 1886-1951”, Psychological Review, 58, 387-88. Rubin like other experimental psychologists...was deeply impressed by the phenomenological point of view which at that time had pervaded the scientific atmosphere of Göttingen as a consequence of the spell cast by the ideas of Husserl. This outlook became apparent in his chief work, Visuell wahrgenommene Figuren”.


Kehr, T. 1915 “Allgemeines zur Theorie der Perzeption der Bewegung”, Archiv für die gesamte Psychologie, 34, 106-120.

Keiler, P. 1980 “Isomorphie-Konzept und Wertheimer-Problem: Beiträge zu einer historisch-methodologischen Analyse des Köhlerschen Gestaltansatzes, I. Erkenntnistheoretische und seinslogische Implikationen des Isomorphie-Konzepts”, Gestalt Theory, 2, 78-112. Köhler, in his 1920, defended the idea of an isomorphism between perceptual events and certain physical properties of processes in the sensory area of the central nervous system. This was Köhler’s solution to Wertheimer’s problem concerning the nature of those holistic brain processes which correspond, in the physiological sphere, to perceptual Gestalten (cf. Wertheimer, 1912). Keiler argues that (1) this purported solution has its roots in Machian philosophy, (2) that Köhler’s attention is diverted (in Berkeleyan fashion?) too much towards physical patterns or structures and not enough towards the recognition by human subjects of “real objects in the practical sense”, and (3) that Köhler is too wedded to a view of perception as solely receptive (in contrast, e.g., to the production theory of the Graz school but also to action-based theories of the Marxian sort).

1981 “Idem., II. Anspruch und Wirklichkeit der Theorie der ‘psychophysischen Gestalten’ – Funktionales System und Wertheimer-Problem”, Gestalt Theory, 3, 93-118. Keiler sees a tendency on Köhler’s part to convert empirical problems into theoretical ones, lacking in testable content. He criticizes both Köhler’s own later attempts to refine the isomorphism theory and the experiments of Lashley et al. designed to refute the theory. He goes on to present an alternative solution of the Wertheimer problem – the theory of the cortical functional systems developed by Luria and Leontiev, two members of the Vygotsky circle in Moscow. Keiler concludes by pointing to the influence of the Berlin Gestaltists on the Vygotsky circle, esp. of the ideas put for-
ward by Koffka in his 1921 concerning the historical determination of the human psyche.

1982

“Idem., III. Die Gegenständlichkeit der Wahrnehmung als entwicklungsgeschichtliches Problem”, Gestalt Theory, 4, 40-63. A satisfactory answer to the Wertheimer-problem presupposes the recognition that Gestalt perception is primarily perception of real, manipulable objects. Keiler closes his series of articles with a discussion of some specific features of man's practical and perceptual relations to the objects of his environment, special attention being drawn to the ‘moulding (forming, shaping, structuring) aspect of human labour’. It is this aspect of labour, it is claimed, which is the ‘objective basis of the permanent reproduction and further development of the faculty of “Gestalt”-perception as a general human faculty’.

1982a


Kelley, H. H. 1971


Kempski, J. von 1952


Kenkel, F. 1913

“Beiträge zur Psychologie der Gestalt [ed. by K. Koffka], 1. Untersuchungen über
den Zusammenhang zwischen Erscheinungsgroesse und Erscheinungsbewegung bei einigen sogenannten optischen Täuschungen”, *Zeitschrift für Psychologie*, 67, 385-449. Experimental analysis of Wertheimer’s theory of the phi phenomenon. Contains the first systematic treatment of gamma movement, i.e. the sudden expansion which occurs when a visual object is abruptly presented on a homogeneous background. See review by Benussi 1914 and reply by Koffka 1915.

**Kennedy, J. M.**

1973  “Misunderstandings of Figure and Ground”, *Scandinavian Journal of Psychology*, 14, 207-209.

1974  “Perception, Pictures and the Etcetera Principle”, in MacLeod and Pick, eds., 209-26. Study of ambiguity of line-figures and of different kinds of outlines and terminations. Kennedy argues that even figure-ground differentiation is ultimately a matter of pictorial form.


1975  “Depth at an Edge, Coplanarity, Slant Depth, Change in Direction and Change in Brightness in the Production of Subjective Contours”, *Italian Journal of Psychology*, 2, 107-23. In the formation of subjective contours it is not necessary to have step-like changes in depth from one overlapping region to the background region. The contour can also correspond to a corner, or to sheaved regions. The shape of subjective contours is influenced by the groupings of the real lines and contours of stimulus displays and can be sharp or diffuse, in reflection of specific sorts of line terminations, changes in direction or gradual fading out of lines.

1976  “Attention, Brightness and the Constructive Eye”, in M. Henle, ed. 1976, 33-48. On the ways in which attention can produce changes in the
apparent brightness or brightness-distribution of a surface.


King, S. M.  see Helson and King.


Kirschmann, A. 1895  "Der Metallglanz und die Parallaxe des indirekten Sehens", *Philosophische Studien*, 9, 147-87. Investigation of the quality-, intensity-, space- and time-relations which must come together to produce what we call the sheen of metals.
Klein, J.


1906  “Normale und anormale Farbensysteme”, *Archiv für die gesamte Psychologie*, 6, 397-424.

1908  “Über die Erkennbarkeit geometrischer Figuren und Schriftzeichen im indirekten Sehen”, *Archiv für die gesamte Psychologie*, 13, 352-88.


see Wertheimer

Kleint, H.


1926  “Die psychischen Formen. Bemerkungen zur Theorie und Einteilung der psychischen Erscheinungen”, *Archiv für die gesamte Psychologie*, 54, 469-517. Defence of a hierarchical taxonomy of types of appearances, arguing that the Gestalt structures to be found on different levels serve as elements for the structures on the next highest levels. Includes treatment of Stumpf, Ehrenfels, etc. on Gestalt qualities.


Klimpfinger, S.


Klix, F.


Kluever, H.


1912a Zur Analyse der Vorstellungen und ihrer Gesetze. *Eine experimentelle Untersuchung*, Leipzig: Quelle und Meyer. First part extracted in Mandler and Mandler 1964, 236-47. A study of types of presentation. Includes a defence of the Würzburg school against criticisms e.g. of Wundt and Titchener. Shows how functional concepts such as threshold, task, determining tendency, and so on, can bring real experiences under ordered law-like relations. In the Foreword Koffka writes: Stumpf ‘gave the first impulse to my scientific thinking’ (p. vi).

1914 "Psychologie der Wahrnehmung", Die Geisteswissenschaften, Jg. 1913/14, Heft 26, 711-16, Heft 29, 796-800. Statement of the new primacy of perception in scientific psychology: 'sensation is understood from the point of view of perception, instead of the other way round' (p. 711). With Wertheimer 1912a, this work completes a transformation in perceptual theory prepared by E. Hering.

1915 "Beiträge zur Psychologie der Gestalt [ed. by K. Koffka], III. Zur Grundlegung der Wahrnehmungsgesellschaft. Eine Auseinandersetzung mit V. Benussi", Zeitschrift für Psychologie, 73, 11-90, repr. in Koffka, ed. 1919, 203-82, extracted in Ellis, ed., 371-78. A reply to Benussi 1914, including a detailed critical survey of Benussi's work (to 1914) and of the Graz production theory in general. Contains an early trace of the idea that there are real (physical) Gestalten, that the Gestalt idea is not at home only in the province of psychology. See pp. 38-42 above


1919 "Probleme der experimentellen Psychologie, II. Über den Einfluß der Erfahrung auf die Wahrnehmung (behandelt am Problem des Sehens von Bewegung)", Die Naturwissenschaften, 7, 597-605. On the opposition between that which is 'structurally determined' in experience and that which is learned or acquired by practice.


1921a  Review of Rubin 1915, Psychologische Forschung, 1, 186-90.


1923a  “Über Feldbegrenzung und Felderfüllung”, Psychologische Forschung, 4 (Stumpf FS), 176-203. On the interdependence of the boundary conditions and the figural qualities of a phenomenal field.


Sensations are real, but are not equivalent to the realities of our everyday phenomenal world. Being a reality, being a process producible under certain well
established conditions, sensation is worthy of study. The investigation of sensation may even help us to understand better the laws of other and more natural phenomena, but it will not do so if the sensation is treated according to the teaching of traditional psychology, as a mental element. (p.158f.)


1927a “Bemerkungen zur Denk-Psychologie”, Psychologische Forschung, 9, 163-83. Reply to Selz (1926), who is accused of being still too mechanistic in his account of thought ‘operations’. Also discussed are works on the thought-processes by Bühler, Benary and Koffka himself.


universal category, subsuming causality, substance, function, etc.


1931b “Psychologie der optischen Wahrnehmung”, ibid., 1215-71.

1932 “[The Overcoming of Mechanistic and Vitalistic Tendencies in Modern Psychology]” (in Russian), Psychologia, 3, 59-69.


1935b “On Problems of Colour-Perception”, Acta Psychologica, 1, 129-34. Colour, localization, shape and size must all be regarded as different aspects of one and the same process of organization.

1938 “Purpose and Gestalt. A Reply to Professor McDougall”, Character and Personality, 6, 218-38.


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<th>Year</th>
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<tr>
<td>1953</td>
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<td>“Grundsätzliches zur Geometrie der Sinnesräume”, <em>Wiener Zeitschrift für Philosophie, Psychologie und Pädagogik</em>, 4, 224-31. That phenomenal space, in contrast to space in the sense of physics or mathematics, has a Euclidean structure.</td>
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<td>1965</td>
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<td>“Gestaltreize, Reizgestalten, Gestaltungsreize – ein Beitrag zur Begriffserklärung”, in H. Heckhausen, <em>Bericht über den 24. Kongreß der Deutschen Gesellschaft für Psychologie in Wien, 1964</em>, Göttingen: Hogrefe, 61-65. Are there Gestalt-stimuli which generate Gestalt perceptions in just the same unambiguous and unconditional manner as light, brightness, etc., according to the old psychology?</td>
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<td>1966</td>
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<td>“Die Zusammenarbeit der Sinne und das allgemeine Adaptationsproblem”, in Metzger and</td>
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1911 “Akustische Untersuchungen. II”, Zeitschrift für Psychologie, 58, 59-140. On analogies between vowels and tones given in perception. Köhler cites Mach, Stumpf and Brentano in support of his attempts to do justice to the ‘actual content’ of perceived tones.

1913 “Akustische Untersuchungen. III und IV (Vorläufige Mitteilung)”, Zeitschrift für Psychologie, 64, 92-105.

1913a “Über unbemerkte Empfindungen und Urteilstäuschungen”, Zeitschrift für Psychologie, 66, 51-80, Eng. trans. as “On Unnoticed Sensations and Errors of Judgment”, in Köhler 1971, 13-39. Stumpf had defended the existence of unnoticed sensations on the basis of the non-transitivity of phenomenal identity. a can appear as equal to b, b as equal to c, but a as unequal to c. Stumpf argued that unnoticed sensational differences must lie behind the perceived qualities. Köhler argues that unnoticed sensations and similar notions are neither verifiable nor does belief in them stimulate productive research. He prefers to regard the Gestalten of equality and inequality as being themselves more complex in their objective structure. The paper includes a damaging critique of the constancy hypothesis, or the tendency to regard Perceptions and sensations as being directly and univocally determined by peripheral stimulation.


1917 “Intelligenzprüfungen an Anthropoiden. I”, Abhandlungen der Königlich Preussischen Akademie der Wissenschaften (Berlin), phys.-
Köhler, W. (cont.)  

math. Klasse, no.1. On the ‘obvious difference of form’ manifested in animal experiments between genuine (intelligent) achievements and mere ‘imitations of chance’. In these terms apes are shown to have the ability to grasp the ‘situational value’ of an object such as a tool by a process of ‘insight’.

1917a  

1918  
“Nachweis einfacher Strukturfunktionen beim Schimpansen und beim Haushuhn. Über eine neue Methode zur Untersuchung des bunten Farbensystems (Aus der Anthropoidenstation auf Teneriffa. IV)”, Abhandlungen der Königlich Preußischen Akademie der Wissenschaften (Berlin), phys.-math. Klasse, no.2, 1-101, extracted in Ellis, ed., as “Simple Structural Functions in the Chimpanzee and in the Chicken”, 217-227. On what kind of process do the memory-effects apparent in learning-phenomena depend? Köhler’s experiments with light and dark grey stimulus-oppositions show that it is not absolute values which are learned, but rather contrastive configurations.

1920  
Die physischen Gestalten in Ruhe und im stationären Zustand. Eine naturphilosophische Untersuchung, Braunschweig: Vieweg, republ., Erlangen: Philosophische Akademie, 1924, extracted in Ellis, ed., 17-54 and in Focht 1935, 91-106. Dedicated to Stumpf. Definitive statement of thesis of isomorphism between the physical and psychical structures involved in perceptual experiences. The lasting value of the work lies in its recognition that there is (something like) Gestalt structure in both spheres (that, for example, electrostatic charges satisfy the so-called Ehrenfels criteria), and that the contrast involved in the figure-ground phenomenon is fundamental to all experience.

1921  
1922 "Zur Psychologie der Schimpansen". Psychologische Forschung, 1, 2-46.

1923 "Zur Theorie der stroboskopischen Bewegung (Im Anschluß an die Untersuchung Hartmanns)". Psychologische Forschung, 3, 397-406.


1924a "Gestaltprobleme und Anfänge einer Gestalttheorie", Jahresbericht über die gesamte Physiologie und experimentelle Pharmakologie, 3 (Bericht über das Jahr 1922), 512-39, repr. in Gestalt Theory, 5, 1983, 178-205, extracted in Ellis, ed. as "Some Gestalt Problems", 55-70. Local processes in the organism evince a clearly defined organization relative to the needs and conditions of the organism as a whole. The paper is an application of this idea to the problem of visual perception, drawing implications critical of Darwinian evolutionary theory, which Köhler sees as having too mechanistic a regard for organic forms taken in isolation from each other. Early statement of the universality of the Gestalt idea.


1925a "Komplextheorie und Gestalttheorie. Antwort auf G. E. Müller's Schrift gleichen Namens".
Köhler, W. (cont.)

Psychologische Forschung, 6, 358-416, extracted in Ellis, ed. as “Reply to G. E. Müller”, 379-88. A critique of Müller 1923. Points to the unrealistic nature of Müller’s attention theory, e.g. in relation to our perception of long words. Shows how experienced configurations are to a large extent independent of attention, that the structures we experience normally do not require attentive effort.


1928b “Bemerkungen zur Gestalttheorie. Im Anschluß an Rignanos Kritik”, Psychologische Forschung, 11, 188-234, extracted in Ellis, ed. as “Reply to Eugene Rignano”, 389-96. The second part is a response to Rignano 1928. Criticizes Rignano’s pragmatic critique of Gestalt theory e.g. by pointing to the existence of non-utilitarian configuration-phenomena such as the shapes and figures we perceive in clouds or flames.

1929 Gestalt Psychology, New York: Liveright (London: Bell, 1930), revised version 1947. Distinguishes three principles of experienced order:
I. Experienced order in space is always structurally identical with a functional order in the distribution of underlying brain processes.

II. Experienced order in time is always structurally identical with a functional order in the sequence of correlated brain processes.

III. Units in experience go with functional units in the underlying physiological processes. (Cf. Madden 1957)

The concept of Gestalt may be applied far beyond the limits of sensory fields. According to the most general definition of Gestalt, the processes of learning, of reproduction, of striving, of emotional attitude, of thinking, acting, and so forth, may be included as subject-matter of gestalt-theory insofar as they do not consist of independent elements, but are determined in a situation as a whole (p. 193, cf. revised version p. 105).

1929a “Ein altes Scheinproblem”, Die Naturwissenschaften, 17, 395-401, Eng. trans. in Köhler 1971, 125-41. Why are the objects of the phenomenal world perceived as before us, outside of us, even though their perception depends upon processes inside of us in the central nervous system? Cf. F. Heider.

1930 “La perception humaine”, Journal de Psychologie normale et pathologique, 27, 5-30. Eng. trans. as “Human Perception” in Köhler 1971, 142-67. Argues against the view that visual organization is to be interpreted as a product of previous experiences. Visual shape is not a sum or plurality of local sensations but a sensory unity to be interpreted as a product of both sensory and physiological organization.


Psychologische Probleme (revised and enlarged German version of Köhler 1929), Berlin: Springer.

The Place of Value in a World of Facts, New York: Liveright (London: Kegan Paul, 1939); German trans. as Werte und Tatsachen, Berlin and Heidelberg: Springer, 1968. See Spiegelberg 1941. A ‘phenomenological’ analysis of the notion of requiredness, which Köhler employs as an equivalent of the notion of value (or of the analogue of force associated with value phenomena).

1. A datum, an entity or an act is required within a context of other data, entities or acts. This holds both for negative and for positive requiredness.

2. Within the context in question requiredness is a dependent characteristic that has no existence of its own, apart from the entities that fit or do not fit each other in these contexts.

3. All requiredness transcends from certain parts of a context to others of the same context. Like all other kinds of reference, it is in this sense a directed translocal trait, a vector, that cannot be split into bits which have a merely local existence.

4. Requiredness differs strikingly from other forms of reference by its demanding character. It involves acceptance or rejection of the present status of the context in question, often more particularly, acceptance or rejection of some part by the remainder of the context. This demanding character has degrees of intensity. The lower this intensity, the more will a condition of merely factual relation, juxtaposition, or sequence be realized. (pp.336f.)

experience and on the disparity between our assumptions about common intuitive phenomena (e.g. visual speed, orientation, retention and recall) and the factors on which such phenomena actually depend.


1950 "Psychology and Evolution", Acta Psychologica, 7 (Révesz Festschrift), 288-97, repr. in Henle, ed. 1961, 67-75. Defence of a 'Principle of Invariance in Evolution': because dynamic processes are pervasive throughout nature, all facts in human perception have certain characteristics which are unrelated to the specific make-up of human cells.

When man is thinking, he invariably follows, at least in part, some principles of action which hold everywhere, and can therefore not be suspected of being merely relative to his particular environment. To be sure, he would not exist at all if evolution had not occurred. At present, he would have little to think about if evolution had not given him sense organs, properly conducting nerve fibres, and many other particular devices. But even a modest nerve impulse which travels along one of those fibers obeys some general principles of action no less than the constraints to which it is subjected. Similarly, man's thinking must have some characteristics
Köhler, W. (cont.) which are not in any sense determined by evolution and, for this reason, significant only in a relative sense. (pp.74f.)


1959 “Gestalt Psychology today”. American Psychologist, 14, 727-34.


1965 “Unsolved Problems in the Field of Figural After-Effects”, Psychological Record, 15, 63-83. Includes a critique of refutations of the field theory of cerebral integration by Lashley, et al. and by Sperry et al.

Minnesota Press, 70-91, repr. in Köhler 1971, 83-107. On the relation between the directly accessible world – which embraces both the self and the world of perception – and the world of nature as this is investigated by physicists, biologists, etc.

1967

1969
*The Task of Gestalt Psychology*, Princeton: Princeton University Press, German ed., *Die Aufgabe der Gestaltpsychologie*, Berlin: de Gruyter, 1971. Late survey of much of Gestalt psychology. See, e.g., pp.88f. on inherited vs. learned traits. Köhler objects to calling the feeling of joy a product of inheritance by analogy with, say, eye and hair colour:

If, for one reason or another, the concentration of a certain chemical differs from one part of the tissue fluid to surrounding parts, diffusion will at once begin to equalize the concentration. This is dynamics. Under comparable conditions the same process would occur everywhere in inanimate nature. What have the genes to do with this? And what inheritance? (p.88f.)

1971

1971a

1971b
“The Naturalistic Interpretation of Man (The Trojan Horse)”, in Köhler 1971, 337-55.

Köhler, W. and Adams, P. A.
1958
“Perception and Attention”, *American Journal of Psychology*, 71, 489-503, repr. in Henle, ed. 1961, 146-63. On the ways in which attention intensifies the process which underlies the perception of an object.

Köhler, W. and Dinnerstein, D.
1947
<table>
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<tr>
<th>Author(s)</th>
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<td></td>
<td>1972</td>
<td>Aspects of Motion Perception, New York: Pergamon Press. Thorough and imaginative survey, adducing experimental evidence to show that standard accounts of motion perception are inadequate. Draws sceptical conclusions regarding the possibility of a language of shape or pattern.</td>
</tr>
<tr>
<td>Korte, A.</td>
<td>1915</td>
<td>“Beiträge zur Psychologie der Gestalt- und Bewegungserlebnisse [K. Koffka, ed.]. II. Kinematokopische Untersuchungen”, Zeitschrift für Psychologie, 72, 193-296. Includes the statement of a number of laws held to govern the reciprocal dependence relations between stimulus, intensity, separation, exposure time, etc., in apparent motion.</td>
</tr>
</tbody>
</table>
| Korte, W.                       | 1923 | “Über die Gestaltauffassung im indirekten Sehen”. Zeitschrift für Psychologie, 93, 17-82. Follows on from Kirschmann 1908 and from Erdmann and Dodge, on the importance for a
theory of reading of indirect attention and of the
reader’s non-summative grasp of the text-
material via a springing from fixation point to
fixation point.

Kössler, W. 1949 "Die Rolle des Beziehungsreichtums bei der Ge-
staltwahrnehmung. Der Einfluß verschiedener
Umgebungsbedingungen auf die Unterschieds-
empfindlichkeit für Distanzen. (Dissertation, Vienna).

Kraus, O. 1921 "Zur Debatte über die Gestaltpsychologie. Einige kritische Darlegungen", Lotos (Prague), 69, 233-42. Critical comments provoked by Dreyer 1921. Kraus identifies Gestalten with relations, dismissing claims to originality both of Ehrenfels’ Gestalt theory and of the work of the Berlin school. The concept of a whole’s being greater than the sum of its parts goes back to classical times.

Krauss, S. 1928 "Über Arbeiten aus dem Gebiet der Far-
benwahrnehmung. Ein Wort für die Verbin-

Krech, D. 1950 "Dynamic Systems, Psychological Fields, and
Hypothetical Constructs", Psychological Re-
view, 57, 283-90.

1950a "Dynamic Systems as Open Neurological

Krech, D. and
Gutehfield, R. S. 1959 Elements of Psychology. New York: Knopf
(textbook based in part on Gestalt psychology
and on the work of Lewin).

Krechovsky, J. see Duncker and Krechovsky.

Kreibig, J. 1902 Psychologische Grundlegung der Wahrnehmung.
Vienna: Hölder. Especially the discussion of the
foundations of aesthetics on the basis of the
theory of Gestalt-qualities (pp. 160ff.).

1909 Die intellektuellen Funktionen. Untersuchungen
über Grenzfragen der Logik, Psychologie und
Erkenntnistheorie, Vienna and Leipzig: Hölder.
'A thing is given in perception as the Gestalt quality of a sum of perceived characters' (p.115). This theory, which is influenced by the production theory of the Graz school, is extended to yield an account of event-perception, motion and states of mind, and is shown to imply a critique of the traditional concept of substance.

1911 “Über Wahrnehmung”, Sitzungsberichte der Kaiserlichen Akademie, Vienna, 168, whole no. 6, 1-37. Perceptual processes are divided into three components:  
I. sensation  
II. conception (Auffassung)  
   (a) as a matter of will or attention  
   (b) as a matter of thought or judgment  
   (both existential and qualitative)  
III. grasping of Gestalt qualities.

Kries, J. von


Krueger, F.


At the centre of Krueger’s approach to Gestalt structure is the notion of a ‘complex-quality’, illustrated for example by the characteristic feeling-tone which one experiences (at least according to the Kruegerian view) on listening, say, to a piece of music in A minor. Complex-qualities, unlike Ehrenfels’ Gestalt qualities, are not articulated into underlying elements, have no determinate boundaries or contours, are ‘diffuse’ and physiognomic, and are seen as having a primacy in both ontogenetic and phylogenetic development (as scientific ideas, e.g., begin as vague impressions and are only later clarified in a theoretical way).

A full Krueger bibliography to 1934 is to be found in Neue Psychologische Studien, 12 (Krueger Festschrift).


(1959) Visual Field as a Frame of Reference, Stockholm: Almqvist and Wiksell (19pp.).


“The Holism-Atomism Controversy: Gestalt Psychology Confronts the Revised Law of Inverse Variation”, Psychological Reports, 24, 699-704. Members added to a class may act as stimuli suggesting to a subject hitherto unnoticed properties common to the original members. However, as the membership of a class increases the number of properties its members in fact share in common decreases (= revised law of inverse variation). The unnoticed properties are psychologically but not objectively new. See criticism by I.M. Copi and author’s reply. idem. 25, 302-18.

see Werner and Lagercrantz.

“Linguistic Gestalts”, in W. A. Beach, S. E. Fox and S. Philosoph, eds., Papers from the 13th Regional Meeting, Chicago: Chicago Linguistic Society. 236-87. Defends the thesis that, because the use and understanding of language always takes place against a certain background of experience, the subject-matter of linguistics ought properly to be structures comprehending not merely linguistic elements but also those other relevant factors which are organized together with these. The fact that such factors may share in common underlying non-linguistic properties may serve to explain surface
linguistic phenomena which would otherwise seem arbitrary. Lakoff calls such structures 'linguistic gestalts', and he gives the following tentative summary of their characteristic marks:

1. Gestalts are at once holistic and analyzeable. They have parts, but the wholes are not reducible to the parts. They have additional properties by virtue of being wholes, and the parts may take on additional significance by virtue of being within those wholes.

2. Gestalts may be analyzeable into parts in more than one way, depending on the point of view that one takes...

3. Gestalts have internal relations among parts, grouped by type. Part of what makes a gestalt is that the parts in it relate to one another in certain ways by virtue of being in the gestalt...

4. Gestalts may bear external relations to other gestalts. They may be viewed as instances of other gestalts or mapped onto other gestalts in some other way. In such mappings, parts of one gestalt get mapped onto parts of other gestalts. As a result of such mappings, a gestalt may 'inherit' properties and inherent relations from a gestalt that it gets mapped onto. There are various types of mappings, among them inferential mappings (which are transitive), and mappings that can represent arbitrary, symbolic, or cultural associations (which are typically not transitive).

5. External relations that gestalts bear to other gestalts are properties of the gestalts as a whole. Different external relations may be borne from different points of view.

6. Mappings of one gestalt onto another may be partial. Gestalts may also bear partial similarities to one another, depending on how closely they match.

7. Gestalts may be embedded inside other gestalts, and may take on new properties as a result of such embeddings.

8. One property a gestalt may bear is that of opposition to another gestalt. That is, one of the defining characteristics of a gestalt may be that it is the 'opposite' of some other gestalt.

9. Certain properties of gestalts may be segregated off as Background properties. Opposites will typically share the same Background properties.

10. Gestalts are structures that are used in processing, whether language processing, thought processing, perceptual processing, motor activity, or whatever.

11. Processes themselves may be viewed as gestalts.
12. An analysis in terms of gestalts does not necessarily make any claims as to the ultimate parts into which something can be decomposed. Since any such analysis is done by human process, it will be limited, guided by resources, purposes, and viewpoints. Given different resources, purposes and viewpoints, we can expect analyses in differing degrees of detail, or even into different parts. In semantics, for example, there need not be an analysis into ultimate, atomic predicates.

13. Gestalts may interact with each other.

14. Gestalts must distinguish prototypical from nonprototypical properties.

15. Gestalts are often cross-modal. That is, their properties may be of various types. Sensori-motor gestalts involve both perceptual properties and motor properties. Linguistic gestalts will involve a number of types of properties - grammatical, pragmatic, semantic, phonological, functional. (p.246f.)

Lakoff, G. and Johnson, M. 1980

Metaphors We Live By, Chicago and London: University of Chicago Press. Esp. ch.15: “The Coherent Structuring of Experience: Experiential Gestalts and the Dimensions of Experience.” Not only language, but experience as a whole, is organized in a Gestalt-like way. Understanding takes place in terms of entire domains of experience, not in terms of isolated concepts. Each domain of experience is a structured whole... that is conceptualized as what we have called an experiential gestalt’ (p.117). The authors show that the structures involved are in some sense natural, and they indicate how they may interact or effect each other in different ways, how they manifest distinct dimensions of independent variation.

Landaburu, L. 1946

“El delito como estructura” (Gestalt theory of crime), Crim Rev (sic), 12. [Reference from Metzger 1966. Untraced]

Langhoff, S. 1980


Lashley, K. S., Chow, K. L. and Semmes, J. 1951

“An Examination of the Electrical Field Theory of Cerebral Integration”, Psychological Review, 58, 123-36. Seminal critique of Köhler's...
cortical theory of Gestalt perception, directed specifically against Köhler and Held 1949. For Köhler’s reaction see his 1965. See also Keiler 1981, pp. 106ff for a (partial) defence of Köhler.


Lauenstein, O. 1932 “Ansatz zu einer physiologischen Theorie des Vergleichs und der Zeitfehler”, Psychologische Forschung, 17, 130-77. Our comparison of phenomena appearing at different times is achieved via a cumulation of traces of material from successive processes. Such material cumulates in temporal sequences in such a way as to form an integrated system. See the discussion in Köhler 1938, 229f. and 264ff.


1975a “The Description of Being Observed: Linguistic Factors and Eye-Contact Judgments”, in Flores d’Arcais, ed., 329-43. Includes a criticism of treatments of perception by linguistic philosophers, whose work is marred by a neglect of experimental work on perception and by a tendency to base analyses on dubious general theories (usually the theory of sense data). Consider for example the specific phenomenon of awareness that one is ‘being observed’: here experimental support can be found for Wittgenstein’s stressing the importance for the obtaining of information from the observer’s gaze patterns, of different sorts of cues derived from his seeing/looking behaviour.


1962 Leinfellner, W. J. M. “Gestalt Psychology and Physicalism”, preprinted for the members of the 5th International Congress for the Unity of Sciences, Cambridge (scheduled to appear in Erkenntnis, 9, 57-62). Somewhat trivial project of translating three central theses of Gestalt psychology into the ‘formal mode of speech’ in the manner of logical positivism. The three theses are psychophysical parallelism, the validity of introspectionism, and holism, though the pre-printed version concentrates exclusively on the first.

1962 Levelt, W. J. M. “Motion Braking and the Perception of Causality”, in Michotte et al. 1962, 244-58. Experiments on impressions of braking suggest an objective criterion which would justify the distinction between responses corresponding to specific impressions of causation and responses corresponding to inferences.


1929  “Gestalttheorie und Kinderpsychologie”, Wer­dendes Zeitalter, 12, 544-50.


1936  Principles of Topological Psychology, New York and London: McGraw-Hill. Attempts to employ mathematical concepts of closure, boundary, connectedness, etc., to characterize the space of needs, desires and experienced obstacles, of psychological subjects. Defines Gestalt as ‘A system whose parts are dynamically connected in such a way that a change of one part results in a change of all other parts’.

1938  The Conceptual Representation and Measurement of Psychological Forces, Contributions to Psychological Theory, vol. 1, no.4.


Lichtenstern, K. A. R. von 1925/26 “Versuch einer Lösung des Substanzproblems auf Grund der Gestalttheorie”, *Annalen der Philosophie und philosophischen Kritik*, 5, 121-28. The world is not divided autonomously into Gestalten, but is drawn together into different Gestalten on different levels in reflection of varying points of view. Only the world as a whole can be awarded the status of substance. (The author is the nephew of von Ehrenfels.)


Liel, W. see Benussi and Liel.


1924 “Revision einer Relationstheorie”, *Archiv für die gesamte Psychologie*, 48, 248-89. Challenges the opposition between thinking and the more intuitive and associative processes of the psyche.
<table>
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<tr>
<th>Year</th>
<th>Author(s)</th>
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<tr>
<td>1926</td>
<td>Theoretische Psychologie im Umriss, Leipzig: Barth; Eng. trans. as <em>Theoretical Psychology</em>, by H. R. DeSilva, St. Louis: Herder. 1926. Attempts to reduce all knowledge to knowledge of self, of elementary sensations, and of feelings.</td>
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<tr>
<td>1907</td>
<td>“Die stroboskopischen Täuschungen und das Problem des Sehens von Bewegung”, <em>Psychologische Studien</em>, 3, 393-545. First to point out that apparent visual movement can take place even though the stimulus objects differ in form.</td>
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<td>1915</td>
<td>“Das paradoxe Bewegungsphänomen und die ‘neue’ Wahrnehmungslehre”, <em>Archiv für die gesamte Psychologie</em>, 33, 261-65. Criticizes the early Gestalt theorists’ view that spatial configurations can act as stimuli: ‘Stimuli — or so I had thought — are physical or physiological processes, not geometrical formations’ (p.264).</td>
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<tr>
<td>1918</td>
<td><em>Die Grundfragen der Wahrnehmungslehre. Untersuchungen über die Bedeutung der Gegenstandstheorie und Phänomenologie für die experimentelle Psychologie</em>, Munich: Reinhardt, 2nd ed., with an epilogue on</td>
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“Gegenstandsphänomenologie und Gestaltetheorie”, 1929. An important study confronting Berlin Gestalt psychology with the philosophical and psychological theories of Brentano, Stumpf, Husserl and Meinong. Linke takes up a position which is in many respects midway between those of Benussi and Koffka. There is no perceptual *Gestaltung* (forming) but only *Umgestaltung* (re-forming), and the latter is a stimulus-free psychic process that is conditioned by mind-independent structural laws. Linke rejects the very idea of Wertheimer’s phi-phenomenon, since perceived motion is impossible without perception of the moving object. The so-called pure movement is ‘merely presented’ (*bloß vorgestellt*), as one may be psychically compelled to present to oneself an array of dots as e.g. a triangle.

Lipmann, O. 1923  “Bemerkungen zur Gestalttheorie”, *Archiv für die gesamte Psychologie*, 44, 371-78. On subjective (inner) and objective (outer) Gestalten and on the capacity of the subject to constitute as Gestalten sums of objective elements which do not, objectively, form a Gestalt.


1898  “Raumästhetik und geometrisch-optische Täuschungen”, *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, 18, 405-41. and as Separatum, Leipzig: Barth, 1897.

1900  “Zu den ‘Gestaltqualitaten’”, *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, 22, 383-85. Reply to Cornelius (1900), who had defended a view of Gestalt qualities as mental contents. Lipps argues that the similarity of melodies and like formations can be explained in terms of the similarity of underlying psychic processes or of excitation states or of the
relations between them. He dismisses Cornelius' suggestion that feelings might be classified as Gestalt qualities, pointing out that feelings are qualities of the ego, not qualities of any objectual contents of consciousness.


1913  *Zur Einfühlung*, Leipzig: Engelmann. Puts forward an empathy-theory of Gestalt presentation according to which the Gestalt-quality of the perceived object is actually a matter of feelings of the observer which he somehow reads into the object itself.

A complete Lipps bibliography is in preparation by N. Bokhove (Utrecht).

London, I. D. 1944  “Psychologists’ Misuse of the Auxiliary Concepts of Physics and Mathematics”, *Psychological Review*, 51, 266-91. Harsh criticism of Lewin’s so-called ‘topological psychology’ to the effect that Lewin has adopted merely the shadow and not the substance of a mathematical theory. The majority of London’s points are well-taken, though occasionally exaggerated – for example where he castigates Lewin for employing topology over a finite domain (288f.).


c. 1970  *Wertheimer’s Seminars Revisited: Problem Solving and Thinking*, 3 vols., Albany: State University of New York Faculty-Student Association. Vol.2, a treatment of elementary mathematics in terms of the notion of structure, is mainly of pedagogical interest, but see the discussion of Pragnanz, including parts of a letter from Köhler, on pp.223ff. Vol. 3, which is on the role of set and repetition in learning, and on reorganization as a factor in problem-solving, seems to have had less to do with Wertheimer’s seminar.


1978c  *Wertheimer’s Seminars Revisited*, vol.6, *Expression of Personality and Memory for Impressions*, Albany: State University of New York Faculty-Student Association.


McAlister, E. see Hochberg and McAlister

MaeColl, S.H. 1939 A Comparative Study of the Systems of Lewin and Koffka with Special Reference to Memory

McDougall, W. 1936/37 “Dynamics of the Gestalt Psychology. I – IV”, *Character and Personality*, 4, 232-44 (on Köhler), 319-34 (on Koffka), 5, 61-82 (on Lewin), 131-48 (general summary): ‘I would submit that no one of the principles of Gestalt psychology is new, except one (isomorphism) which is, I think, demonstrably false’.


1866b “Die Gestalten der Flüssigkeit”, Lecture delivered in the German Casino in Prague in 1866, see Mach 1872; repr. in Mach 1896, 1-16, Eng. trans. as “The Forms of Liquids” in Mach 1943, 1-16.

1871 “Die Symmetrie”, Lecture delivered in the German Casino in Prague in 1871, see Mach 1872; repr. in Mach 1896, 100-16, Eng. trans. as “On Symmetry” in Mach 1943, 89-106.

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<th>Year</th>
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<th>Author</th>
<th>Publisher</th>
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<tbody>
<tr>
<td>1875</td>
<td>Grundlinien der Lehre von den Bewegungsempfindungen</td>
<td>MacKenna, M.C.</td>
<td>Leipzig: W. Engelmann</td>
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<td>The Science of Mechanics: A</td>
<td>of 2nd ed.: The Science</td>
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<td>Critical and Historical</td>
<td>of its Principles, by T. J.</td>
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<tr>
<td>1943</td>
<td>Popular-Scientific Lectures</td>
<td>MacKenna, R.B.</td>
<td>Leipzig: Barth</td>
<td>1st ed., La Salle: Open Court</td>
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<td></td>
<td>A comprehensive Mach bibliography by J. Thiele is to be found in Centaurus.</td>
<td>MacKenna, R.B.</td>
<td>Miscellanea Psychologica Albert Michotte.</td>
<td>International Magazine of the History of Science and Medicine, 8, 1963, 180-237.</td>
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<tr>
<td>Madden, E.H.</td>
<td>1950</td>
<td><em>An Examination of Gestalt Theory</em> (Dissertation influenced by G. Bergmann. University of Iowa).</td>
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<td></td>
<td>1952</td>
<td>“The Philosophy of Science in Gestalt Theory”, <em>Philosophy of Science</em>, 19, 228-38. Following Bergmann, Madden shows that analytic methods are able to cope with non-additive phenomena, since they do not assume – as the Gestaltists’ caricature suggests – that laws for whole-phenomena are obtained by simple conjunction of laws for part-phenomena. Rescher’s reply in the following issue (pp.327-8) points to the phenomena of emergence (Madden’s response is on pp.329-31).</td>
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<tr>
<td>Name</td>
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<tr>
<td>Maher, J. P.</td>
<td>1971</td>
<td>“The Semantics and Perception of IC Structure: A Gestalt Approach to Color Terms: Spanish and English 'green'”, as repr. in Maher 1977. Demonstration of the power of a Gestaltist approach to historical linguistics, taking into account not merely linguistic phenomena but also the cultural, historical, social, political, psychological background against which language is used.</td>
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Mansurow, N. S. see Anzyferowa and Mansurow.


Marshall, H. R. 1914 “Psychic Function and Psychic Structure”, *Mind*, 23, 180-93:

> each mental item of psychic emphasis, whatever its special nature may be, always displays (first) some measure of complexity or manifoldness, (second) some measure of intensity, something of agreeableness or disagreeableness, (fourth) some degree of stability or realness, (fifth) some temporal qualification. (p. 191)

Martín, J. R. 1940 “Reminiscence and Gestalt Theory”, *Psychological Monographs*, 52, whole no. 235. Capacity for reminiscence is proportional to the meaningfulness of the material to be recalled.

Martín, P. F. 1953 *Experimentelle Untersuchungen zur Psychologie der Interpretation*, (Dissertation,
Graz). Interesting Würzburg style analyses of the processes involved in the interpretation of texts.


Marty, A. 1908 Untersuchungen zur Grundlegung der allgemeinen Grammatik und Sprachphilosophie, I (only volume published), Halle: Niemeyer, repr. Hildesheim: Olms, 1976: 'the “form” in the sense of Gestalt is evidently nothing other than a special type and sum of relations’ (p.109). A Gestalt is a sum of relations to which a special sort of feeling-quality comes to be attached (cf. Stumpf 1907f.). Thus it is clear that, for example, our apprehensions of chords and melodies can be accompanied by sensory feelings, just as can individual tones. To apprehend a Gestalt is simply to apprehend a certain group of sensations between which special relations obtain in such a way that, as if by reflex, special feeling-qualities come to be attached thereto.

Marx, Joseph [Pepo] 1909 Über die Funktion von Intervall, Harmonie und Melodie beim Erfassen von Tonkomplexen (Dissertation, Graz, under Meinong). Parts I and II are a study of musical chords and of their effects on the hearer, both in relation to consonance and dissonance and in relation to temporal complexity (interplay between chords and melody). Part III is a study of the concept of direction in music and of the factors affecting our experience thereof.


1929 Das Gestaltproblem (Ergebnisse der Physiologie, 29), Munich: Bergmann. Survey of reciprocal dependence and correlation relations between Gestalten and their parts and of the ‘Gestalt laws’.


1975 “Von der Gestalttheorie zur Psychologie”, in Ertel, et al., eds., 64-75. Gestalt theory will prove its worth once there have been provided formal treatments of the notion of structure and as soon as it has been freed of its vague philosophical underpinnings.


1891 “Zur Psychologie der Komplexionen und Relationen”, Zeitschrift für Psychologie und Physiologie der Sinnesorgane, 2, 245-65, repr. in GA I, 279-300. Attempts to refine and develop the Ehrenfels’ theory of 1890. Meinong rejects a conception of Gestalt-qualities as sums or complexes of relations on the grounds that relations (e.g. the relations between the successive tones of a melody) are normally not given in consciousness when we perceive a Gestalt and certainly do not have to be so given. Meinong identifies Gestalt qualities as founded contents; hence they are (1) ideal, (2) given with their fundamenta as a matter of necessity, (3) in some sense ranged over the latter, not alongside them as with Ehrenfels. Meinong also moves beyond Ehrenfels in identifying the higher-order Gestalt formation as a product of cognitive or intellectual processing, thereby giving birth to the ‘production theory’ of Gestalt perception.


1899 “Über Gegenstände höherer Ordnung und deren Verhältnis zur inneren Wahrnehmung”. 


A complete bibliography of Meinong’s writings compiled by R. Fabian is to be found in GA VII, 325-42.


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<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Metelli, F.</td>
<td>1927</td>
<td><em>Einführung in die Psychologie und die psychologischen Richtungen der Gegenwart</em>, Leipzig: Meiner</td>
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<td></td>
<td>1940</td>
<td>&quot;Ricerche sperimentali sulla percezione del movimento&quot;, <em>Rivista di Psicologia</em>, 26, 1-56.</td>
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<td></td>
<td>1964</td>
<td>&quot;Repos apparent et phénomènes de 'totalisation cyclique' dans la perception visuelle&quot;, <em>Journal de Psychologie normale et pathologique</em>, 61, 1-38.</td>
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1975b “Shadows without Penumbra”, in Ertel, et al., eds., 200-209. There are some figures which, under chromatic conditions for the perception of transparency, instead of generating the impression of a transparent layer through which part of the surface beyond could be seen, are described as having something like a dark shadow cast on them. These cases contradict Kardos’ thesis that there is a shadow only if there is a penumbra.


Metzger, W.


1930  “Optische Untersuchungen am Ganzfeld, II. Zur Phänomenologie des homogenen Ganzfeldes”, Psychologische Forschung, 13, 6-29 (For Part I see W. Engel 1930.)

1930a “Optische Untersuchungen am Ganzfeld, III. Die Schwelle für plötzliche Helligkeitsände- rungen”. Psychologische Forschung, 13, 30-54.


1934 “Untersuchungen über phänomenale Identität”. Psychologische Forschung, 19, 1-60. Demonstrates functional dependence between the extent to which a whole manifests the real relation of intrinsic unity and the extent to which this whole will be identified as genidentical, i.e. as one and the same through time.


1941 Psychologie: die Entwicklung ihrer Grundannahmen seit der Einführung des Experiments, Dresden and Leipzig: Steinkopff; 2nd revised ed. with extensive but not always reliable bibliography (338-68), Darmstadt: Steinkopff, 1954; 3rd ed., 1963 (further editions to 5th ed., 1975, are unchanged). Heavily influenced by Wertheimer. A somewhat hectic and uneven treatment, but full of useful insights. In particular, Metzger shows clearly why Ehrenfels’ conception of Gestalt structure in terms of an additional quality is inadequate to certain cases. He distinguishes four ways in which components can enter into a perceived whole:

1. The manifold of stimuli reproduces itself [bildet sich ab] in the manifold of members of the unified whole, as
in the case of a figure made of points (e.g., a domino),
simple tone-series, and certain chords...

2. The stimulus manifold leads to a formation which is
itself not articulated, even though often clearly formed
and set off externally; such a formation however still
contains a manifold of loci, which corresponds, at least
approximately, to the manifold of stimuli, as in the case
of a plane figure (a segment of a circle) or the howl of a
siren, etc. This second sort of relation between single
stimulus and locus holds also within the individual
members of an articulated whole, provided the latter
are not unextended points; this fact has been
insufficiently attended to in discussions of perceptual
psychology.

The first two sorts of whole have this in common, that
the absence of a stimulus component brings about a gap
or discontinuity at a certain place in the intuitive whole
and, connected with this, the stimulus effects make
themselves felt in the first place side by side or
successively within the unified whole.

3. There arises a formation as in 2., but the manifold of
stimuli is not reproduced therein; the individual
components are rather more or less intensively
involved in the shaping of the character of the whole, in
such a way that if one is missing or another is added then
this brings about changes in this character, though no
gap or discontinuity arises. The primary example is the
musical sound. This shows particularly clearly that
certain components can be more significant for the
whole than others, that one of these in certain
circumstances 'founds' ['begründet'] the whole, while
the others merely add 'colour', and that with the
addition of certain further components that which had
served as founding component can sink to the level of
mere colouring. - This third type of relation can occur
together in the same whole with the first two types in
the most varied ways or (under constant external
conditions) alternate with them, as is sufficiently well­
known e.g. from the case of the hearing of partial tones
within what at first seems to be an intuitively unified sound...

4. Finally there occur intuitive formations which are
based on a number of stimulus manifolds each one of
which in itself yields an intuitive whole of the first,
second or third sort, but whose effects coincide [zur
Deckung kommen] in such a way that... the absence of
any one of them does not bring about any gap or
discontinuity... The prime example of 4. is perception
via double organs: two eyes or two ears are stimulated,
and I see one thing, hear one word. I close one eye, block up one ear, and see the same thing, hear the same word. No gap appears, nothing is lost; not even the brightness of what is seen or the intensity of what is heard are diminished. (p.53ff. of 1st ed., p.56f. of 3rd ed.)

1954

1954a

1957

1960

1963
“Zur Geschichte der Gestalttheorie in Deutschland”, Psychologia, 6, 11-21.

1965
“Der Beitrag der Gestalttheorie zur Frage der Grundlagen des künstlerischen Erlebens”, Exakte Ästhetik, 1, 15-29.

1966
“Der Ort der Wahrnehmungslehre im Aufbau der Psychologie”, in Metzger and Erke, eds., 3-20.

1966a
“Das einügige Tiefensehen”, in Metzger and Erke, eds., 556-89. Includes a discussion of the various factors – cross-over and covering phenomena, size differences, brightness gradients, etc. – making possible the monocular perception of depth.

1966b
“Figural-Wahrnehmung”, in Metzger and Erke, eds., 693-744.


1974a "Can the Subject Create His World?", in MacLeod and Pick, eds. 1974, 57-71. Part I is a critical survey of various idealist conceptions, i.e. of conceptions of the world as dependent on conscious acts, from Fichte and Schopenhauer to the production theories of G. E. Müller and of Meinong: "To sum up, none of the known theories of "creating" one's own world by mental acts has proved to be adequate to the facts.' (p.62) Part II surveys theories according to which the phenomenal world originates in behaviour (e.g. in eye movements) or in overt action. Again, the activities involved in perception "have one trait in common: none of them "produce" or "create" anything. Their very purpose is to make things react in various ways and thus lay open their nature..." (p.66).


1975a "Die Entdeckung der Pragnanztendenz. Die Anfänge einer nichtatomistischen Wahrnehmungslehre", in Flores d'Arcais, ed., 3-47. Pragnanz-phenomena reveal that there can be
no norm-free psychology of perception. Even the earliest and simplest of perceptual functions can be described only with the use of value-concepts since our elementary perceptual apparatus operates according to aesthetic principles – or presupposes that the external world of things and events is governed by such principles.


1982 “Möglichkeiten der Verallgemeinerung des Prägnanzprinzips”, Gestalt Theory, 4, 3-22. On the possibilities of generalizing the principles of Prägnanz beyond the purely perceptual sphere to take account of e.g. phenomena of social psychology.


Michels, K.M. and Zusne, L. 1965 “Metrics of Visual Form”, Psychological Bulletin, 63, 72-86. Review of research on
relations between measures of perceptual response and measures of physical form. Useful bibliography.

Michotte, A. 1905 Les signes régionaux; nouvelles recherches expérimentales sur la répartition de la sensibilité tactile dans les états d'attention et d'inattention, Louvain: Editions de l'Institut supérieur de Philosophie.


1912 “Nouvelles recherches sur la simultanéité apparente d’impressions disparates (Expérience de ‘communication’)”, Etudes de Psychologie, 1, 97-192.

1912a “Note à propos de contributions récentes à la psychologie de la volonté”, Etudes de Psychologie, 1, 193-233.


1941 “La causalité physique est-elle une donnée phénoménale?”, Tijdschrift voor Philosophie, 3, 290-328, repr. in Michotte et al. 1962, 91-127.


1952 “[Autobiography]”, in E.G.Boring, et al., eds., History of Psychology in Autobiography, 4, 213-36; expanded French version in Psychologica Belgica, 1, 1954, 189-217: it was in Würzburg, where Michotte was studying from 1907-08, ‘that I discovered the works of Brentano, Mach, Meinong, Husserl, Stumpf, von Ehrenfels and others’ (p.215).
1953  “La participation émotionnelle du spectateur à
l’action représentée à l’écran. Essai d’une
théorie”, first publ. in Revue international de
Filmologie, repr. in Michotte et al. 1962, 501-
511.

1953a “L’influence de l’expérience sur la structuration
des données sensorielles dans la perception”,
Rapport au deuxième symposium de
l’Association de Psychologie scientifique de
Langue française (Louvain, 1953), Paris:
Presses Universitaires de France, 31-45, repr. in
Michotte et al. 1962, 545-60.

1955 “Perception et cognition”, Proceedings of the
14th International Congress of Psychology in
Montreal, 1954 (Acta Psychologica, 11),
Amsterdam: North-Holland, 70-91, repr. in
Michotte et al. 1962, 561-87.

1957 “La causalité phénoménale”, Studium
Generale, 10, 383-90, repr. in Michotte et al.

1957b “Les variations de réalité apparente de la
troisième dimension dans les perceptions
visuelles”, Archivio di Psicologia, Neurologia e
Psichiatria, 18, 203-13, repr. in Michotte et al.
1962, 512-22.

1959 “Réflexions sur le rôle du langage dans l’analyse
des organisations perceptives”, Actes du
XVème Congrès International de Psychologie
(Bruxelles, 1957) (Acta Psychologica, 15),
Amsterdam: North-Holland, 17-34, repr. in
Michotte et al. 1962, 588-609.

1960 “Le réel et l’irréel dans l’image”, Bulletin de la
Classe des Lettres de l’Academie royale de
Belgique, 5e Série, 46, 330-44, repr. in Michotte
et al. 1962, 522-37.

1962 “Centres de rotation, et perceptions visuelles
de mouvements circulaires”, Psychologische
Beiträge, 6 (Köhler Festschrift), 531-43.

Michotte, A. et al. 1962 Causalité, Permanence et Réalité Phénoménale. Etudes de Psychologie expérimentale (Studiu
Michotte, A. and Burke, L.  

Michotte, A. and Galli, G.  
1925 Recherches sur les synthèses sensorielles dans le domaine de la sensibilité kinesthésique, Travaux du Laboratoire de Psychologie expérimentale de l’Université de Louvain (37pp.).

Michotte, A. Knops, L. and Coen-Gelders, A.  

Michotte, A. and Portych, T.  
1914 "Deuxième étude sur la mémoire logique. La reproduction après des intervalles temporels de différentes longueurs", Etudes de Psychologie, 1, 237-364.

Michotte, A. and Ransy, C.  
1912 "Contribution à l’étude de la mémoire logique", Etudes de Psychologie, 1, 1-96.

Michotte, A. and Thinès, G.-L.  
1963 "La causalité perceptive", Journal de Psychologie normale et pathologique, 60, 9-36; Ger. trans. as "Die Kausalitätswahrnehmung" in Metzger and Erke, eds., 954-77.

Michotte, A., Thinès, G.-L. and Crabbé, G.  
1964 Les compléments amodaux des structures perceptives, Studia psychologica, Louvain: Editions de l’Institut supérieur de Philosophie; Ger. trans. as "Die amodalen Ergänzungen von Wahrnehmungsstrukturen", in Metzger and Erke, eds., 978-1002. On amodal completion of perceptual structures, including a discussion of the tunnel and piston effects.
See also Fraisse, P. 1956. For bibliography to 1947 see *Miscellanea psychologica Albert Michotte*, Louvain: Editions de l'Institut supérieur de Philosophie, 1947, xxxiii-xxxv.

Mikesell, W. and Bentley, M. 1930 “Configuration and Brightness Contrast”. *Journal of Experimental Psychology*, 13, 1-23. Employs both conventional and non-conventional shapes as stimulus-objects and shows that familiarity derived from past experience, in making for a more unitary configuration, can also affect contrast in ways which satisfy laws that apply to unitary configurations in general, however they have arisen.


Miller, A. I. 1975 “Albert Einstein and Max Wertheimer: A Gestalt Psychologist’s View of the Genesis of Special Relativity Theory”, *History of Science*, 13, 75-103. Includes a treatment of the manuscript material underlying ch.10 of Wertheimer’s *Productive Thinking* and a discussion of Wertheimer’s analyses of Einstein’s thought.


Miner, N. see Sperry, et al.

Minguzzi, G.F. 1968 “Sulla validità della distinzione tra percezione di nesi causali e percezione di dipendenze funzionali”, in Kanizsa and Vicario, eds., 161-96. A study of Michotte’s distinction between perception of mechanical causation (launching
and entraining effects) and perception of functional dependence (triggering, inverse launching, falling on removal of support, attraction effects, etc.).

1984  “La percezione di superfici anomale”, in Kanizsa, eds., 97-118. Survey with extensive bibliography. See also Bosinelli, et al.


Montpellier, G. de  1935  Les altérations morphologiques des mouvements rapides (Etudes de Psychologie, 4), Louvain: Editions de l’Institut supérieur de Philosophie. Study by follower of Michotte of spontaneous productions of rhythm and of subjective factors which play a role in determining elaborations of rhythmic forms produced.

1937  “Note sur l’accélération dans les mouvements volontaires de la main”, Archive de Psychologie, 26, 181-97.

Moore Heider, G.  see Heider, G. M.


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<th>Author(s)</th>
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<tr>
<td>Mori, T. and Nagashima, K.</td>
<td>1953</td>
<td>“The Effects of the Organization of the Total Patterns upon Figure After-Effects”</td>
<td>Essays and Studies by Members of Tokyo Women's Christian College, 87-102.</td>
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<tr>
<td>Mousgaard, I. K.</td>
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<td>see Fieandt and Mousgaard.</td>
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Musatti, C.L. 1924 "La psicologia come scienza", Rivista di Psicologia, 20, 15-22. Psychology is not a science of the conscious subject, but a science of conscious states.

1924a "Sui fenomeni stereocinetici", Archivio Italiano di Psicologia, 3, 105-20. Trans. as Musatti 1962. Stereokinetic phenomena are involved in those perceptual situations in which, as the result of real or apparent movement, figural elements objectively situated on a surface are perceived as three-dimensional. See Musatti 1957.

1926 Analisi del concetto di realtà empirica, Città di Castello: II. Solco, repr. in Musatti 1964, 13-175.

1928 "Sui movimenti apparenti dovuti ad illusione di identità di figura", Archivio Italiano di Psicologia, 6, 153-63.

1928a "La Scuola di Psicologia di Padova (1919-1927)", Rivista di Psicologia, 24, 26-42.


1928c "L'attività scientifica di V. Benussi", Archivio Italiano di Psicologia, 6, 259-73.


1929a "La psicologia della forma", Rivista di Filosofia, 20, 329-57, repr. in Aut-Aut, 89, 1965, 8-38. Defence of Benussi's later, refined version of the production theory, consisting in the thesis that there are not only perceptions where non-sensory factors play a significant role but also perceptions where the role of such factors is negligible.
1930 “I fattori empirici della percezione e la teoria della forma”, Rivista di Psicologia, 26, 259-64.

1931 “Forma e assimilazione”, Archivio Italiano di Psicologia, 9, 61-156, repr. in Musatti 1964, 213-69. On the tendency for elements of a unitary structure to become articulated in accordance with the law of maximum homogeneity. Musatti attempts thereby to unify into a single law the factors listed by Wertheimer in his Untersuchungen (1921 and 1923a) as factors of unification of form. Musatti’s law states that the perceptual field organizes itself into units through articulated forms in such a way as to reach the maximum homogeneity possible for each unit.

1931a Elementi di psicologia della testimonianza, Padua: Cedam.

1934 “Il costituirsi dell’esperienza come problema della psicologia empirica contemporanea”, first publ. in Atti del X Congresso Nazionale di Filosofia, Padua, repr. in Musatti 1964, 271-77.


1955 “La stereocinesi e il problema della struttura dello spazio visibile”, Rivista di Psicologia, 49, 3-57.
“Coscienza e inconscio nelle ricerche sperimentali di V. Benussi”, *Rivista di Psicologia*, 51, 3-23. Deals especially with Benussi’s research around 1924 on perceptual assimilation in the sense of Wundt, i.e. on those processes in which the appearance of a visually perceived form (e.g. the caricature of a face) is enriched in particular aspects by the influence of the complex experience each of us has with human faces. This idea was exploited by Musatti in his 1924, criticized by Renvall 1929.


“Struttura ed esperienza nella fenomenologia percettiva”, *Rivista di Psicologia*, 52, 265-79, repr. in Musatti 1964, 351-67. Critique of research on the Ames phenomenon (the rotating trapezoidal window); argues that it is impossible to find an experiment which would decide between empiricist and Gestalt interpretations. The empiricist holds that we see Ames-like phenomena as we do because of past experience of similar objects, the Gestaltist because of the working of Gestalt laws giving rise to a tendency towards Prägnanz. But since there is no one who has not seen Prägnant forms, these forms to that extent belong to our ‘past experience’. See Kanizsa 1968, 1969.


Psicoanalisi e vita contemporanea, Turin: Boringhieri.
“Die Vergegenständlichung in der Wahrnehmungserfahrung”, Psychologische Beiträge, 5 (Metzger Festschrift), 175-82. The experienced world manifests a number of invariants of form, identity, duration, constancy, etc. How do these invariants become established, given that (at least in normal circumstances) the physical stimuli manifest a constant and continuous variation?


1962 Stereokinetic Phenomena, Commentary by Howard R. Flock, mimeograph, edited by J. J. Gibson, Department of Psychology, Cornell University.


perception ('I perceive a certain Gestalt' is a misleading way of expressing 'I perceive something in a certain Gestalt-like way').

see Sperry, et al.

see Mori and Nagashima.

Myers, R. E.
Nagashima, K.


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<thead>
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<th>Author(s)</th>
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<tr>
<td>Noguchi, K.</td>
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<td>see Morinaga and Noguchi, etc.</td>
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<td>Northup, K. M.</td>
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<td>see Zigler and Northup.</td>
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<tr>
<td>O’Connell, D. N.</td>
<td></td>
<td>see Köhler <em>et al.</em>, and Wallach and O’Connell.</td>
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Oeser, O.A. 1930 “Critical Notice: Gestalt Psychology and Gestalt Theory”, *British Journal of Psychology*, 21, 73-94. Review of Köhler 1929. On the difference between causal and ontological analogies in science: causal analogies exist where, for example, physical laws governing liquid flow are profitably extended to apply to flows of gases. Köhler’s attempts to draw analogies between physical and psychological structures are merely ontological and will be taken seriously by no physicist, since these structures have nothing in common beyond the fact that both satisfy the Ehrenfels’ criteria, but the latter apply indiscriminately to all groups of objects. Gestalt theory is criticized for its appeal to large numbers of *ad hoc* tendencies, where it is a mark of science to strive for a unified theory.


Oléron, G.  see Fraisse and Oléron.

Oñativia, O. V. 1951  *Percepción y acción*, Buenos Aires: Universidad monografías psicológicas, no. 5.


Oppenheim, P. see Grelling and Oppenheim, Rescher and Oppenheim.


Owen, D. H. see Brown, D.R. and Owen.

“Analysis of Causal Relations in the Perceptual Constancies”, in Epstein, ed., 183-216. See also Sagara and Oyama.

Palmés, F. M.a

1945


Park, J.

see Epstein and Park.

Pastore, N.

1971


Pauli, R.

1926

“Der Aufbau der Tastwelt. (Im Anschluß an das gleichnamige Buch von D. Katz)”. Archiv für die gesamte Psychologie, 56, 253-80.

Paunonen, H.

1974


Pavlov, I.

1928

“Über die Idee einer objektiven Psychologie. Psychoreflexologie und Behaviorismus im

1929 Die Wertheimer-Koffka-Köhlersche Gestaltheorie und das Gestaltproblem, systematisch und kritisch dargestellt. Ein Kapitel aus der Prinzipienrevision in der gegenwärtigen Psychologie. Leipzig: Barth, 1929. (Kiel Habilitation). English trans. as The Gestalt Theory and the Problem of Configuration, London: Kegan Paul, Trench, Trubner and Co., 1932. Somewhat exaggerated critique of Berlin school which is attacked, e.g. for producing a theory which leaves no room for the phenomena of attention and for embracing as a philosophical dogma the idea that the theory of isomorphism solves the mind-body problem. Just as the notion of 'element' was totally empty in the old atomistic theory, so, Petermann argues, the notion of 'Gestalt' is empty in the new theory: it does no work.


Petry, H. M. see Bradley and Petry.


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<td>Pick, H. L.</td>
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<td>see MacLeod and Pick, eds.</td>
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<td>Interpretation of ideas on the role of objectification in human behaviour in Ach 1932.</td>
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<td>1950</td>
<td>&quot;Quels sont les déterminants de la prégance perceptive?&quot;, Acta Psychologica, 7 (Révész Festschrift), 337-51.</td>
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<tr>
<td>Pikler, J.</td>
<td>1913</td>
<td>&quot;Empfindung und Vergleich. 1&quot;, Zeitschrift für Psychologie, 67, 277-88. Defence of Schumann's ideas on comparison in his &quot;Beiträge zur Analyse der Gesichtswahrnehmung&quot;.</td>
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<td>1966</td>
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<td>The Tacit Dimension, New York: Double-day. Generalizes Gestalt-theoretical ideas on the physiognomic character of perceptual knowledge to the spheres of theoretical and practical knowledge. All cognition involves a tacit or subliminal dimension in the sense that we always see more than can be formulated explicitly, e.g. in terms of rules.</td>
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<td>1910</td>
<td>Porteck, G. and Portlock, D. B.</td>
<td>“Über die Bedeutung der scheinbaren Größe und Gestalt für die Gesichtsraumwahrnehmung”. Zeitschrift für Psychologie, 54, 311-61. Dissertation, begun in Stumpf’s laboratory in Berlin and completed under T. Ziehen. Claims that the facts of apparent form can be treated empirically without resorting to the notion of Gestalt quality. Stresses that the apparent form (shape, Gestalt) of spatial objects is adequate to the objective shape only in frontal-parallel orientation.</td>
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Puca, A. 1941 *La psicologica della forma (Gestalt) nelle sue legge e nelle sue applicazioni*, Naples.

Pupp, R. 1932 *Gestalt und Beziehung im Anschluß an die österreichische Schule*, (Dissertation, Munich, under Geyser). Valuable study of Austrian production theory, especially in relation to the work of Witasek and Meinong, affirming that what is characteristic of the production theory is its unrevoked holding on to the primacy of the elements. Following Gelb (1911) Pupp suggests an extension of Ehrenfels’ theory admitting also relations as founding elements of Gestalt qualities and, more generally, laying particular stress on the notion of Verschmelzung and on the role of relations.

It is not merely a sum of impressions that we have before us in the way of Gestalt with the sounding of the last note of a melody, but much rather, besides these and in their fusion,... a sui generis moment of peculiar penetration (p.90).

After considering the Berlin school critique of the production theory (above all Koffka 1915), Pupp suggests a compromise position according to which the order from stimulus to sensation to act of production to Gestalt may sometimes be reversed: the experience of the Gestalt may come first, though sensations do nevertheless in certain circumstances manifest their primacy; or the two sorts of experiences may in some cases go in parallel.


Radner, M.  see Gibson and Radner.


1949  “Variabilität und Konstanz als phänomenologische Kategorien”, Psychologische Forschung, 23, 69-114. Thorough treatment of certain formal aspects of perceived constancy, and specifically of the differences between objects of perception as individuals and as members of classes. defends the asymmetry of the relation is similar to.


1952 Struktur und Metrik figural-optischer Wahrnehmung, Frankfurt: Kramer. Unparalleled study of optical illusions and associated phenomena, with an exhaustive taxonomy of basic forms, especially in relation to those differences which consist in one figure's being derived from another in the sense of Rausch 1966. Culminates in a treatment of the Cartesian structure of phenomenal space.


1960a “Eine stroboskopische Versuchsapparatur”, Psychologische Beiträge, 4, 110-17. On an apparatus constituted by a mosaic of flashing lights designed to produce stroboscopic effects.


1960c “Über kinästhetische Nachwirkungen”, Psychologische Beiträge, 5 (Metzger Festschrift), 232-47. Figural after-effects depend not only on the conditions of stimulation but also on the associated behaviour and on the manner of experiencing the stimulus.


1966 “Probleme der Metrik (Geometrisch-optische Täuschungen)”, in Metzger and Erke, eds., 776-865.


1966b “Paradoxien der Identität”, *Studium Generale*, 19, 383-391. Interesting treatment of the existential and functional dependence relations, particular those obtaining between agent and action, as a means of resolving the paradox ‘Si duo faciunt idem, non est idem’ (When two do the same, what they do is – in certain circumstances – not the same). Rausch develops a formal framework within which it is possible to distinguish between those moments of an action which are dependent on and those which are independent of the acting subject (with implications for the psychological, moral and legal treatment of action and responsibility).

*Schweizerische Zeitschrift für Psychologie*, 29 (Meili Festschrift), 127-34. Phenomenological treatment of the difference between two readings of the subject-predicate form. 1. taking the subject as constant, the predicate as variable. 2. taking the predicate as constant, the subject as variable.

1971 “Betonungsproblem und Variabilitäts-Konstanz-Verhältnis”, *Archiv für Psychologie*, 123, 235-43. On the distribution and coordination of emphases between parts of a sentence. It is normally the variable data in a sentence that are accentuated.


1972a “Optische Täuschung”, in *Lexikon der Pädagogik*, Freiburg: Herder, 244-45.


1981a “Einübung in ein zweites Zahlensystem. Ein Beitrag zum Problem der Bezugssysteme”, in
L. Tent, ed., Erkennen, Walten, Handeln, Göttingen: Hogrefe, 136-54. Demonstrates how alternatives to the decimal system, e.g. taking 6 as base, can be acquired in a short time in such a way that the new system does not interfere with the old. Rausch investigates whether the transfer involved could serve as a model for the relations between other pairs of reference systems.


1983 "Helldominanz und Dunkelldominanz bei stroboskopischen Phänomenen II", Psychologische Beiträge, 25, 397-426. It is shown how a process objectively consisting of successive extinction and flashing of adjacent elements in a mosaic of lights can appear as the movement of a dark object in a bright continuum. Several modes of phenomenal causality can be distinguished thereby (the dark object can e.g. be seen to cover up an adjacent bright one or to displace or engulf it).

1985 "Über Eigenschaften und Prädikate", Gestalt Theory, 7, 139-54.


Reenpää, Y. 1936 Allgemeine Sinnesphysiologie. Stellung und Bedeutung des sinnesphysiologischen Versuches im Bereich der Observation, des exakten Experimentes und der Begriffsbildung, Vienna: Springer. An interesting treatment of the structures of sensation and of the objects founded thereon, in the spirit of Carnap's
Reich, O.  
1933  
*Das Qualitätsproblem der Psychologie und seine Lösung. Eine musikpsychologisch-psychologische Abhandlung.* (Dissertation, Prague, im Selbstverlag).

Reimann, H. and Birkhan, G.  
1983  

Reiser, O.  
1927  

1930  

1931  
"The Logic of Gestalt Psychology", *Psychological Review*, 38, 359-68. Argues that the Gestalt-theoretical treatment of the thought-processes, if it is to be adequate, must be able to do justice to the thought-processes of the mathematician.

1934  
"Time, Space and Gestalt", *Philosophy of Science*, 1, 197-223.

1939  
"Aristotelian, Galilean and Non-Aristotelian Modes of Thinking", *Psychological Review*, 46, 151-62. Argues that Gestalt theorists (and particularly Lewin) have not gone far enough in their examination of the role of logic in the

Aufbau. Reenpää's position is a version of Gestalt constructivism: the parts of Gestalten exist, and they can be investigated, but they do not exist in isolation (as they do, for example, from the standpoint of cruder forms of sensationalism).
construction of systems. Reiser countenances a further step, beyond Galileo and in the direction of Dirac.

see Brunswik.

Reiter, L.

Remondino, C. 1975


Renvall, P. 1929

“Zur Theorie der stereokinetischen Phänomene”, in Annales Universitatis Aboensis, Series B, 10 (ed. E. Kaila). Includes a discussion of Musatti’s early work on stereokinetic phenomena. Musatti is criticized for having appealed to assimilative processes to account for stereokinetic phenomena. Following Kaila, Renvall argues that the simple structural laws of Gestalt psychology can explain the phenomena without any need to appeal to our past experiences with solid objects.

Rescher, N. and Oppenheim, P. 1955

“Logical Analysis of Gestalt Concepts”, British Journal for the Philosophy of Science, 6, 89-106. Informal discussion of emergence, holism and dependence, inspired by Grelling. Concludes with an interesting topological treatment of the structural features of wholes, i.e. of those features which are invariant under certain sorts of transformations (transpositions):

A complex is characterised by the following three features:
(1) A set $G$ of topologically structured attributes.
(2) A topologically structured space $X$, constituting the domain of positions.
(3) An assignment $f$ of exactly one $G$-attribute to each $X$-position. (p.100)

Two complexes $(X_1, G_1, f_1)$ and $(X_2, G_2, f_2)$ are isomorphic if
(i) $X_1$ and $X_2$ have the same topological structure,
(ii) there exists a one-to-one correspondence $F$ of $G_1$ and $G_2$ which preserves their type, and all of their topological properties, and
(iii) the assignments $f_1$ assign $F$-corresponding $G_2$-attributes to corresponding $X_1$ positions. (p.101f.)
This definition of the isomorphism of complexes can in certain cases be extended to a quantitative measurement of similarity of structure. It generates also the possibility of classifying different types of complexes with respect to different structural characteristics.


Révész, G. 1912 “Az érzetsorok phaenomenologiai vizsgalata” [The phenomenological study of series of sensations] (in Hungarian), Athenum, 152-64. Analyses the problem of similarity and of ‘interchromatic relations of sound and colour’, new phenomena which ‘have to be regarded as objects of higher order’.


1953a  “Gestaltbildung und Strukturerkenntnis”. *Wiener Zeitschrift für Philosophie, Psychologie und Pädagogik*, 4, 268-73. On the need to acknowledge the significance of the functioning of language in the formation of Gestalten, especially in the haptic sphere, where concepts play a crucial role.

A Révész bibliography to 1950 is provided in *Acta Psychologica*, 1950, 408-14.

Richards, C. S. 1975  “‘Closure’ and Gestalt Notions on the Visual Memory of Form: A Review”. *Journal of General Psychology*, 93, 95-113. Critical survey of literature on gapped circle patterns, concluding that there is little positive evidence for a strong closure effect in relation to such patterns, and a great deal of equivocal or negative evidence. The paper closes with a treatment of alternatives to the Gestalt closure hypothesis.


“Zur Gestalttheorie. Antwort auf Herrn Köhlers kritische Erwiderung”, Scientia, 43, 323-56. Reply to Köhler 1928a. Gestalt structure is explained by Rignano in terms of an additional component bond, joining together individual psychic data, this bond being identified with the ‘significance’ of the data for the perceiving subject.


1928b “Die Gestalttheorie”, Psychologische Forschung, 11, 172-87 (abbreviated translation of Rignano 1928). Critique of Wertheimer-Köhler-Koffka Gestalt psychology for the deficient empirical basis of its claims and for ignoring the specific invariability of the elementary sensations. How, if part-properties are dependent on the whole, is recognition of the same object possible, since no two environments are exactly alike? Contains a further treatment of Rignano's utilitarian view of configuration-phenomena as resulting from the unification of sensory elements with ‘meanings’ or ‘concepts’ (that is with affective classifications of objects).


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<th>Year</th>
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<tr>
<td>1979</td>
<td>“Illusory Contours as the Solution to a Problem”, Perception, 8. 665-81.</td>
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<tr>
<td>1978</td>
<td>“Noam Chomsky e la Gestalt: su una possibile linea di continuità”, in Kanizsa and Legrenzi, eds., 151-63.</td>
<td>Compares Chomsky’s distinction between competence and performance with Koffka’s two environmental levels (geographical and behavioural).</td>
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<tr>
<td>1929</td>
<td>“Configurațiile le fizioalogice și fiziice”, in L. Rusu, et al., 72-81.</td>
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<tr>
<td>1929a</td>
<td>“O privire sintetică asupra psihologiei configurative”, in L. Rusu, et al., 100-136.</td>
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<tr>
<td>1927</td>
<td>see Anderson, et al.</td>
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1915 Synsoplevede Figuren. Studier i psykologisk Analyse, German translation: Visuell wahrgenommene Figuren. Studien in psychologischer Analyse, Copenhagen: Gyldenalske, 1921, extracted in Beardslee and Wertheimer, eds., 194-203. First detailed study of figure-ground phenomenon. The ‘ground’ has ‘stuff-character’, the ‘figure’ has ‘thing-character’. The ground is localized behind the figure; it is less structured, less penetrating, less clear, less significant and less memorable, and it brings forth fewer associations. Rubin points to the importance of the contour or boundary for the understanding of the figure-ground opposition, and in particular to the existence of peculiar and often sudden transformations of contours in our perception of ambiguous figures. The contour is not a separate entity but determined by the nature of the figured surface to which it belongs, and Rubin demonstrates how in such transformations surfaces emerge as a whole and not piecemeal. Concludes with an analysis of the relations between contour, surface-figure and strip-figure [Strichfigur], and with an argument for the visibility of certain sorts of figures without extension. An historical appendix deals with the theories of minimum visible of the British empiricists, Rubin providing evidence to suggest that Hume had carried out experiments similar to his own and that he had reached the same results.


1926 "Die Nichtexistenz der Aufmerksamkeit", in K. Bühler, ed., Bericht über den 7. Kongreß für experimentelle Psychologie in München, 1925, Jena: Fischer, 211-12. 'Attention' is an ambiguous term: to suppose otherwise is to be led into confusion; talk of types of attention has no explanatory value.

1927 "Über Gestaltwahrnehmung", Proceedings and Papers of the 8th International Congress of Psychology at Groningen, 1926, Groningen: Noordhoff, 175-83, repr. as "Einige prinzipielle Gesichtspunkte" in Rubin 1949, 9-17. Presentation of principles of 'adspektive Psychologie' and criticism of elementarism. Elements, Rubin argues, are artificial abstractions; psychic structures are not generated from elements in any way, since elements could never exist in pure form. Adspective psychology concentrates rather on the actually given formations, and attempts not to decompose these into mere pieces, but to investigate their various 'sides' or 'aspects'. The problem whether a psychic whole is more than the sum of its parts does not arise, since it is never affirmed that all the sides and parts are known.


Shape is perceived by means of a sort of “thinking” in the central nervous system, the formulation of judgments e.g. of the curvature of the edge of a ruler being to some extent dependent on the relative position of the observer and on movements and pressure of fingers, arms, etc. ‘As a rule there is very little in the consciousness of the subject regarding the position and movements of arm, hand and fingers.’ (p.244) On the way in which the regulation of the finger movements is influenced by the general knowledge of the subject. ‘Instead of moving the fingers along the edge, you can move the edge along the fingers (“passive” touch experiences).’ (p.245) ‘If through touch experience alone a combination of edge-form and ruler-movement is selected which does not correspond to the objectively given combination then the sudden cooperation of vision will transform the selection to something more like the objectively (and visually) given.’ (p.246)


1936a “Bemerkungen über unser Wissen von anderen Menschen”, Erkenntnis, 6, 392-97, repr. in Rubin 1949, 29-34.


Rudin, S. A. and Stagner, R. 1958 “Figure Ground Phenomena in the Perception of Physical and Social Stimuli”, *Journal of Psychology*, 45, 213-25.


Sager, L. C. see Pomerantz, Sager and Stoever.


1980a “Figure anomale. Il contrasto di chiarezza come risultato delle disomogeneità indotte”, *Giornale Italiano di Psicologia*, 7, 121-45. Brightness contrast in anomalous figures is explained in terms of induced homogeneity, which is shown to be sensitive to the classical grouping principles of Gestalt psychology.

1981  “Figure anomale. La polarizzazione intrafigurale delle parti inducenti”, *Giornale Italiano di Psicologia*, 8, 421-36. See also Bagnara and Sambin.

1943  *La translation des objets comme facteur de leur permanence phénoménale* (Dissertation under Michotte), Louvain: Warny, repr. in Michotte et al. 1962, 277-98.


1926  “Optische Täuschungen und Psychologie”, *Neue Psychologische Studien*, 1, 159-66.


1928  “Experimentelle Ergebnisse der Gestaltpsychologie” in E. Becher, ed., *Bericht über
Sander, F. and Volkelt, H.


Sarlo, F. de


Sato, K.


1963  “Gestalt Psychology in Japan”, Psychologia, 6, 7-11.

Saxinger, R.


Sayanagi, T.


Schapp, W.

1910  Beiträge zur Phänomenologie der Wahrnehmung, Göttingen: Kaestner; 2nd ed., Erlangen:
Philosophische Akademie, 1925 (repr. Frankfurt: Suhrkamp, 1976). Part I is an insightful phenomenological study of the relations between perception of motion, shape and pressure and perception of qualities such as elasticity, roughness, heaviness, stickiness, etc., and also of the relations between the visual world and the world of acoustic experience. Part II is a study of the varieties of the perception of colours, both as representing things and as 'mere appearances'. Schapp puts forward a criterion of thing-colour perception in terms of clarity and specific order of the colours perceived. Part III (not incl. in the 2nd ed.) is on the interplay between cognition ("Idee") and perception, with special regard to the role of perceptual boundaries.


and the individual exhibit Gestalt character; but because the former predominates, the behaviour of the individual is affected in such a way as to bring about social unity, which rests not on 'reason and fear, but on social drives'.


Schoenfeld, N. 1941 “The Metaphor of ‘Closure’”, *Psychological Review*, 48, 487-97. The term 'closure' names an observable perceptual phenomenon, but its meaning is in need of precise definition. Schoenfeld gives reasons why the notion should not be illegitimately extended into other spheres.


Schulte, D. 1974 *Feldabhängigkeit in der Wahrnehmung*, Meisenheim: Hain. See also Erke and Schulte.

Schulte, H. 1924 “Versuch einer Theorie der paranoischen Eigenbeziehung und Wahnbildung”, *Psycho-

"Wittgenstein e la Gestaltpsychologie", in A. Gargani, ed., Ludwig Wittgenstein e la cultura contemporanea, Ravenna: Longo Editore, 39-48. Emphasizes the importance of Gestalt psychology, and especially of the work of Köhler, in Wittgenstein's later thought. Wittgenstein's central criticism of Gestalt psychology is that it too readily assumes that we see two distinct objects in cases of an aspect switch.


"Einige Hauptgesichtspunkte der Beschreibung in der Elementarpsychologie. I. Erscheinungen und Gedanken. II. WirkungsaKzenten sind anschauliche, unselbständige Bewusstseinsinhalte", Archiv für die gesamte Psychologie, 8, 241-338 339-84. The term ‘WirkungsaKzent’ (accent of effect) is derived from A. Hildebrand, Das Problem der Form in der bildenden Kunst (Strasburg: Heitz, 1893). Accents of effect are associated with specific elements in perceptual complexes. They are characterized as being intuitive and incomplete [unselbständig]. Certain accents of effect associated with specific elements in perceptual complexes – e.g. the expressive character of a line representing the mouth in a drawing of a face – can be generated by acts of will even when these elements are isolated from their surrounding complexes. On Gestalt-qualities see esp. pp. 357ff.
1908 "Idem, III. Über Organempfindungen und Körpergefühle (Dynamien)", Archiv für die gesamte Psychologie, 11, 147-207.

1908a "Beiträge zur Psychologie des Zeitbewußtseins", Archiv für die gesamte Psychologie, 13, 275-351. Distinguishes five types of relation between heard beats: 1. beats are in total fusion, 2. beats constitute a trill, 3. beats form a collection, 4. beats are brought together subjectively to form a unity, 5. beats are heard as objectively separate from and independent of each other.


1900 "Beiträge zur Analyse der Gesichtswahrnehmungen, I. Einige Beobachtungen über die Zusammenfassung von Gesichtseindrücken zu Einheiten", Zeitschrift für Psychologie und Physiologie der Sinnesorgane, 23, 1-32. First treatment of appearance of subjective or phenomenal contours in the absence of abrupt stimulus gradients. 'If by Gestalt qualities we understand only characters [Merkmale] which mark out the complex of elements, then I, too, regard their existence as established, for one can already regard the greater unity of a complex as a 'feature' in this sense. Ehrenfels, however, spoke not of new 'features' but of 'positive
contents of presentations’. (p.31) Schumann himself sees configuration phenomena as being explained in terms of the association of general names with groups of psychic data. He defends a production theory of Gestalt perception on the basis of a theory of attention.

1900a “Beiträge zur Analyse der Gesichtswahrnehmungen. II. Zur Schätzung räumlicher Größen”, idem, 24, 1-33.


1908 Untersuchungen zur Psychologie des Lesens, Leipzig: Barth.


Sellars, R. W. 1956 “Gestalt and Relativity: An Analogy”, *Philosophy of Science*, 23, 275-79. Argues that even within the relativistic framework certain physical patterns (e.g. of asymmetrical acceleration) remain as Gestalten in nature.

Sellars, W. 1950 “Gestalt-qualities and the Paradox of Analysis”, *Philosophical Studies*, 1, 92-94.


1934 “Gestalten und Steigerungsphantomene”, *Archiv für die gesamte Psychologie*, 91, 319-94.

A complete Selz-bibliography can be found in Groffmann 1981, pp.62ff.


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<th>Author</th>
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<tr>
<td>Sickles, W. R. and Hartmann, G. W.</td>
<td>1944</td>
<td>“Psycho-geometry of order”, <em>Psychological Review</em>, 51, 189-99</td>
<td>(sequel to Sickles and Hartmann 1942). Draws attention to similarity of the geometric properties of electric fields with certain properties of psychological processes and appeals to Mach’s doctrine of economy of thought in order to explain this similarity.</td>
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<td>Simmel, M.</td>
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<td>see Heider and Simmel.</td>
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<tr>
<td>Siro, E.</td>
<td>1969</td>
<td><em>Über die Autonomie des Seelischen im Lichte des Phi-Phänomens</em>, <em>Annales Academiae Scientia</em></td>
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See also Mulligan and Smith, Graßl and Smith.


of immediate short-circuiting of nervous impulses (as held by Wertheimer, et al.)? Or is it binary, i.e. such as to demand an extra level of 'intellectual processing' (as on the Graz production theory)? Spearman argues that the opposition between the two groups is spurious: any relational whole can be perceived either directly (the elements are perceived as standing in given relations), or intellectually (the subject perceives that the elements stand in given relations). The ontological correlate of the former experience is then simply the result of combining together the ontological correlate of the latter with its underlying foundation. Anticipates some of the ideas in Rausch 1966a.


1937 “The Confusion that is Gestalt-Psychology”, American Journal of Psychology, 50, 369-83. The doctrine of Gestalt is befogged by equivocal use of the term 'Gestalt' and by being tied to the perceptual sphere:

Deeper than all these defects, however, and mainly responsible for them, has been one great paralyzing confusion; that between the objective matter regarded and the subjective manner of regarding it. Under such names as “Gestalten” [etc.] all genuine processes of knowing have been replaced by mere trivialities of grouping. (p.382)


1937 “The Differential Response in Animals to Stimuli varying within a Single Dimension”, Psychological Review, 44, 430-44. Criticizes Köhler 1948 for his privileging of relational as opposed to absolute stimulus factors on a less than adequate empirical basis.
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<tr>
<td>Springbett, B. M.</td>
<td>1926</td>
<td>see Humphrey and Springbett.</td>
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<td>1968</td>
<td><em>Funktionelle Grundlagen der Wahrnehmung von Figuren</em> (Dissertation, Münster). Partial vindication of Köhler’s account of the physiological structures underlying figure-ground perception on the basis of experiments on perception times.</td>
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<td>1975</td>
<td>“Gestalttheorie und dialektischer Materialismus”, in Ertel, <em>et al.</em>, eds., 146-60. The absence of serious confrontation between Gestalt theory and materialistic psychology is all the more surprising, Stadler argues, given that many theoretical principles of Gestalt theory – for example the determination of the parts by the whole – read as though taken straight out of a textbook of dialectics.</td>
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| 1975 | “Experiments on the Measurement of Phenomenal Qualities by Stroboscopic Movement of Transformation [SMT]”, in Flores d’Arcais, ed., 201-15. The SMT phenomenon is generated by presenting one figure for a short
time and immediately afterwards, or after a short interval, a second figure in the same spatial position. The duration of the interval after which the impression of one figure undergoing transformation changes into the impression of two successive figures, defines the resistance of the figure to transformation, what is called the "tolerance of identity". The latter is, unlike identity, a continuous feature of a figure; a certain figure may possess more or less of this quality. Measures of tolerance of identity can be used as a means of gauging structural features of figures, qualities of parts and fragments of figures, figural goodness, Pragnanz, etc.

1979

Stadler, M. and Trombini, G. 1971
"Die Transformationsscheinbewegung als funktionales Kriterium phänomenaler Sachverhalte", Psychologische Beiträge, 13, 239-56. See also Hepke and Stadler; Seeger and Stadler; Trombini and Stadler; Trombini, Stadler and Stegnano, etc.

Stagner, R. 1941
"Wissenschaftliche Grundlagenforschung und die Gestaltkrise der exakten Wissenschaften", Die Gestalt (Abhandlungen zu einer allgemeinen Morphologie), 3, 47-68. Discussion of the problem of mathematical existence (are mathematical objects dependent on or independent of our cognitive acts?), with some reference to Gestalt notions.

Steck, M. 1957
"A Study of Aesthetics", Theoria. A Swedish Journal of Philosophy and Psychology, 23, 180-92. 'It is the emotional projection on Gestalten that causes us to call an experience aesthetic.' 'Works of art are such artefacts as are made with at least one purpose, namely that their Gestalt shall be the "object" of emotional projections', (pp.186, 190).

see Rudin and Stagner.
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<tr>
<td></td>
<td>1898</td>
<td>Psychologie der Veränderungsauffassung, Breslau: Preuss und Jünger.</td>
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<tr>
<td>Stoever, R.J.</td>
<td></td>
<td>see Pomerantz, Sager and Stoever.</td>
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<tr>
<td>Stout, G.F.</td>
<td>1896</td>
<td>Analytic Psychology, London: Swan, Sonnenschein, 2 vols. ‘An element which is apprehended first as part of one whole, and then as part of another, is presented in two different points of view, and so far suffers transformation.’ (I, p.71) Puts forward a view of Gestalt qualities as a new sort of ‘simple idea’. See the review by Lipps, Zeitschrift für Psychologie, 16, 399-409, and also the following passage by C. Burt:</td>
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<td>After the First World War, when Köhler and Koffka visited England, their accounts of the phenomena of Gestalt were readily accepted. Owing, however, to the strong atomistic tendencies in current German psychology and the strong associationist tendencies of American behaviourism, their doctrines seemed far more revolutionary in Germany and America than they did in this country. To British psychologists they appeared to be providing, by means of a series of brilliant and ingenious experiments, a detailed verification and amplification of the general principles</td>
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already clearly formulated by Ward, Stout, and their various followers. Perhaps for that very reason, until quite recently, British psychologists have tended to neglect this field of experimental research.


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Leipzig: Barth, 209-13 (includes discussion with Krueger on the conception of feelings as Gestalt qualities).


1937 Psychologia postaci (Gestalt Psychology), Warsaw: Nasza Księgarnia.

Tampieri, G. 1956 “Sul completamento amodale di rappresen-
tazioni prospettiche di solidi geometrici”, Atti
del XI Congresso degli psicologi italiani, L.
Ancona, ed., Milan: Vita e Pensiero, 1-3. Co-
presented posterior parts of three-dimensional
objects do not have an arbitrary form that can be
varied in imagination at will.

1968 “Sulle condizione del movimento stereocine-
tico” in Kanizsa and Vicario, eds., 197-217. On
the work of Musatti and Metzger on stereokinetic phenomena and of Hans Wallach
on the kinetic depth effect.

1975 “‘Parts’ and ‘Wholes’ in Children’s Visual
Perception”, in Flores d’Arcais, ed., 256-77.
Meili and others have put forward the view that
the difference between children’s and adults’
perceptual experience consists in the capacity of
the latter to see ‘structured wholes’, i.e. to see
wholes simultaneously with their parts.
Tampieri’s experiments show that there is in this
respect no general trend in development.

Tarscay, W. I. 1938 A kisérleti akaratvizsgál latok fejlődése (On the
experimental study of volition), Budapest (with
German abstract). Includes a critical review of
the research on the organization of action by the
Lewin school.

Tausch, R. 1962 “Empirische Untersuchungen im Hinblick auf
ganzheits- und gestaltpsychologische Wahrneh-
mungserklärungen”, Zeitschrift für Psycholo-
ogie, 166, 26-61. Investigations of Müller-Lyer
figures in the spirit of Rausch.

Taylor, H. 1932 “The Method of Gestalt Psychology”, Ameri-

Readability”, Journalism Quarterly, 30, 415-33.
On the connection between the Gestaltist
notion of closure and the exercise of replacing
words deleted systematically from a text.

Ternus, J. 1926 “Untersuchungen zur Lehre von der Gestalt
[ed. M. Wertheimer], III. Experimentelle
Untersuchungen über phänomenale Identität”,

446
Neither spatial nor temporal continuity are necessary conditions of phenomenal identity of objects perceived in motion or at rest. Heavily influenced by Wertheimer.


1980a “Sensumotorik aus gestalttheoretischer Sicht”, Sportwissenschaft, 10, 7-35.


1933 “Gestalt and Sign-Gestalt”, Psychological Review, 40, 391-411. On seeing things as ends or instruments: the pragmatic motivation of the Gestalt concept.


The environment of an organism has the character of a complex causal texture (Kausal-
in which certain objects may function as local representatives (die Stellvertreter) of other objects; these later to be known as the entities represented (die Vertretenen).

This function of local representation has, however, two subvarieties.

A. On the one hand, objects or situations may function as local representatives of others in that they provide (with the cooperation of the organism) means-objects (Mittelgegenstände) to the others; these latter to be known as the goals (Zielgegenstände).

B. On the other hand, objects or events may also function as local representatives for others in that, being themselves caused by such other objects or events, they serve as cues (Anzeichen) for the latter.

“A Reply to Mr Koffka”, Psychological Bulletin, 30, 459-65. Admits that evidence is piling up that the physiology of the brain is molaristic or organized in a Gestalt-like way (p.464), but maintains that neurological and perceptual structures are related functionally, that they are not necessarily isomorphic. See also Postman and Tolman.


“Variabilità percettiva e movimento stroboscopico di trasformazione”, Rivista di Psicologia, 64, 107-22.

“Sul movimento stroboscopico di trasformazione quale metodo per misurare proprietà funzionale di ‘frammenti’ e ‘partì’ nella percezione figurale”, Bolletino della Società Italiana di Biologia Sperimentale, 46, 749-52.
On stroboscopic movements of transformation (see Stadler, Stegnano and Trombini, above) as a method for measuring the functional properties of the ‘fragments’ and ‘integral parts’ given in figural perception. Experimental confirmation is provided for the hypothesis that the tolerance of identity through transformations is greater if what is added in transformation represents a fragment, rather than a natural part.

1970a “Il movimento stroboscopico di trasformazione quale metodo per misurare la pregnanza figurale”, Rivista di Psicologia, 65, 145-57. Includes a historical survey of work on Pragnanz up to and including the work of Rausch, and presents a summary of experimental results lending support to Rausch’s theory.


Twardowski, K. 1894 Zur Lehre vom Inhalt und Gegenstand der Vorstellungen. Eine psychologische Untersuchung, Vienna: Hölder, repr. Munich:

Uchiyama, M. 1960  “Experimental Study on the Declining Process of the Form Field – the Field after Figure Disappearance”, *Psychologia*, 3, 41-49.


Varvel, W. A. 1934  “A Gestalt Critique of Purposive Behaviorism”, *Psychological Review*, 41, 381-99. Against Tolman’s system, which is accused of being only superficially Gestaltist.


1968a “Un metodo per l’analisi delle forme visive”, in Kanizsa and Vicario, eds., 279-95. Extension of Vicario 1968, attempting to separate further dimensions of visual form.


1975 “Some Observations on Gestalt Principles of Organization”, in Flores d’Arcais, ed., 67-80. Shows that, in conditions very similar to those in which proximity and similarity of elements give rise to their unification, remoteness and dissimilarity can have the same effect. Suggests that the phenomena in question can best be understood in terms of the more general concept of segregation.


Viney, M., Wertheimer, Michael and Wertheimer, Marilyn L.


Volkelt, H.


Voth, A.C. see Brown and Voth.

Vurpillot, E. 1959 “Vers une psychophysique de la forme”., Année psychologique, 59, 117-42. See also Bresson and Vurpillot.

Vygotsky, L. S. 1930 “Strukturnaja psychologija”, in B. A. Fingert and M. Sirvindt, eds., Osnovnije techenija sovremennoj psichologii (Basic Trends in Contemporary Psychology), Moscow: Gosudarstvennoe Izdatelstvo, 84-123. Analyses Gestalt theory as an attempt to overcome the false dilemma of vitalism vs. mechanism, natural vs. cultural psychology, etc.

1930a “Predisloviye k russkomu izdaniyu knigi V. Kölera: ‘Issledovanie intellekta chelovekpod bnnh obezyan’”, as repr. in Vygotsky 1982, 210-37. Forward to the Russian edition of Köhler’s 1917. Points out that Köhler’s account of anthropogenesis is consonant with Marxist theory, but insists that tool use in chimpanzees is still accidental as compared to humans. Gives a good review of the contemporary German and Russian debates on the interpretation of Köhler and stands up for a psychophysical monist position based on a theory of isomorphism along Köhlerian lines.

1934 “Problema razvitija v strukturnoj psihologii” (The Problem of Development in Gestalt Psychology), as repr. in Vygotsky 1982, 238-90. Highly polemical preface to the Russian edition of Koffka 1924. Argues that the Gestalt-theoretical understanding of mental development is too wedded to the chimpanzees of Köhler. The higher mental processes of man, in contrast, manifest a structural dimension of sense or meaning which is (a) social in nature, (b) historically determined, and (c) not covered by the naturalistic principles of Gestalt. Vygotsky is otherwise very sympathetic to Koffka.

Waals, H. G. van der Roelofs, C. O.


Waiblinger, E.


Wallace, S.

1982 “Figure and Ground: The Interrelationships of Linguistic Categories”, in P. J. Hopper, Tense-Aspect: Between Semantics and Pragmatics, Amsterdam: J. Benjamins, 201-23. On the division between foreground and background in information verbally conveyed and on the implications of this division for an understanding of tense/aspect. Wallace provides an account of foregrounding in terms of the greater or lesser salience of various linguistic categories, the more salient categories (e.g. human, singular, non-third person, present, transitive, actional) tending to be in the foregrounded portions of discourse. He provides a list of various characteristics of figures (thing-like, solid, discrete, etc.), and grounds (diffuse, continuous, etc.), derived from the Gestalt literature.

Wallach, H.


essays deal with colour- and motion-perception, memory, and perceptual adaptation and learning.

Wallach, H. and O'Connell, D. N. 1953


Warner, D.H.J. 1964

"Resemblance and Gestalt Psychology", *Analysis*, 24, 196-200.

Wartensleben, G. 1913

"Über den Einfluß der Zwischenzeit auf die Produktion gelesener Buchstaben", *Zeitschrift für Psychologie*, 64, 321-85. (Köhler, Schumann, Wertheimer are among the subjects.)

1914

*Die christliche Persönlichkeit im Idealbild. Eine Beschreibung sub specie psychologica*, Kempten/Munich: Kösel. A Gestalt-theoretical study of personality. Contains a valuable early account of Wertheimer's ideas, probably the first published treatment of Gestalt theory as such. See esp. the discussion of Wertheimer's idea of centering [Zentrierung], the grasping of some one factor in such a way as to open the way to the grasping of a whole as hierarchically ordered around it, so that a Gestalt appears where previously organization and intelligibility had been lacking. The most important passage is translated in Ash 1982, pp.301f. See also Michael Wertheimer 1980, pp.13f.

Washburn, M. F. 1926


Watson, G. 1934

"Psychology in Germany and Austria", *Psychological Bulletin*, 31, 755-76.

Watt, H.J. 1910

"Some Problems of Sensory Integration", *British Journal of Psychology*, 3, 323-47. By English psychologist close to the Würzburg school:

An intimacy of connexion between *nerve-paths* or impulses emanating from different sense-organs is, of
course, recognized in many forms. But this connexion has been somewhat exclusively considered to consist in a mere coordination or association of afferent or efferent impulses with one another. Sufficient attention has hardly been paid to the possibility that upon these afferent impulses an afferent structure might be raised which is dependent upon but essentially an addition to these. To distinguish it from mere coordination, such a structure might well be called integration. (p.323f.)

1911  “The Elements of Experience and their Integration: or Modalism”, *British Journal of Psychology*, 4, 127-204.


1913a “The Main Principles of Sensory Integration”, *British Journal of Psychology*, 6, 239-60. Treatment of the integration of sensations and of ‘modes’ [Vorstellungen] in general, similar in many ways to that of the Graz production theory.

Waugh, L. R.  see Jakobson and Waugh.

Weber, A. O. 1938 “Gestalttheorie and the Theory of Relations”, *Journal of Philosophy*, 35, 589-606. Accuses the Gestalt theorists of a confusion of the empirical and the a priori. Gestalt apriorism is similar to—it is simply less extreme than—the view that is involved in Bradley’s thesis that all relations are internal.

Wegener, J.  see Köhler, et al.


1927 Die Gestaltanalyse, Erfurt: Stenger. Chs. 8 and 9 of Book 2 deal, respectively, with Ehrenfels and the Graz school, and with Berlin Gestalt theory. The remainder of the book is somewhat heavily larded with Böhme, Kant, Goethe.


Welcke, E. 1907 Kritisches zur Frage der Konsonanz (Dissertation, Munich).
1908 “Einheit und Einheitlichkeit”, Archiv für die gesamte Psychologie, 13, 254-74. After Lipps. There are three quite differently constituted sorts of unity: of consciousness, of intended object, and of thing. Each corresponds to a different sort of adaption [Zueinanderpassen] of parts to each other.


1934 “Der Raum in der Musik”, Archiv für die gesamte Psychologie, 91, 395-443. Distinguishes 3 sorts of space in the auditory world: (1) auditory space itself, a projective image of physical space; (2) tone space, an unfixed, unclear, framework or order-scheme of 3-dimensions; (3) musical space, a space of ‘pure feelings’ (a matter of expression).


Wentsch, F.  see Brod and Wentsch.


1919a  “Rhythmik, eine mehrwertige Gestaltenverketzung. Eine phänomenologische Studie”, Zeitschrift für Psychologie, 82, 198-218. On optical and spatial analogues of rhythm. Each successive stimulus, taken together with the interval which links it to its successor, is a basic Gestalt. Hence rhythm is a sequence of Gestalten.

1924  “Studien über Strukturgesetze. I. Über Strukturgesetze und deren Auswirkung in den

1924a "Studien über Strukturgesetze. II. Über das Problem der motorischen Gestaltung", ibid., 265-72.


1932 Grundfragen der Sprachphysiognomik, Leipzig: Barth.


1966 "Intermodale Qualitäten (Synästhesien)", in Metzger and Erke, eds., 278-303.


Wertheimer, Max 1905 "Experimentelle Untersuchungen zur Tatbestandsdiagnostik", Archiv für die gesamte
Psychologie, 6, 59-131. Also as Separatum, Leipzig: Engelmann, 1905. Dissertation, under Kulpe. Würzburg style experiments designed to establish who has inside knowledge about a given event or state of affairs.

1906


1910


1912

“Über das Denken der Naturvölker. I. Zahlen und Zahlgebilde”, Zeitschrift für Psychologie, 60, 321-78, repr. in Wertheimer 1925a, 105-63, extracted in Ellis, ed. as “Numbers and Numerical Concepts in Primitive Peoples”, 265-73. Introduces the notion of Pragnanz. Points to the way in which consciousness can have different quantitatively structured objects in different cultural conditions on the basis of the same underlying material. Among the points raised by Wertheimer is the idea that it is probable that not counting but e.g. visual number-forms, and

natural group- and quantity-structures relative to real biological relationships, constitute the genetically important origin of numerical concepts. The primary structures are probably not such concepts as 1 and continued additions of 1 but conceptually analogous individualized structures. Plurality is not genetically a quantity of identical terms but an articulated whole.

(Ellis trans., p.272)

1912a


What is given psychically in the field of movement? The standard thesis is...: the positions between the objects
Wertheimer, M. (cont.)

are subjectively filled [ergänzt]. (And one could add the a priori proposition that movement is inconceivable without an object or a seen thing that moves.)

Wertheimer rejects this interpretation, showing that there are cases of pure movement which 'have nothing to do with the subjective between-positions: the beginning and end state is there, and the movement, but no movement of' (cf. p.61 of repr.). Raises for the first time the so-called Wertheimer-problem: What is the nature of those brain processes which are the immediate physiological representatives of the Gestalt wholes experienced in perception?

1918

1920
Über Schlussprozesse im produktiven Denken. Berlin and Leipzig: De Gruyter, 22pp. repr. in Weingartner, 1925a, 164-84, extracted in Ellis, ed. as “The Syllogism and Productive Thinking”, 274-82; Eng. trans. as “Syllogisms in Productive Thinking”, Psychological Reports, 1981, 49, 395-412. Argues for a logic that would do justice to the processes of thinking as they actually occur. How does it happen that the same logical operation can in some circumstances have consequences that appear empty or sterile or merely classificatory and in others give rise to the feeling that one has truly advanced? Wertheimer argues that a form such as the Barbara figure of the syllogism may either appear as a mere summative whole, where M serves as a bridge between S and P, or it may appear as a specific type of Gestalt, where M stands to S and P in a non-trivial relation. In the latter case the premisses are refashioned, we come to achieve a grasp of the internal structure of the relevant state of affairs as a result of having carried out the operation in question. (And Wertheimer’s talk here of the ‘specific laws’ governing the ‘formal moments’ of such structures and of the ‘internal structural connections within them’ may suggest the
influence of Husserl's conception of logic in the *Logical Investigations*.) Wertheimer's examples show that inferential thinking may bring about a sudden switch in one's apprehension of the subject. Wertheimer gives a series of examples in which what appear to be two derived designations for the same object in fact refer to logically different objects. The idea is illustrated by examples from the history of science (e.g. comprehension of stellar movements).

1922

"Untersuchungen zur Lehre von der Gestalt. I. Prinziplle Bemerkungen", *Psychologische Forschung*, 1, 47-58, extracted in Ellis, ed., 12-16 and in Focht 1935, 107-11. Critique of mosaic or bundle-thesis, i.e. the thesis that:

At the basis of everything 'complex' [in experience] there lies in the first place, as its foundation, the sum of elementary contents, constituent parts (sensations, etc.), side by side. One has ultimately to do with a summative manifold of different types of constituent pieces (a 'bundle'); everything else is somehow built up out of additive sums [Und-Summe] of elements. (p.48f.)

and of the thesis of association:

If a content a has been often present together with another content b ('in spatio-temporal contiguity'), then there exists a tendency, that the occurrence of a should bring with it the appearance of b.


1923


1923a


I stand at my window and see house, trees, sky. And now, for theoretical reasons, I could be tempted to
Wertheimer, M. (cont.) count off and say: here are...327 brightnesses (and hues). But do I really have “327” before me? No: sky, house, trees; the having of “327” as such can be realised by no one. (p.301)

Attempts to lay the ground for laws governing configuration, principally on the basis of experiments with dot-formations. Contains the first discussion of Prägnanz-tendencies in perception.


1925 *Über Gestalttheorie*, Erlangen: Philosophische Akademie, repr. in *Symposion. Philosophische Zeitschrift für Forschung und Aussprache*, 1, 1927, 39-60, extracted in Ellis, ed. as “Gestalt Theory”, 1-11; Eng. trans. with Foreword by K. Riezler, in *Social Research*, 11, 1944, 78-99. The lecture was delivered to the Berlin Kant-Gesellschaft in December 1924. The whole of Gestalt theory is embraced in a thesis to the effect that there exist natural circumstances in which what happens in the whole is not conditioned by the nature of the parts or their mode of combination, but on the contrary, what occurs in any part of the whole is determined by the laws relating directly to this whole.

There are contexts [Zusammenhänge] where the behaviour of the whole is not determined by the nature and combination of the individual pieces, but in contrast where, in the pregnant case, that which happens in a part of this whole is determined by inner structural laws of this whole (p.43).

What is given to me by the melody does not arise...from the sum of the pieces as such. Instead, what takes place in each single part already depends upon what the whole is. The flesh and blood of a tone depends from the start upon its role in the melody: a b as leading tone to c is something radically different from the b as tonic. It belongs to the flesh and blood of the things given in experience, how, in what role, in what function they are in the whole (p.47).

1925a *Drei Abhandlungen zur Gestalttheorie*, Erlangen: Philosophische Akademie, repr.

1933 “Zu dem Problem der Unterscheidung von Einzelinhalt und Teil”, Zeitschrift für Psychologie, 129, 353-57, Eng. trans., “On the Problem of the Distinction between Arbitrary Component and Necessary Part”, in the enlarged edition of Wertheimer 1945. Defends a conception of part in terms of role or function within a whole (in an array of points, for example, the opposition between member, endpoint, boundary-point, limit-point, basis, peak, etc.).

1934 “On Truth”, Social Research, 1, 135-46. repr. in Henle, ed. 1961, 19-28. Defence of ‘Gestalt axiom’ that the processes involved in cognition are universal to all human cultures. Wertheimer’s account of truth is holistic – statements have truth-values only in relation to certain fields or contexts.

1935 “Some Problems in the Theory of Ethics”, Social Research, 2, 353-67, repr. in Henle, ed. 1961, 29-41. Puts forward the view that there are universals of evaluation, and drives home the need to investigate the psychological and logical structures involved in evaluation.


1959 “On Discrimination Experiments. I. Two Logical Structures” (ed. L. Wertheimer),
Wertheimer, Max and Klein, J. 1904 “Psychologische Tatbestandsdiagnostik”, Archiv für Kriminalanthropologie und Kriminalistik, 15, 72-113. See also Hornbostel and Wertheimer.


Wever, E. G. 1927 “Figure and Ground in the Visual Perception of Form”, American Journal of Psychology, 38, 194-226.

1928 “Attention and Clearness in the Perception of Figure and Ground”, American Journal of Psychology, 40, 51-74. Clearness is the presence of something that can be reported upon; this implies a dependence of clearness on figure-ground structure.


1933 “Idem. II. Confused Interpretations of the Historical Approach”, *Psychological Review*, 40, 221-45. Argues that James and Titchener are too Aristotelian, too wedded to the opposition between unity and multiplicity, to be counted as true precursors of Gestalt psychology.

1933a “Idem. III. Inconsistencies in Thorndike’s System”, *Psychological Review*, 40, 303-23.


Wiesenforth, G. see Ehles and Wiesenforth.


1982 Catastrophe Theoretic Semantics. An Elaboration of René Thom’s Theory, Amsterdam: J. Benjamins. Approach to semantics resting on a repertoire of linguistic Gestalten or dynamic archetypes corresponding in part to the structures distinguished by Michotte in his work on attribution of causality. See pp.34-37 above.


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<th>Author</th>
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<tbody>
<tr>
<td>Witasek, S.</td>
<td>1895</td>
<td>Untersuchungen zur Complexions-Theorie (Dissertation, Graz, under Meinong).</td>
<td>On the presentation and comparison of complexes and on the lower and higher-order dispositions associated therewith.</td>
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<td></td>
<td>1896a</td>
<td>“Über willkürliche Vorstellungsverbindung”,</td>
<td><em>Zeitschrift für Psychologie und Physiologie der Sinnesorgane</em>, 12, 185-225. How is it possible deliberately to have something given in presentation – to will that something be presented – given that the act of will is itself such as to include an act of presentation? Witasek deals with this problem by distinguishing intuitive from non-intuitive presentations, and the present essay is a study of the processes involved in passing deliberately from the non-intuitive to the intuitive (e.g. when instructed to imagine a square, or to sing the sequence C-E-G). Intuitive and non-intuitive contents must bear a specific relation to each other, and this relation, too, according to Witasek, must be brought to presentation – in sharp contrast to those cases where one presentation is related to another merely by association.</td>
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1897a “Beiträge zur speziellen Dispositionspsycho­logie”, Archiv für systematische Philosophie, 3, 273-98.

1898 Über die Natur der geometrisch-optischen Täuschungen, Leipzig: Barth, and in Zeitschrift für Psychologie und Physiologie der Sinnesorgane, 19, 1899, 81-174 (Habilitationsschrift, Graz). Attempts to determine the range of applicability of psychological and physiological explanations of optical illusions. Optical illusions cannot be a matter of judgment (cannot be what Meinong called Urteilsstöuschungen), since even when simultaneously judging correctly we are still misled by what we see. They must be illusions of sensation. See Lindenfeld, ch. 9, pp.232ff.


1901 “Über Hören und Musiciren”, Das Wissen für Alle, no.22-24, 32pp. Popular introduction, including treatment of feelings associated with listening to music.

1904 Grundzüge der allgemeinen Ästhetik, Leipzig: Barth; Italian translation, Principii di estetica generale, Milan: Remo Sandron, 1913. Employs ideas on Gestalt deriving from Meinong and Ehrenfels as part of a psychological theory of aesthetic experiences.


1908 *Grundlinien der Psychologie*, Leipzig: Dürr; 2nd ed. Leipzig: Meiner, 1923. Three sorts of *Vorstellungsproduktion* are distinguished: Gestaltproduction, comparison-presentation and connection-presentation (the latter corresponding to the function 'and').

1909 "Zur Lehre von der Lokalisation im Schraume", *Zeitschrift für Psychologie*, 50, 161-218. On the mechanisms of binocular vision and specifically on the interrelations between the retina of both eyes and corresponding points in the respective visual fields and on the coincidence of the latter.


1910 *Psychologie der Raumwahrnehmung des Auges*, Heidelberg: Winter. The work is divided into two parts, reflecting the two-storey character of the Graz production theory. Chs. 1 and 2 deal with immediate visual experience, chs. 3 and 4 with produced visual experience, i.e. (i) the perception of spatial Gestalten, (ii) the perception of motion, (iii) the perception of depth, perspective, distance, magnitude. Witasek stresses that a moment of production is present already in the perception of objects, i.e. before judgment comes into play. The work defends a nativist position with regard to the perception of space, in some respects parallel to that of Stumpf.


Witte, W.


1952a  "Zur Geschichte des psychologischen Ganzheits- und Gestaltbegriffs", Studium Generale, 5, 455-64.


1966  "Haptik", in Metzger and Erke, eds., 498-517.

1966a  "Das Problem der Bezugssysteme", in Metzger and Erke, eds., 1003-27.

1975  "Zum Gestalt- und Systemcharakter psychischer Bezugssysteme", in Ertel, et al., eds., 76-93. Is a reference system a system in the sense of systems theory? Witte's paper includes a comparison of Gestalt theory and systems theory and points to the Gestalt character of reference systems.

Wittmann, J.


“Raum, Zeit und Wirklichkeit”, Archiv für die gesamte Psychologie, 47 (Part III of Martius Festschrift), 428-511 and in G. Martius and J. Wittmann, Die Formen der Wirklichkeit. Festbeitrag zur Kant's 200-jährigem Geburtstag. Leipzig: Akademische Verlagsgesellschaft, 5-81. (Bound together with an essay by G. Martius on Kant's theory of categories.) On the need to give up the notions of sensation and of psychic element. Cognition is a matter of analysis not (pace Kant) of synthesis.


1. the Gestalt has no parts: it is either there as a whole or not at all,
2. the Gestalt has no fixed size or quantity – it can obtain unchanged in a small or in a large mass,
3. the Gestalt reproduces by producing copies of itself,
4. Gestalten can occur in arbitrarily large numbers in one and the same body.

Wolff, W. 1935 “Induzierte Helligkeitsveränderung”, Psychologische Forschung, 20, 159-94. See also Duncker and Wolff.


distinguishes six different positions along the continuum from radical empiricism to nativism (p.573):
I. association between qualitative sensations only: Herbart, W. F. Volkmann, Lipps;
II. association between qualitative sensations and feelings of movement: Helmholtz, Wundt;
III. association between qualitative sensations, physiological movements, and the feelings of those movements as conditions for a mental "reconstruction": Weber, Lotze, Höfding.
IV. no association because all three dimensions are given by physiological mechanisms: J. Müller, E. Hering.
V. no initial association because 'extensity' and 'volume' are given in sensation itself, although association may be involved in subsequent judgment of extension and depth: Stumpf, James, Höfler, Mach.
VI. no association at all because extension and depth are an immediate perception (Gestalt): Wertheimer, Köhler, Koffka.

Woodworth, R. S. 1907 “Non-Sensory Components of Sense Perception”, Journal of Philosophy, Psychology and Scientific Methods, 4, 169-76. ‘Each thing perceived, each size and shape distinguished, probably we should add each relation observed, has its own felt quality, which is not one of the qualities of sensation.’ (p.173) ‘The truth is that the appropriate size qualities and distance qualities are clapped on to the sense presentation without the intermediary of sensorial imagery.’ (p.172) ‘The thing quality must be present if we are to have the consciousness of a thing or of properties of a thing.’ (p.173) Woodworth’s is an extreme version of Ehrenfels’ doctrine (mentioned on p.171).

1931 Contemporary Schools of Psychology, London: Methuen. Ch.4: “Gestalt Psychology or Configuralism”, 99-133.

Wulf, F. 1921 “Beiträge zur Psychologie der Gestalt. VI [ed. by K. Koffka], Über die Veränderung von Vorstellungen (Gedächtnis und Gestalt),”
Psychologische Forschung, 1, 333-73, extracted in Ellis, ed., as “Tendencies in Figural Variation”, 136-48. Critique of G. E. Müller’s theory of the *directional image* [Richtungsvorstellung] as an account of the way in which memory images converge in such a way as to reveal a tendency to maximize Pragnanz. Wulf shows that it is not the process of *convergence* which is crucial, but rather the stable forms towards which memory images converge. See Gibson 1929. Wulf’s methodological errors are now recognized.


Wyatt, H. G. 1928 “The Gestalt Enigma”, Psychological Review, 35, 298-310. ‘It is not the Gestalt which is the significant and explanatory principle in developmental psychology, that gives to mental events, at least in the case of learning, their organic unity, but the existence and entertainment of ends and purposes.’ (p.303).

Yela, M. 1952 “Phenomenal Causation at a Distance”, Quarterly Journal of Experimental Psychology, 4, 139-54, repr. in Michotte et al. 1962, 168-92.


Young, P. T.  

Zalai, B.  

Zama, A.  
see Galli and Zama.

Zangwill, O. L.  

Zapparoli, G. C. and Ferradini, F.  

Zapparoli, G. C. and Reatto, L. L.  

Zeigarnik, B. V.  
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