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GESTALT AS A SPECIALIZED TERM: ITS CONCEPTUAL DEFINITION IN PSYCHOLOGY AND PHILOSOPHY

ABSTRACT

In the present paper the author attempts to reconstruct the process of terminologization of the expression *Gestalt* in the philosophical and psychological debates which laid the way for the emergence of the Berlin School of *Gestalt Theory*. *Gestalt* (English translations are: “form,” “shape,” “configuration,” “aspect”) is a German word, which is already documented in Old High German (*gistalt*) as meaning “appearance, way of appearing.” From the end of the 18th century onward, the word had a very interesting semantic enrichment and found uses in the arts and sciences, since it started to be used in specific domains (literature, philosophy, psychology) to designate an organic whole. In the first few decades of the 20th century, it became a specialized term – a *terminus technicus* in philosophical and psychological thought – as *Gestalt psychology* and *Gestalt theory* emerged as a new scientific and philosophical orientation. The exact conceptual definitions of Gestalt, Gestalt qualities and Gestalt perception were heatedly discussed in the philosophical and psychological debates that raged in the first two decades of the 20th Century after the publication of the famous paper by Christian von Ehrenfels – *On Gestalt Qualities* (1890)—and it was developed in various psychological schools (the Berlin School, the Graz School) and philosophical orientations (phenomenology, neokantism), till the formulation in 1923 of the Gestalt laws by Max Wertheimer. In the concluding part of the paper, the author attempts to trace the development of the *Gestalt* approach after the Second World War.

Keywords: Gestalt theory, terminologization, crisis of science, holism.

INTRODUCTION

Nowadays, we understand Gestalt Psychology, Gestalt Theory and Gestaltism as an orientation in philosophical thought which tries to understand the laws according to which our mind is able to structure a manifold and complex reality into meaningful perceptions and notions. The key con-

cept for this orientation is “Gestalt”—a word which in common language designates “form,” “shape,” but in the Gestalt theory designates an (organic) whole with self-organizing tendencies. In the present article, I will attempt to trace the most important phases of semantic enrichment and “terminologization” (in the sense of a transformation of the lexical item from a generic word into a scientific term) of this German expression, parallel to the process of the emergence and establishment of *Gestalt Theory*.

In linguistics, terminologization is defined as the semantic transformation of a lexical unit into a specialized term (Roelcke, 2013, 2), with possible consequent semantic restrictions,¹ determinations or extensions, which presupposes a particular relationship of designation between a symbol (word, German “*Benennung*”) and a referent (external object, German “*Objekt*”) given by the reference (conceptualization process, denotation, “*Begriff*”). According to many scholars, in the case of a common word, we have a process of designation which is not the result of critical reflection and cognitive elaboration, but is based on common usage, in the case of a “term” we have binding definitions and precise conditions of correct use in texts and discourses (Grucza 2013, 149). Consequently, a term is used in specialized texts in a coherent and binding way, it marks conceptual dependencies and semantic hierarchical structures (for example the relationship between hyperonyms and hyponyms (Roelcke 2013, 3). A terminologization process can require different time spans: sometimes a new term is introduced by definition and it requires relatively little time to be established, but normally terminologization is a durative process which is connected with scientific or other social practices.

In the case of the word *Gestalt*, this process was quite long and its roots are to be seen in the rich semantic potential of the word “*Gestalt*” and in its conceptual definition in the scientific debate at the turn of the 19th and 20th centuries. This debate is rooted in the deep crisis involving positivism and idealism, the two major philosophical systems of the 19th century (Henle 1968, 141; Ringer 1969, 375ff.). *Gestalt psychology*, later known more widely as *Gestalt Theory*, emerged in the first decades of the 20th century in several universities which practiced research in experimental psychology (first of all Berlin, Graz, Leipzig) as a new orientation which undermined the mechanistic foundation upon which psychologists had until then constructed their systems. Gestalt psychologists proposed a holistic view of natural, exact and human sciences, in which the unity of science and the mind was demonstrated and thus the tension between “dualistic restriction and monistic hopes characteristic of psychological thinking in its German cultural context” (Ash 1982, xxxiii) was resolved.

¹ See (Sager 1998/99, 46): “a lexicalised unit may remain restricted to its original reference in its area of application and usage, or even become more narrowly restricted in meaning or usage.”

THE WORD “GESTALT” FROM COMMON MEANING TO SPECIALIZED MEANING

The word *Gestalt* is a common word in German, that is to say it is used in the common language. It corresponds to the English words “form,” “shape,” “figure” and “configuration.” In the *Duden-Dictionary* of the German language, *Gestalt* is defined as the “visible appearance of an individual” or “as the form that something has or in which something appears.” It can also designate the “aspect” of something or someone, a not recognizable figure, or a figure created by a poet.² The word is documented in Old High German as *gistalt* – a participle derivation from the verb “stellen” (to stand/to put) – and in Middle High German as *gestalt* in the meaning of “appearance, way of appearing” (*Deutsches Wörterbuch der Brüder Grimm*, vol. 5, 4177–4191),³ see also this lemma in the etymological dictionaries (Kluge 1993; Pfeifer 1993). In a more precise analysis, the Old High German form *gistalt* is the result of morphological composition through the prefix *gi-* (which carries a perfective and sociative meaning), the root of the verb *stell-* (to put) and the abstractive suffix *-t* (typical for verbs, nowadays present in words as a result of a verbal derivation, such as *Fahrt* < *fahren*, *Jagd* < *jagen*). Thanks to the semantic values of these morphemes, the word has expressed right from its origin something (a whole) which is the result of a process (“perfective” meaning), and at the same time unity in multiplicity (“sociative” meaning), i.e. it evokes a dynamic process with moments of relative constancy and stability. Hence, it should not come as a surprise that the actual meaning “something that has its appearance/form as a result of its inner structure” is already present in earlier evidence for this word. Even as a non-specialized word, *Gestalt* refers to something which is stable in its dynamic nature something which is recognizable as such as a result of a process which structures its inner form.

The high semantic potential of the word was recognized by Kant, Goethe and the Romantic thinkers (among others Wilhelm von Humboldt and Johann Gottfried von Herder), who used the term to describe a wide gamut of structural principles (heuristic, philosophical, physical and aesthetic). Throughout the 19th century, a debate on the term *Gestalt* took place in many disciplines (philosophy, psychology, physiology, biology, aesthetics and art theory). Designating an organic, structured whole which is immediately given (grasped immediately) in its phenomenal evidence, the concept *Gestalt* turned out to be heuristically fruitful for the explanation of multi-

² See (Duden 1983, 490): “1. [...] Sichtbare äußere Erscheinung des Menschen im Hinblick auf die Art des Wuchses: eine untersetzte, schwächliche G[estalt] [...] 2. Unbekannte, nicht näher zu identifizierende Person [...] 3. a) Persönlichkeit, wie sie sich im Bewusstsein anderer herausgebildet hat [...] b) von einem Dichter o. ä. geschaffene Figur 4. [...] Form, die etw[as] hat, in der etw[as] erscheint [...]”

³ <http://woerterbuchnetz.de/DWB/?sigle=DWB&mode=Vernetzung&lemid=GG11860#XGG11860>

plicity in unity, and more specifically for the explanation of phenomena connected to the unitary perception of colors, of spatial and acoustic belongingness, up to the interpretation of very complex phenomena and higher cognitive processes, such as feelings, volition, values, judgments, and aesthetic perception.

The German scientist and poet Johann Wolfgang Goethe is considered the first author to have recognized the broad semantic valence of the word “Gestalt” (for broader investigations see *inter alia* (Simonis 2001; Fitzek 2013)). In his early Sturm und Drang essay *Von deutscher Baukunst* (1772), Goethe used the expression *Gestalt* to describe the organic principle which animates life and art: “wie in Werken der ewigen Natur, bis aufs geringste Zäserchen, alles Gestalt und alles zweckend zum Ganzen” (Just as in the eternal works of nature, everything is perfectly formed down to the meanest thread, and all contributing purposefully to the whole” (see Goethe 1980, 108). The expression *Gestalt* recurs later in Goethe’s poems and in *Faust II*⁴ as morphological structuring principle of organisms. In his study on morphology, he wrote: “The Germans have a word for the complex of existence presented by a physical organism: *Gestalt*” (Goethe 1988, 63).

Anyway, it must be stressed that it was not only Goethe, who contributed to the semantic enrichment of the term *Gestalt* in the direction of a holistic and dynamic structure, but so did (and to a greater extent) “Goethianism” as a widely shared *Weltanschauung* and a way of life in the first decades of the 19th century (see Poggi 2015). Therefore, it is no surprise that throughout the whole of the 19th century the expression “*Gestalt*” occurs in non-scientific writings as a cypher for the organic principle. It was with this cultural background that the scientific conceptual definition of the term *Gestalt* found its roots.

“GESTALT” AS A SPECIALIZED TERM

A more rigorous conceptual definition of *Gestalt* and *Gestalt quality* was attempted in the debate which took place in philosophy and psychology⁵ at the turn of the 20th century. The historical paper by Christian von Ehrenfels *On Gestalt Qualities*, published in 1890 in the periodical *Vierteljahrsschrift für wissenschaftliche Philosophie*, edited by the philosopher Richard Avenarius, marked a key moment in the reflection conducted up to that moment. Ehrenfels understood by the term “*gestalt qualities*” qualities of a higher

⁴ Act I, Scene IV, verses 6287–6288: “Gestaltung, Umgestaltung, des Ewigen Sinnes ewige Unterhaltung” / “Formation, transformation, eternal minds in eternal recreation” (English translation in: (Fitzek 2013, 33)).

⁵ For a reconstruction of how psychology was established as scientific discipline and its emancipation from philosophy see (Ash 1982, 63–80).

order based on elementary sensations but at the same distinguishing themselves from the latter through their nature of being something “more,” not reducible to the sum of their base elements:

By a *Gestalt quality* we understand a positive content of presentation bound up in consciousness with the presence of complexes of mutually separable (i.e. independently presentable) elements. That complex of presentations which is necessary for the existence of a given Gestalt quality we call the *foundation* [Grundlage] of that quality.⁶

As he wrote at the very beginning of his paper, Ehrenfels took a stand in this essay on a current controversy:

Here we have an important problem of genetic psychology [...] [that is: S.B.] the question, in descriptive psychology of what precisely the given presentational formations (spatial shapes and melodies in themselves are. Is a melody a mere sum (i) [Zusammenfassung] of elements, or (ii) something novel in relation to this sum, something that certainly goes hand in hand with, but is distinguishable from the sum of elements?” (Ehrenfels, 1890)⁷

Ehrenfels is referring here to a running debate about the perception of a particular kind of structured whole, *Gestalten*, like a melody, or perceived movement, or spatial shapes, in which the whole cannot be reduced to the sum of its elements. In these cases, the final phenomenic “effect” remains the same, even though the physical stimuli are changed. A melody remains the same as a given perceived whole, even though it is realized in another tonality. This means that a melody is more than the sum of the single notes and it fulfills the “transposivity” principle; in the same way, the sensation of smoothness or roughness of tactual impressions can be evoked by very different stimuli. Ehrenfels assumed that Gestalt qualities are something “more,” something which “emerges” with evidence and gives to the perceived object coherence and sense.⁸ In this “production”-assumption, Ehrenfels reveals his deep indebtedness to the theory of production of Alexius Meinong and the Graz School, in which he developed intellectually and according to which there are elements of a first order (founding elements) and “complexions” of

⁶ See (Ehrenfels 1890, 262): “Unter Gestaltqualitäten verstehen wir solche positiven Vorstellungsinhalte, welche an das Vorhandensein von Vorstellungskomplexen [sic] im Bewußtsein gebunden sind, die ihrerseits aus von einander trennbaren (d. h. ohne einander vorstellbaren) Elementen bestehen. Jene für das Vorhandensein der Gestaltqualitäten notwendigen Vorstellungskomplexe wollen wir die Grundlage der Gestaltqualitäten nennen.”

⁷ See (Ehrenfels 1890, 250): “Mit dieser Controverse ist ein wichtiges Problem der genetischen Psychologie aufgeworfen; [...] was denn jene Vorstellungsgebilde ‘Raumgestalt’ und ‘Melodie’ in sich seien – eine blosse Zusammenfassung von Elementen, oder etwas diesen gegenüber Neues, welches zwar mit jener Zusammenfassung, aber doch unterscheidbar von ihr vorliegt?”

⁸ See (Ehrenfels 1890, 253): “Wie kann [...] der blosse Umstand, dass sich mehrere Vorstellungen oder Empfindungen in einem einzigen Bewusstsein vereint vorfinden, schon einen genügenden Grund dafür abgeben, dass zu jener Summe noch etwas Neues hinzutritt, welches nicht in den Summanden enthalten war?”

a second order (founded elements), emerging through productive psychic acts (for a wider analysis see (Lindenfeld 1980)).

As Ehrenfels admitted in a letter to his teacher and mentor, Alexius Meinong,⁹ that it was the philosopher and scientist Ernst Mach who before him had made fundamental contributions to this debate. Mach had already used the term *Gestalt* and the examples of melody and spatial shapes as *Gestalt* “grasped” immediately already in his paper entitled *Bemerkungen zur Lehre vom räumlichen Sehen* (1865) (*Remarks on the theory of spatial vision*), and then in *Beiträge zur Analyse der Empfindungen* (1886) (*Contributions to the Analysis of Sensations*). Later, after the publication of the paper by Ehrenfels and in part as a response to him, Mach again used it in Chapter XII of his *Populärwissenschaftliche Vorlesungen* (1896) (*Popular Scientific Lectures*). When speaking of spatial Gestalts in his paper of 1865, Mach referred explicitly to Johann Friedrich Herbart’s theory of spatial vision and fusion (for a broader investigation and also for further references see (Poggi 1994; Spillmann 2015)). Assuming a fundamental monism, Mach goes further and enlarged the gestalt principle to the entire animate world, quoting pithily in his *Popular Scientific Lectures* Goethe’s verses in *Metamorphosis of plants*: “All forms (Gestalten) of Nature are allied, though none is the same as the other; Thus, their common chorus points to a hidden law.” (Mach, *Popular Scientific Lectures*, 9).¹⁰ With this challenge, for science to find the hidden law on which the harmony of the world is based, he initiated a broader philosophical discussion about the possibility of bridging over the gap between the different sensory fields and various categorizations of apparently disparate phenomena under a unified system.¹¹

Seen in this tradition, the use by Ehrenfels of the term *gestalt qualities* was aimed at overcoming a categorically substantialized distinction between subject and object, between body and soul in a holistic view of perception, cognition and volition. The phenomenal evidence that in many perceptual, cognitive and volitional acts the whole is not reducible to the mere sum of its parts, led to the methodological assumption that science has to proceed not only bottom-up, but also top-down, that is to say from the whole to the con-

⁹ See (Kindinger 1965, 74–75).

¹⁰ (Mach 1910, 9): “Alle Gestalten sind ähnlich, und keine gleicht der anderen. Und so deutet das Chor auf ein geheimes Gesetz.”

¹¹ See Ehrenfels, *On Gestalt Quality*, 114: “If we have succeeded in sketching a picture, however broad in outline, of the role and significance of the phenomena considered in psychic life, then it might now be pointed out that the theory of Gestalt qualities would perhaps be qualified to bridge the gulf between the various sensory regions, and indeed between the various categories of the presentable in general. The theory makes possible the unification, within a single framework, of what are superficially the most disparate of phenomena.” See (Ehrenfels 1890, 289): “Vermag das Gesagte ein [...] Bild von der Stellung und Bedeutung des betrachteten Phänomens im psychischen Leben zu entwerfen, so soll nun noch auf den Umstand hingewiesen werden, dass die Theorie von den Gestaltqualitäten geeignet wäre, möglicherweise die Kluft zwischen den verschiedenen Sinngebieten, ja den verschiedenen Kategorien des Vorstellbaren überhaupt zu überbrücken und die anscheinend disparatesten Erscheinungen unter ein einheitliches System zusammenzufassen.)

stituent parts, from the global meaning to the single meaning of the constituents.

Ehrenfels' work sparked a lively debate in scientific and non-scientific circles. Within two decades the stances of different "disputants" and "schools" crystallized themselves, among which the most important were the Berlin School of Carl Stumpf¹² and the Graz School of Alexius Meinong.¹³ A very important point of reference in the discussion was the interpretation, and partial revision, of the intentionality concept developed by the philosopher Franz Brentano, who had a fundamental influence on the thinking of Alexius Meinong, Carl Stumpf, Edmund Husserl and Kazimierz Twardowski. In his work *Psychologie vom empirischen Standpunkt* (1874), Brentano reintroduced the concept of intentionality, derived from medieval Scholastic philosophy but reinterpreted in the light of Brentano's vision of consciousness:

Every mental phenomenon includes something as object within itself, although they do not all do so in the same way. In presentation something is presented, in judgement something is affirmed or denied, in love loved, in hate hated, in desire desired and so on. This intentional in-existence is characteristic exclusively of mental phenomena. No physical phenomenon exhibits anything like it. We could, therefore, define mental phenomena by saying that they are those phenomena which contain an object intentionally within themselves. (Brentano 1995, 88–89)

Intentionality is not only what distinguishes psychological from physical phenomena, but it also binds the psychic and physical world in the unity of intentional acts, beyond the Kantian dualism of modalities of knowledge. Objects are always intentionally given to the consciousness, they are *in-existent* to consciousness in the sense that they are *in* the mental or psychological state (locative *in*). This fundamental assumption, which was later developed by Husserl in his phenomenology, was crucial for Carl Stumpf, who transmitted it to his students, among them to Köhler, who developed in *Über ein altes Scheinproblem* (1928) (*An Old Pseudoproblem*) the core elements of the so-called "critical realism," later taken up in Wolfgang Metzger's *Psychologie. Die Entwicklung ihrer Grundannahmen seit der Einführung des Experiments* (*Psychology. The Development of Its Initial Presuppositions since the Introduction of the Experiment*, English first edition 1940).

A complete formulation of *Gestalt laws* was then carried out in the framework of the Berlin School of Gestalt theory, initiated by Stumpf, through its main representatives Wolfgang Köhler, Kurt Koffka, Max Wertheimer and Kurt Lewin (Todorovic 2011). As Max Wertheimer summarized: "The

¹² See (Bonacchi 1998; 2011).

¹³ On the Leipzig School see (Fitzek, Salber 1996).

basic thesis of gestalt theory might be formulated thus: there are contexts in which what is happening in the whole cannot be deduced from the characteristics of the separate pieces, but conversely; what happens to a part of the whole is, in clearcut cases, determined by the laws of the inner structure of its whole.” (Wertheimer 1944, 78). The thinking behind Gestalt Theory developed around the main topic of the structural organization of wholes: figure and background, integration and segregation, groups and parts, articulation and hierarchy, and the phenomenal organization of visual fields. Many research areas in psychology gained greatly from the formulation of gestalt laws (Wertheimer 1923), further discussed by Koffka (1935) and Köhler (1947): visual perception, acoustic perception, the psychology of learning, research into memory and language, the psychology of art, and affect psychology. The Prägnanz-Principle, or principle of “good Gestalt,” is the core principle, a sort of overarching general rule which states that phenomenal organization in perception and mind is ruled by “maximal possible goodness” (simplicity, unification, regularity, balance). From this principle are all gestalt laws derived: proximity, continuity, closure, similarity, symmetry, common fate, and past perceptual experience (Wertheimer 1923, 331; Köhler 1947).

The official forum for these researchers was the journal *Psychologische Forschung* (Psychological Research), which had provided a forum for scientific discussion on gestalt related themes since the early 1920s. The gestalt concept was developed not only by the Berlin School, but also in the context of other philosophical orientations: in phenomenology (Edmund Husserl),¹⁴ in Neo-Kantianism (Ernst Cassirer), and in the Würzburg School (Karl Bühler, Oswald Külpe), in philosophical anthropology (Max Scheler, Arnold Plessner).

GESTALT THEORY TODAY

Hitler’s advent to power and the rise of the Nazi regime caused a deep caesura in this very promising scientific development. Most gestalt theoreticians were forced to emigrate to the United States, where they could not always find an advantageous scientific milieu in a context dominated by psychological behaviorism. An exception was Rudolf Arnheim, who studied under Max Wertheimer and Wolfgang Koffka at the University of Berlin. He migrated to the United States after the beginning of the Second World War. In his work *Art and Visual Perception: A Psychology of the Creative Eye* (1954), he applied Gestalt principles to the arts.

¹⁴ See (Rollinger, Ierna 2015).

After the Second World War Gestalt Theory attracted a renewed interest, first of all as Gestalt psychology. A great influence in this renaissance was due to Wolfgang Metzger, whose *Psychology* became a classic for gestalt studies. Recently, a new interest in the Gestalt approach has been observable in the context of various application-oriented disciplines, among others: group organization, design, semiotics, linguistics, and psychotherapy. The most important concepts of Gestalt Theory (auto-organization, isomorphism, field theory, *Prägnanz*), the distinction between global and local factors in the organization of wholes have inspired much current research.

Worth mentioning here are the integrative activities of the International Society for Gestalt Theory and Applications (<http://www.gestalttheory.net/cms/>) and of the journal *Gestalt Theory*, both of which attempt to draw various scientific circles towards the gestalt approach.

Last but not least, every history of use has to also contain a history of disuse and abuse. *Gestalt Therapy*, developed by Fritz Perls, Laura Perls and Paul Goodman in the 40's and the 50's (*Gestalt Therapy: Excitement and Growth in the Human Personality*, 1951), is only vaguely connected with *Gestalt Theory*, even though the founders were pupils of the eminent *Gestalt* thinker.

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