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PART II. THEORETICAL AND APPLIED ISSUES

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GESTALT PRINCIPLES IN LINGUISTICS

1. INTRODUCTION

The two studies that follow have been motivated by the work done within the so-called "cognitive linguistics" paradigm (as represented by the research of such linguists as Langacker, Lakoff, Talmy and others). This trend in modern linguistics is experientialist in nature, in that it lays emphasis on the speakers' interaction with their physical environment and on the close ties between perception and language. Some of those linguists seem to be evading the question of the extent of this closeness. I tend to opt for the strongest possible hypothesis – the direct opposite of the linguistic determinism postulated by Whorf [1956]: I believe that linguistic coding is determined by the human perceptual system. As human perception is visually oriented, the properties of language are largely determined by the nature of the visual process. Therefore I strongly believe linguists should become more interested in the organization of visual perception, as this could provide them with some valuable insights about the structure of language.

One theory of visual perception that has had great impact on subsequent research was the Gestalt movement, whose members argued that perceptual processes are dynamic rather than passive, and that the perceptual world is organized into patterns of configurations rather than a mosaic of sensations. Although these claims were made at the beginning of the century, many of the phenomena which the Gestaltists uncovered are still being researched and present some of the major challenges to perceptual theory.

2. GESTALT PERCEPTION IN VISION

Gestalt psychologists [Köhler 1929, 1940, 1947; Koffka 1935; Wertheimer 1923/38] demonstrated and explored the importance of perceptual organization, insisting [after von Ehrenfels 1890] that "the whole is more than the sum of its parts". The final percept is always more than the simple combination of the sensory elements; it has an additional property which von Ehrenfels named Gestaltqualität (form-quality). The holistic perception results from interrelations in the physical stimulus pattern according to some organizational principles. In the formulation of Wertheimer:

> The way in which parts are seen, in which subwholes emerge, in which grouping occurs, is not an arbitrary piecemeal...summation of elements, but is a process in which characteristics of the whole play a major determining role. [1938: 135]:

In direct contrast to constructivist theorists, who argued that the percept was assembled by first analyzing the individual details of the array and then synthesizing the overall pattern, the Gestaltists held that the primary perceptual impression was always holistic: the nervous system is designed to extract the gestalt first; it gets around to the details later. This claim was tested experimentally much later in a series of experiments carried out by Navon [1977, 1991]. His findings suggest that global features of objects are indeed perceived more readily than local features; he concludes that perceptual processing proceeds from global structuring towards finer discrimination (the Global Precedence hypothesis). Global precedence may be motivated biologically. The global structure of stimuli tends to be more unique, and thus more suggestive of the identity of the stimulus than local features. Therefore, when there is only sufficient time for a partial perceptual analysis, it may be more valuable if one first obtains information about the general structure of an object, so that it can be identified and perceived with minimal delay. Seeing a long thin moving shape in the grass, most people instinctively take some definite action immediately rather than stoop to take another look to determine whether the shape is really a snake and whether it is the harmless kind or otherwise.

The principles by which groups of stimuli organize themselves in perception into gestalts were first discussed by Wertheimer [1923], who called them "the laws of grouping". Several of the most important ones are the laws of proximity, similarity, "common fate", continuity, connectednesss, closure, and symmetry. The organized wholes tend to stand out as figures against the less well defined grounds (cf below). The Gestalt theorists observed a general tendency of perception to "prefer" simple,

symmetrical and closed shapes, i.e. "good figures"; they suggested an underlying "law of Prägnanz" (or "the minimum principle") which holds basically that a "good" percept will have the simplest organization possible in given stimulus conditions [cf. Koffka 1935: 110].

Gestaltian researchers also noted the fact that vision is characterized by perceptual constancy: the perceived gestalt stays invariant under various transformations of the stimulus. An object does not change perceptually as its brightness, size, or location varies within reasonable limits. People tend to see objects as the same size irrespective of distance; shapes do not change when seen from new positions; colors remain the same in different illuminations. The Gestaltists suggested that these phenomena are due to the fact that stimuli are not isolated, but always located in a context, which they likened to a field of forces or dynamic tensions. The ratios between stimuli in context remain constant, and so e.g. paper will always appear white and coal black no matter what the level of illumination, because it will always reflect relatively more light than coal.

Research on pattern perception [cf. Juola 1979] has shown that the context in which an object is viewed affects the speed of its perception. People find objects much more rapidly in familiar scenes than in ones whose components are arranged unnaturally. Presumably, this is due to the use of stored information about how objects and their environments normally relate to one another.

The Gestaltists [e.g. Köhler 1940] described visual perception as being realized through a series of interactions between percepts, which continuously modify already established configurations in the visual field. According to Arnheim [1986: 7]:

> Every detail of information about the representational content of a picture not only adds to what we know but changes what we see. It is psychologically false to assume that nothing is seen but what stimulates the retinae of the eyes.

3. AUDITORY AND CONCEPTUAL GESTALTS

Many researchers have argued for the relevance to linguistics of those Gestalt psychology findings.

As has been repeatedly pointed out by various linguists, words, phrases, and sentences are more than a sum of their parts: their meaning does not depend only on its components, but on an overall structure. Understanding a visual image involves discerning the meaning of the whole in terms of the relation of its parts; similarly, when we read or hear a sentence, we

arrive at its meaning by making sense of the words as they relate to each other, in a particular speech situation.

It follows from the Gestalt position that it should be possible to replace the original parts of a whole with other parts while still managing to retain the quality of the gestalt. This is obviously true of the linguistic system, with its potential of selection from a set of paradigmatically related units while still preserving the grammatical construction.

Linguistic constructions may be analyzable into parts in more than one way, with different properties in the foreground on each analysis. On the other hand, they may be seen as parts of larger gestalts of various kinds (syntactic, semantic, pragmatic) with which they may have differing relationships.

A spoken word is a perceptual gestalt. In listening we register the overall pattern and ignore the finer details. Hockett [1987: 41] claims that one situation in which this is evident is when we are being introduced to someone at a noisy party: the introducer's words are clear until the stranger's name is uttered, but with that name, we suddenly discover that the noise-level is higher than we had realized. Presumably, we are able to recognize the gestalt of a familiar and expected word/phrase against a noise level that would render unrecognizable the details, but this is not possible in the case of an unpredictable novel utterance.

The similarities between visual perception and speech perception are reflected in the similarity of the models designed to account for auditory and visual pattern recognition. Models of both kinds postulate that perceptual input activates memory information (a conceptual gestalt), which is then used to anticipate other perceptual events. One such model of speech perception is the analysis-by-synthesis model proposed by Neisser [1967]; it is similar to Gregory's [1974] theory of visual perception, in which the observer approximates the correct percept successively, by means of hypothesis testing (starting with the most general hypothesis).

The influence of overall structure on speech perception was demonstrated in a classical experiment by Warren and Warren [1970]. They presented their subjects with one of the following sentences (the asterisk indicates a deleted portion of the sentence):

(1) It was found that the *eel was on the table.
(2) It was found that the *eel was on the shoe.
(3) It was found that the *eel was on the axle.
(4) It was found that the *eel was on the orange.

Subjects listening to sentence 1 tended to hear the *eel as meal, in sentence 2 it was heard as heel, in sentence 3 as wheel, in sentence 4 as peel. Those observations support the Gestalt thesis of the tendency of the perceptual system to attend first to gestalts.

Similar top-down effects are also observed on other levels of linguistic organization. For example, words are understood faster when presented in intelligible sentences; when isolated from context they become harder to identify. Word perception, in turn, influences the way syllables and phonemes are heard. One illustration is the phonemic restoration effect observed in another experiment by Warren and Warren [1970]: their subjects tended to perceptually "fill in" missing sounds in a speech stream. As regards this tendency for closure, consider also such phenomena as our being able to follow a conversation while listening attentively only part of the time, or reading through a novel rapidly while not attending to every word. We are able to fill in the missing parts of the message in much the same way that partly obscured visual objects are perceived accurately by filling in missing detail.

I have remarked above that "good figures" in perception are compact, regular, efficient and simple forms; the Gestaltian "minimum principle" holds that, all things being equal, the preferred organization of the percept will be the simplest one that the circumstances permit. This brings to mind Grice's [1965] Cooperative Principle, the general pragmatic principle governing all conversational interactions:

> Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.

Of the four conversational maxims that follow from this general principle, the Maxim of Quantity and the Maxim of Manner put particular stress on the "goodness" of form. An utterance should be neither more nor less informative than is required, it should be clear, brief, and orderly – that is, the simplest possible in a given situational context. And, of course, such an utterance must "fit" the context (Maxim of Relevance), i.e. the hearer must perceive it as part of a larger whole so as to fully discern its meaning. "Good" utterances produced if we adhere to the maxims (actually, natural laws of organization) make for the maximally efficient conversation.

Like visual objects, words are characterized by perceptual constancy: a spoken word does not change perceptually if the loudness, duration, or relative pitch position is changed. Jakobson [1971] claimed that the same essentially relational and topological properties that characterize phonological invariance may be observed in semantics. He posited invariants of meaning – general as opposed to contextual meaning. The invariant semantic common denominator of a form would be that property or set of propertiess which remain constant throughout all the specific contextual applications of the form.

A similar distinction was captured by Osgood's [1980] Emic Principle. Osgood points out that in both perceiving and comprehending "we usually have situations where percepts are variable but their significances are constant" [1980: 212]. Physically different phones "converge" upon a common phoneme; and similarly for morphs/morphemes and semes/ /sememes.

The concept of gestalt has been adopted by cognitive linguists, who have used it to make very broad claims about conceptual organization. Lakoff [1977: 246] maintains that "thought, perception, the emotions, cognitive processing, motor activity, and language are all organized in terms of ... gestalts", some of whose properties he describes as follows:

> – Gestalts are at once holistic and analyzable. 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. [...]
>
> – 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. [...]
>
> – Gestalts may be embedded inside other gestalts and may take on new properties as a result of such embeddings. [...]
>
> – Gestalts are structures that are used in processing, either language processing, thought processing, perceptual processing, motor activity, or whatever. [...]

Lakoff's [1982] ICMs ("idealized cognitive models") have many of the properties described above.

Johnson [1987] uses a similar concept of "experiential gestalts" (he calls them alternatively "image-schemata"), which are "coherent, meaningful, unified wholes within our experience and cognition; they generate coherence for, establish unity within, and constrain our network of meaning" [1987: 41]. The very definite, highly structured image-schematic gestalts are "experientially basic", meaningful, repeatable patterns which give order to our perceptions, understanding, and actions. Experiential basicness is a relative matter; Johnson claims it depends on "background knowledge, motivations, interests, values, and previous experiences" [1987: 62].

We might also point out the gestalt-like character of basic-level categories, as described by Rosch and her collaborators. Rosch et al. [1976] have found that the the members of basic-level categories have similarly perceived overall shapes, and the entire category can be represented by a single mental image. Berlin et al. [1974] have also suggested that the fundamental determinant of the basic level is the perception of the overall part-whole configuration, i.e. gestalt perception.

Conceptual gestalt structures obviously predetermine and give shape to linguistic utterances.

4. FIGURE-GROUND DISTINCTION IN PERCEPTION AND LANGUAGE

The very essence of visual perception is to find, quickly and effortlessly, a certain object among a vast number of unimportant ones, i.e. to separate it from its general environment. As the Gestalt psychologists have pointed out, whenever we perceive, we distinguish between the figure in a field of view and the ground against which it is seen. This basic perceptual phenomenon was explored by Köhler [1940] and Koffka [1935]. They observed that figures tend to be more complete and coherent, better-defined and remembered than the ground, which is seen as less distinct, is less attended to and more easily forgotten. The figural area tends to appear denser and brighter than the ground, consistent with hierarchical organization. These perceptual processes are instrumental in creating fictional space, i.e. the percept of a distance in depth between the two regions: the figure appears to stand out from the ground, which seems to be floating behind it.

In an effort to find the factors that determine which pieces of information will be perceived as figure and which will become the ground, the psychologists of the Gestalt school formulated their "principles" of perceptual organization [Wertheimer 1923, Köhler 1929; Koffka 1935]. Among the most important ones for vision are:

Proximity and similarity. Elements that are close together and are similar in brightness, color, and shape tend to form connected clusters that become figures.

Closure. Bounded regions and closed forms are perceived more often as figure than areas with open contours. If a visual pattern is incomplete, there is a strong perceptual tendency to fill in any existing gaps.

Area. The smaller a closed region of a visual cluster, the more it appears to be a figure; and obviously the larger the area of a region is, the more it tends to be seen as the ground. For example, we see the cup on the table, and not the table under the cup [cf. Ertel 1974].

Symmetry. The more symmetrical a closed region is, the more likely it is to appear as figure.

Good continuity or "common fate". A perceptual organization that will minimize changes or interruptions in the contours of the perceived constituents will be seen as figure. One example may be the skyline of a city at night. In three-dimensional space, many spontaneous and dynamic organizations are based on common movement. Objects which move together, such as a flock of birds, tend to be seen as a unit. [cf. Julesz and Hirsch 1972: 297].

There is a strong perceptual tendency to perceive the figure as a good form, i.e. to regroup visual variables or "misinterpret" the actual data so

that they would correspond more to geometric patterns possessing a strong internal structure [cf. Köhler 1940: 134–5].

Visual figure/ground distinction has analogies in auditory perception. An auditory figure is a single event of brief duration or a cluster of events, which stands out from its ground – the ongoing accompaniment which is often not even noticed. If we translate space into time (and the conceptual spatialization of time is common in human thinking, as has recently been pointed out by e.g. Lakoff and Johnson 1980, among others), the principles for the formation of auditory figures parallel those of the visual modality. Thus, as Julesz and Hirsch [1972: 300–305] point out, the important factors determining the formation of auditory figures are:

Proximity. Sounds that are close together in time tend to be grouped into clusters. In speech, segmentation and the identification of syllables, words, and tunes results partly from the temporal proximity of intrasyllabic elements.

Area. In auditory perception, area translates as length or duration. The shorter the relative duration of an auditory event, then, the easier it is to perceive it as a figure. A rifle shot stands out clearly from its background. We might in this connection note the fact that exclamations and commands – emotionally charged lingustic utterances – are usually relatively short, presumably so as to draw even more attention to themselves as figures.

Closure. Julesz and Hirsch claim that auditory perception lacks real closed figures, which they ascribe to the unidirectionality of time. Still, we might point out the strong tendency to fill in any existing gaps in the patterned stream of sound: the so-called phonetic restoration effect. In an experiment by Warren and Warren [1970], twenty subjects were presented with a recording of the sentence: *The state governors met with their respective legi*latures convening in the capital city.*, a 0.12 sec portion of which (indicated by the asterisk) had been removed and replaced with the sound of a cough. The experimenters found that the subjects claimed that there was no missing sound.

Symmetry. Repetition is easily perceived in auditory patterns, and so are the various kinds of parallelism.

Good continuity. In the frequency-time domain there exist good auditory analogs for this principle. We might mention here intonation contours and melody that persist over time. These factors may play a part in the so-called "cocktail party effect": our ability to abstract the voice of a particular speaker from the background noise of many other people talking at the same time. Cherry [1953] who first studied this effect, found that this ability involves making use of physical differences among the auditory messages in order to select the one of interest; these physical

differences can include differences in pitch, timbre, voice intensity, and in the location of the speaker.

The figure/ground distinction is connected with the perceptual mechanism of the focusing of attention on some parts of the visual or aural field, either because they are relevant in the context of our present activities and intentions, or because they conflict with expectations by being novel, incongruous and intense.

Focused visual attention has often been compared to a spotlight: it lets us see objects within a relatively small area very clearly, but there is very limited processing of the visual stimuli falling outside of its beam. Similar observations can be made for the focused attention in the auditory modality. There is generally almost no processing of unattended stimuli. Cherry [1953] carried out experiments in which one auditory message had to be shadowed (repeated back out loud) at the same time as another message was played to the other ear. Very little information seemed to be extracted from the second or nonattended message, and listeners seldom noticed when that message was spoken in a foreign language.

As in the case of an adjustable light beam, visual attention can cover larger or smaller area, depending on the nature of the task [cf. LaBerge 1983]. Campbell and Robson [1968] have suggested that attention may be shifted between the outputs from variously sized spatial filters. And so, at a party one may switch attention from the appreciation of the texture of a lady's dress (high spatial frequency information) to the more general outlines of her appearance (low spatial frequency information). Their idea was supported by the finding that there are substructures in the visual cortex that selectively respond to limited ranges of spatial frequency. These perceptual phenomena are reflected in language, where the area of focused attention may be marked grammatically through the placement of the foregrounded NP at the head of the larger nominal construction (in English, placing it first) as in *a crowd of people/the people in the crowd*; the difference in the level of specificity (or "resolution") between these two images is also reflected in the predicates of those nominal constructions (*was* vs. *were*).

The perceptual organization of a visual scene obviously determines the form of the verbal account a speaker is going to produce about that scene. What we choose as the basis of a linguistic utterance is usually the figure.

The form of the utterance is also shaped by a number of Gestalt principles like the ones mentioned above. It has been found, e.g., that the smaller of two objects is preferred in the subject position [Osgood 1971]. Osgood has shown his subjects simple situations and asked them to describe them; they produced sentences such as e.g.

(5) The ball is rolling across the table.

In this case, the thematized NP represents an object that is not only small, but also moving, and the object in the locative phrase is larger and stationary. Given that moving objects are perceptually more salient in a visual scene, this organization of the sentence is natural and predictable.

Recently, the concepts of figure and ground have received attention from linguists of the cognitive orientation. Talmy [1983: 232] proposes to give them the following particular characterization:

> The Figure is a moving or conceptually movable object whose site, path, or orientation is conceived as a variable the particular value of which is the salient issue. The Ground is a reference object (itself having a stationary setting within a reference frame) with respect to which the Figure's site, path, or orientation receives characterization.

Other linguists who have called on these concepts, their conceptual synonyms foreground and background, or the more general "degrees of salience", include Hopper [1979], Hopper and Thompson [1980, 1984], Wallace [1982], Lakoff [1987]. Langacker's [1987] "trajector" is also quite comparable to Talmy's Figure, while his "landmark" compares with Talmy's Ground.

Talmy observes [1983: 234] that the characteristics of the physical makeup of objects in a scene relevant for the division into figure and ground are qualitative or "topological"; they are e.g. the structural type of the objects, their degree of subdivision, boundary conditions and symmetry vs. distinguishability of parts. We may note that these are all Gestalt-type properties. Metric properties, such as particular size, length, distance, or angle, as well as more substantive properties like texture, or material, are not attended to (and are not grammatically marked).

The natural perceptual tendency to thematize the figure is responsible for our perception of even non-physical entities and events in terms of the figure/ground organization. Thus, note e.g. the assymetry of *Talmy's ideas resemble Koffka's ideas* where *Koffka's ideas*, clearly earlier on the scene, act as a reference object ground) for the thematized NP, despite the "symmetric" predicate.

Since time, as a rule, gets metaphorically spatialized, the figure/ground organization of objects in space naturally generalizes to the relative location of events in time.

Talmy [1978: 632] gives the categories of figure and ground in temporal events the following characterization:

> The temporal site of the Figure event is considered as a variable whose particular value receives characterization with respect to a Ground event, considered as a reference-point set in a temporal reference-frame (usually, the one-dimensional time-line).

He goes on to discuss the semantic roles in complex sentences expressing temporal and/or causal relations and observes that there is a (possibly universal) tendency to treat the earlier one of any two events in temporal sequence as reference point, or ground, and the later event as the figure. The unmarked linguistic expression of this relationship is a complex sentence where the earlier event is in the subordinate clause, and the later one in the main clause.

Similarly, the unmarked linguistic expression of the causal relationship between any two events is a complex sentence where the causing event (the ground) is in the subordinate clause and the resulting event (the figure) is in the main clause. Talmy speculates tentatively on deeper reasons for those tendencies. He suggests that they are due to the cognitive characteristic of making the earlier cognized event a basis for assessing the later one (p. 641); yet elsewhere he also mentions the Gestalt-type factors ("A larger, temporally-containing event acts as Ground...with respect to a contained event as Figure") (p. 640).

The division into foreground and background generalizes onto the more abstract phenomena observed at higher levels of linguistic organization. Hopper [1979] points out that in narrative discourse, there is an overt distinction between the language which relates the main events and the language of the parts of the discourse containing supportive material. The events of the story line are sequenced chronologically, and each is seen as a whole whose completion is a necessary prerequisite to a subsequent event. Within each discrete episode the subject remains the same; the episodes center on human topics and dynamic, kinetic events indispensable to the narrative. The situations or happenings in the background may be simultaneous or overlapping with the main events. Subjects change frequently and clauses tend to have marked pragmatic structure, with focus on subject, instrument, sentence adverbial, or the direct object alone. Episodes contain a variety of topics and describe states or situations necessary for understanding motives, attitudes, etc. [cf. Hopper 1979: 216].

Foregrounding may be marked in the tense/aspect system of the verb (perfective for foreground, imperfective for background) or by the use of the "voice" system – the active/passive distinction. Hopper observes that most tense markers can be expected to function in background only, e.g. pluperfect, remote-past, future-perfect, future, etc. This is so because details supporting the narrative do not have to be contemporaneous with it but may be part of the prehistory or the supposed consequences of the narrated event, or may suggest contingent but unrealized events. In foreground, by contrast, tense-indication is only needed to provide a conventional location of the successive events of the narrative on the time axis. In many languages, this tense is the one known as "preterite" or simple past.

Wallace [1982] similarly argues that verbal categories such as imprefectivity, past tense, future tense, intransitivity, and the modalities of hypotheticality, negation, potentiality, and doubt are ground-like in that they are similar to the characteristics of perceptual ground: unformed, diffuse, continuous, below, behind, etc. Conversely, categories such as perfectivity, present tense, transitivity, and the modalities of reality, actuality and certainty are figure-like in that they are similar to the characteristics of perceptual figure: discrete, local, bounded, above, in front, etc. Wallace claims that figure and ground have relevance to nominal categories, subordination, and larger discourse concerns as well.

The interplay between foreground and background also functions aesthetically within the visual arts and literature. In traditional European paintings showing a group of figures or a single portrayed person, there is usually a clear distinction between those structure-bearing objects and their surrounding environment. The extrinsic space is reduced to a neutral ground and may therefore be entirely ignored. In contrast, in some more modern paintings, there is an increasing tendency to obliterate the distinction between the foreground and the background, and to make the viewer put more perceptual effort into identifying subwholes and set them against one another.

In the process of literary interpretation, the reader must continually reconstruct the relationship between the two aspects of the scene. Authors may set out marks in the text that will guide the reader into a particular direction of interpretation, i.e. make him discern a particular figure. The two main devices of foregrounding seen as complementary forces by literary scholars are deviation (choices made outside the permitted range of potential selections) and parallelism (a pattern of equivalences and/or contrasts that are superimposed on the normal patterns of language organization).

5. AMBIGUOUS FIGURES

The Gestalt psychologists drew attention to the phenomenon of figure/ground reversal, and more generally, of ambiguous figures. In vision, the images which do not provide the eye-brain system with enough information to distinguish between figure and ground may be experienced as equivocal or reversible. One example of such a figure is the yin/yang icon. Until we make an either/or decision as to which part of the image is to be dominant, forming the figure, and which is to be subordinate, forming the ground, there is an oscillation between the two alternatives, as the eye repeatedly shifts from one area to the other.

Those phenomena illustrate the importance of interpretation, or top-down processes in perception. In the case of such well-known ambiguous figures as Rubin's famous faces/goblet illusion, or the Necker cube, whose orientation is unstable and which is seen sometimes with one vertex nearest the onlooker, sometimes with another, the physical stimulus itself does not change: the same pattern of contours, lines and angles strikes the eye. Yet the pattern may have two or more quite distinct interpretations.

Clark, Carpenter and Just [1973] see this situation as typical; they claim that "It would seem impossible to find a perceptual experience that could not be interpreted in alternative ways" (p. 313). Indeed, the objects we perceive, as they are glimpsed with momentary glances, are usually ambiguous and incomplete as far as usable stimulus information is concerned, since they are partly hidden from sight. Yet, as was pointed out by Neisser [1967: 61]:

> [...] perception is not just a process of passive registration in which an external stimulus gives rise to a corresponding internal representation in an automatic and invariable way. What is perceived on a given occasion depends not only on the pattern of stimulation at the sensory receptors but also on the preceding context and on the expectancies and states of motivation and attention of the perceiver.

Just as most nonlinguistic signs are potentially amibiguous, i.e. polysemous, so too are most words in language. Like visual ambiguity, linguistic ambiguity may also be looked at as involving confusion between figure and ground. Common to such forms in both visual and verbal modes is that either one or another figure is seen but not both simultaneously. The significance of the elements of both pictures and sentences depends on the structural organization that is dominant at the moment. As was mentioned above, an important role is played here by contextual factors. The influence of context is evident when we consider the fact that speakers/hearers are not ordinarily aware of ambiguities in their own utterances, or in the speech of others [cf. Carroll, Bever and Pollack 1981: 370].

Language also shares with perception the ability to make a sudden discovery of a "hidden" figure. When an initially concealed visual image is perceived, it seems to "pop out" from the background. The differentiation of figure and ground changes a meaningless array of blobs to a meaningful scene. Once recognized, the percept is highly resisant to reorganization. Linguistic discoveries of hidden figures may occur e.g. in jokes. A puzzling last line suddenly falls into place as we "catch the meaning" of the joke, after we have mentally recombined the elements of the previously received information to arrive at a meaningful organization.

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ZASADY PSYCHOLOGII POSTACI W JĘZYKOZNAWSTWIE

Autorka zwraca uwagę na to, że główne zasady psychologii postaci, formułowane pierwotnie w celu wyjaśnienia mechanizmów percepcji wizualnej, odnoszą się również do mechanizmów językowych na różnych poziomach. Ogólna zasada prymatu całości – „postaci" nad częścią, fakt, że postać nie da się sprowadzić jedynie do sumy jej elementów, jest również jedną z głównych zasad języka. Podział pola postrzegania na figurę i tło, jak i bardziej szczegółowe prawa determinujace ten podział (np. tendencja zamknięcia całości) znajduje odzwierciedlenie lub analogię w wielu konstrukcjach językowych. Sugeruje to, że język jest związany z percepcją wizualną bardziej niż przyznawały to tradycyjne teorie językoznawcze.