

## Explaining the obvious: a theory of visual images as cognitive structures

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# **EXPLAINING THE OBVIOUS**

# INITIATING A THEORY OF VISUAL IMAGES AS COGNITIVE STRUCTURES

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"Vision is already inhabited by a meaning /sens/, which gives it a function in the spectacle of the world and in our existences."

Maurice Merleau-Ponty, in Phenomenology of Perception

## Introduction

"Explaining the Obvious" is a book about meaning in visual images – i.e. meaning in what we see – and about seeing as an activity that creates meaning. It accounts for a theoretical exploration of seeing (*regarding*) as an act of cognition, and exploration of that which is seen as a spatial structure of meaning.

The main results in this book were first presented 1995 in Swedish, and took the form of a basic argumentation. Some aspects of it were published five years later in English, as a brief study containing some analyses of images. Neither publication has attracted much public or scholarly attention. The present book retains and elaborates the main theses of the earlier work. On the one hand it illustrates them by means of further analytical elaboration using pictorial examples and diagrams; on the other it puts them in a wider theoretical cognitive perspective, focusing on the conditions for and nature of meaning in the act of regarding – as a contrast to discursive and linguistic meaning.

As it happens, this is a foundational work. By that reason sooner or later it has to be critically evaluated by a systematic philosophy of knowledge in charge of universal relevance.

The distinction between verbal and pictorial meaning is important in this book. Here however the distinction which has to be made first of all is the one between meaning as a general phenomenon and meaning in language.

The unfamiliar opposition between meaning in language and meaning in visual images might cause certain initial difficulties in the reading of this book. Not least is one easily led astray by the all too natural condition that we must use language as an instrument for analytical thought and communication at the same time as trying to be impartial judges between two fundamentally different structures for making and experiencing meaning.

This introduction describes first the general conditions and origin of the present theory. The text is subsequently divided into two relatively independent main sections.

The first section is illustrated; in a continous discussion it directs attention to general conditions for meaning in images. It does not aim to provide a comprehensive theoretical context. By using individual examples of upcoming meaning in images of different nature it attempts to demonstrate the consequences of recurrent conditions. These cases are to be understood as models, in relation

to which possible elements of meaning arise in different spatial interactions between visible factors.

The second section discusses in a more thematic way factors and elements which are considered to be of specific importance for a more comprehensive theory. It maintains and evaluates a continuous critical comparison between conditions for visual images as meaning and for meaning in language. That way it also comes to indicate consequences for general cognitive theory.

Its primary task is to argue for an interpretation of a visual image as a representation of the one of the mind's two comprehensive structures of meaning, and to indicate link to an overall scheme as a dynamic cognitive system. At the very least one can expect a comprehensive evaluation here to emerge of the simultaneous multi-dimensionality of the structural condition of an image.

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The main task of this introduction is to familiarise the reader with the here relevant aspects of the nature of spatial, dynamic meaning in images, and with the upcoming of meaning in spatial events.

Throughout the present investigation I have relied heavily on scrutinisation of individual images and sights of immediate physical reality, relating these to individuals' own resources for receiving and treating impressions. The main reference for critical control is thus the reader's own visual image, as it is represented each time s/he fixes his/her gaze on a particular sight. Getting some acquaintance with one's own visual images – most conveniently in looking at pictures – is not just to be introspective in a general way, it is unique in also continuously offering means for critical control. By the same one also has the advantage of full authenticity as to the object and the situation. It is an experience which is in principle replicable without given limits.

For the immediately following section my primary methodical concern has thus been to operate analytically out of our everyday viewing. In this way I have attempted to establish sufficient theoretical bases for the model analyses which are an integral part of the text, and which, if accepted, support my theoretical propositions.

Very few references to earlier theoretical works are to be found here, and argumentations in relation to other authors or to establish conceptions in this book are even fewer. I am not a philosopher by training and trade. But after the first publication of my ideas I spent several years studying epistemology before starting to write again. Initially, I aimed to locate my ideas within an established universe of cognitive theory. This proved untenable, however, due to the constantly recurring paradigmatic incompatibilities.

My point of departure, however, has been classical as it is based on Kant's introductory analysis in "Kritik der reinen Vernunft" on the conditions under which new concepts are created. It is only under conditions appointed by him and commonplace today that its impact on me in this text be recognized.

The way in which Maurice Merleau-Ponty conceives of visual experience in his work on perception<sup>2</sup> has consistently been in my mind when writing this book; as has the first chapter of Edmund Husserl's Ideen.<sup>3</sup> While the majority of modern cognitive philosophers use to depart from sense data already derived from sense impressions, I found within their foundational phenomenology an approach to meaning in humans which departs from conditions in sense impressions and visual images without immediately projecting language upon each element and context of meaning. It may be unnecessary to point out that in their case this approach is merely a transitory one, leading further to problems within discursive philosophy. Whatever they found out about our perception of the world this is presented from the perspective of a final function of linguistic meaning and logical operations. There is thus an incomptibility also between our overall frames of references.

A primary and as such perhaps even uncontroversial idea in the present text is that meaning is a substance in its own right. A second principle is that it is as *spatial* structures of meaning that visual images have their overall status, occupying and organising a space which in a process most immediately is represented as a field. They are thus not of linear nature, nor are they of the discursive order. I propose that images represent a specific cognitive structure which is no less thorough or complete than that of language.

Each visual image is an integrated system of its own, reflecting the overall system which is consituted by its structure. As systems they are complex, integrated organisations functioning in independence of any immediate outside control.

If so, understanding of visual images must of necessity depart from their own spatial cognitive structure. If not described in language they cannot be commented on at all with any consistency. The latter way is common enough, that of trying in discursive phrases to re-write the observed phenomena which I propose to be non-linguistic. But is, however, a self-contradictory practice; more about this later.

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Other works exist which present theories of meaning in images; these are to be found within psychology and cognitive science as well as aesthetics. My intention here is to limit my study to what is valid for images in general, without connecting to or questioning any specific cultural tradition etc.

On the other hand, as the focus is on the changing articulate nature of visual images one should expect a number of connections with corresponding themes within aesthetics dealing with articulate visual structures. But as to the structural nature of meaning, the most frequent assumption or tacit condition that one meets there is that meaning in images is of linguistic or semiotic nature.

Visual images, however, are mental facts, arising within the individual and bound to her/him. Pictures are not necessarily made for communication. But quite frequently there has been a communicative intent behind their coming about, and the opposite possibility which obviously must apply to visual images in general has not been given very much theoretical attention. And still, their cognitive structure differs fundamentally from any linguistic manifestation. In the survey of present visible elements which they offer for sight these writings invite us to grasp and make sense of consistent interrelations of meanings. That is something which language only can do, and this not very satisfactorily in the present case, by creating and resorting to syntax.

But there are other differences between the cognitive nature of images and that of language. In an in-depth-study Göran Hermerén has focused on the problem of language and visual experiencing, in departing from a comprehensive set of characteristics for language in a wide sense examining to what extent those under different conditions are met by images of art. Even if there are linguistic connections in many of his examples it is an exception rather than the rule that the meaning of an image as experienced can be dubbed linguistic.<sup>5</sup>

As to the psychology of perception, most theories concern (almost) immediate perception. But as a process of creating meaning, there are no given time limits for studying of a visible scene. Neither have I there come across any text which approaches visual image as a mental state and activity with a basic cognitive structure of its own, and which have all resources of the mind and memory at their disposal. Neither have I there found any text which discusses even limited aspects of such an approach in any depth except in relation to linguistic theory, systems and usages. As far as I have been able to find my enterprise is unique.

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It was as an art historian that I was first confronted with the type of questions which have then followed ever since. Long ago I found some applications of structural combinations with specific cognitive results within a Tuscan tradition of mural painting from the l5th century. In that material it was possible to demonstrate a successive development of meaningful ways to combine different *aspects* of parts and elements to meaningful patterns of increasing degrees of complexity and distinction. The genetically analytic method which I then followed was developed from the one which my teacher and friend Ragnar

Josephson used in his regrettably never translated "Konstverkets födelse" from 1940.6

The above mentioned studies indicated an important area for further research: no matter how much or how little the artists may have reflected discursively while doing their work, the actual production of images of this nature represents in itself a highly complex cognitive activity. This realisation specifically concerns the developments in formal articulation of qualities in images which language is incapable of representing or replacing, but which reflect a working intention, proceeding creatively step by step. Such meaning is understood in the very apprehension of confrontations between different aspects of coinciding phenomena, an apprehension which requires a dynamic perspective in the analysis of the art historian. It is this which is the subject of my first book on this issue, "Levels of Unreality", in 1963.<sup>7</sup>

It took me a long time to realize that the above conditions, once distinguished in articulate art works, could be found in any visual image and not only in images of art. I understood that it would only be in the light of more fundamental principles for spatial formation of meaning that one can reach a full understanding of such conditions.

My first theoretical approach to problems of such nature was rather tentative, "Verkligheten är ett innanhav" /"Reality is an Inland sea"/, 1987. It presents a set of reflexions on the meaning of anything as expression of human understanding rather than of qualities in physical reality etc. But it is from ever changing aspects that humans observe and understand even the most familiar things, in relation to any other object or set of earlier acquired meaning. Aspects seemed to me being as decisive for meaning and understanding as established concepts.

It was in reflecting over pictures as meeting-places for visible phenomena within a limited space that I eventually came to the conclusion that during the act of regarding for a principle all elements which appear on the image influence each other's meaning, sometimes superficially, often profoundly. Each experienced correlation calls forth at least one aspect. So now I felt that in an image there is to be counted with a *simultaneous interdependence* between all different phenomena occurring and observed together.

Some eight years after the above-mentioned publication, in 1995, the core of my theory was published as an open argument, in the book "Intuition och åskådlighet" ("intuition and 'anschaulichkeit'/graphicness").<sup>8</sup> As a term of cognitive theory "intuition" is here retained or recaptured in its classical, restricted meaning.

I was convinced that I now was working on the core of a comprehensive theory of visual image as a cognitive structure; one which could be compressed into the formula of a *simultaneously present*, *multidimensional cognitive structure* for which none of the necessary conditions is depending on human communication.

In the spatial intellectual act, in the broad field of vision, the mind observes and compares the different elements simultaneously; each and all of those can thus simultaneously affect and be affected by another's meaning. In this way the various visual elements will be mutually connected across the field, under one comprehensive aspect (as the one of all elements being parts of a certain place, or a certain object). Concurrently, decisions regarding individual elements are acted upon by other elements as well as they themselves are acting upon the former, so that further modifications may have happened as consequences of those interactions before the visual image attains a final structure of meaning.

The above discussion suggests that a visual image is a structure of simultaneous and multidimensional meaning.

However, given the open character of the dynamic field of an image, which is less firmly conditioned by that which is before the eyes, a different decision can always also be expected which would result in the creation of a different meaning.

Parts and aspects of the theory on this stage were retained in English 2000, in my paper "A Theory of Intuition on the Basis of the Visual Image". 9

More about the background for this book in my personal development, see following note.<sup>10</sup>

In the late 90s there was much discussion – and to some extent this has continued up to the present there still is – about images as informative structures of a linguistic character. But language has arisen out of the needs for communication. For visual images the opposite condition applies; visual images do not inform anybody but the proper individual. This difference has thorough theoretical consequences.

In the present context the concept of the articulated structure is basic. Language is often described as a system, and the system when seen as a generality is a structure. Not only individual discourses, phrases etc. but any cognitive entity might be apprehended as a system of its own, made possible by conditions provided by the structure in question. In visual images then, the conditions of meaning for visual elements in relation to the field can be resumed as their structure, and to the extent these can be seen to come back regularly in any image, the structure would show to fulfil the task of a system.

The visual image as we conceive of it here is that what we see, more precisely what we come to experience in relation to the *sight*. The latter is the physical object of our regarding. The term "visual scene" which is most commonly used for the same in the theoretical discussion would fit well also here, if not for two reasons. First, it makes us think upon something extensive and complete, like the scene of a theatre or the full field of vision. Secondly, it has shown easily to

invite for contaminations with "visual images". And regarding might as well concern a single object as an open scene.

In regarding any sight we make an image come up, but even if sights sometimes seem to appear immediately, they never do so. There is always a cognitive process going on until we cease to look. Mind creates the image as a structure of meaning. It keeps more or less of that meaning in memory, but the visual image itself does not persist – when attention is gone, the image is gone. Images of memory are not the same. This is one reason why visual images have to be described as dynamic phenomena, and this is why there is no final distinction other than that of aspect to be made between the act of seeing and an image as a factual structure (which in reality may never really exist in that frozen form) and as an activity in mind. Having a visual image is just another aspect of developing such an image.

The spatial structure of a visual image corresponds to spatial conditions in the real world, but it is not just reproductive in relation to the latter. I intend to show that it features purely mental dispositions and capacities which combine to treat and create meaning without even being restricted to visible matter.

I have no doubt that behind much of our nonverbal thinking we can indicate the same mental structure as in our visual images, and that this structure has much to say about *intuition*. It is, however, beyond my task now to go further into the specific problems of intuition.

# Formation of Meaning in Spatial Dynamics

### Moments and Models of Possible Meaning in Images

What does meaning in an image look like?

That of course should not be a mystery to anybody. One has an immediate experience of one's own from countless visual images. We are decidedly conscious of the visual image itself as an appearance, and of what it represents as meaningful matter in our mind. Out of what we see we can take direction for our acts and judgments and draw conclusions.

This meaning however is not only unsupported by language, but even, as to its bearing structure, decidedly different from linguistic structures of meaning. When it comes to meaning out of visual observation it is possible for us to find linguistic expression for just selected aspects and restricted contexts within that which we see that. But we never really can expect to find words and phrases which even schematically can account for the content of the visual image and for its overall character which is so evident before our eyes, and for the interplay of its parts.

All theoretical analysis is discursive – no less so in this text than during this investigation – and in lack of discursive structure in images in such relations these constrict us and refer us to indirect ways in a search for their consistent meaning.

When people discuss linguistic topics they can rely upon a common linguistic competence. There are things which can be expressed verbally in a univocal way. It is of course a different case when it comes to visual images, but also there a comparable common ground exists, so far that when two persons are looking at the same sight – the same object – be it a landscape prospect, a thing or a painting, the one part uses to know precisely what the other is talking about.

But language is founded on previous conventions of meaning, and it joins its elements together in grossly the same way no matter who is talking. When standing before a sight is up to each individual spectator within him/herself to develop the meaning of it. But in the first hand, for a principle, s/he then has had independently from others to conceive of its structure and to organize the relations inside it, even if this is always based on a sense for the basic conditions of the extended space of any image in common with other humans.

Mutual understanding about meaning within some specific sight in any case

is a most frequent occurrence; it may be said that it is normally very easy to reach that synoptic agreement in front of something which has already been talked about. But when people come to such conclusions this is not by comparing the mere visual images in-between themselves. The agreement becomes evident when one person apprehends the references of somebody else to parts of the sight before them and understands the aspect from which s/he sees that, in realizing that s/he relates in the same way to the same objects and features within them. Should there be initial disagreements about the one or other element or relation within the sight, it is possible to reach understanding when together focussing nearer at the crucial parts or features, and not least with the aid of verbal arguments.

The latter has not to be provided by full sentences, in such situations it rarely is. And that which normally makes us accept some specific understanding in this context is not logical criticism, but rather the mere basic act of all criticism, namely in making direct comparisons of some visual features with others, such which are within sight or such brought up from memory.

A declarative sentence can be critically and logically examined and thus sometimes show to be true or false, as it is out of its declared prerequisites (even if the possibilities also to verify the latter may be failing). On the contrary, that which is proposed concerning the content of meaning within it to somebody standing before the same sight can immediately be evaluated by this one. But when it comes to reasons for the judgments those usually can be considered either apparent or impossible to account for, and inaccessible for scrutiny.

It is possible to make alls sorts of statements about meaning in a visual image, or in that which one has seen as part of this, which is undoubted in the sense of almost never to be called in question. Statements like that a house-wall towers vertically in front of oneself or that there is a boat nearby in the sea cannot normally be contested. But even if a statement appointing some meaning of objects etc. within a sight can be irrefutable, it is impossible, as already touched upon, to make a however schematic, satisfactory overall description of any common simple visual image. It might seem that one eventually would be able to make an exhausting description of some painting, remaining the same each time one returns to it. But this can rightfully be doubted, which I am confident that any experienced art lover would attest.

One might get the idea that an exception is possible with an image of the type of a simple schematic drawing all measures and relations of which can be accounted for. But we know by ethnological experience that if this could be possible, if ever, it would only be within one and the same cultural tradition.

That which conditions the meaning of a sight is much more than the mere appearances; what we see directly accounts with its few dimensions for the physical present while each element and context of meaning coming up in regarding has added further dimensions to the cognitive structure of the image.

And as already stated different individual aspects on parts or wholes may result in internally deviating meaning.

Something essential is added to the structural arsenal of meaning when two or more persons converse in front of a sight. Normally such conversation would be described as just a linguistic act, with the object of this conversation in view. A sight is however not just one comprehensive object, it is a multitude of visible elements within some overall structure. Even if two spectators glance quickly at the same sight and arrive at a relatively convergent overview of the whole, a complex and comprehensive understanding can only be reached after more consistent effort. In viewing a natural scene a spectator who is interested primarily in human presence will get a different visual image to a lover of the nature, attentive to traces of wild animals and biotope. And none of them would be able to make the other understand what s/he really saw, if not supported by the mere sight.

Language appoints meaning systematically; the meaning itself as substance is beyond language. In so being meaning becomes linguistic from a structural perspective while still dealing with representations etc. which are not contained in the words as such. In a discussion in front of a sight, however, where the real objects of comparisons in reality not are to be found in the sight itself, but in the visual images of that sight, it becomes apparent that words allocate meaning which itself cannot obtain any immediate expression. The words that we then use when conversing in front of the sight do not have to rely on syntax, sometimes it may even seem unimportant whether one utters a word or just points with a finger.

Imagine, for example, that something within a landscape is the object of the two peoples' simultaneous attention; normally not only the intended part of the scene but also its comprehensive structure of visual phenomena will be common to both spectators. This is not to say that we experience things that we see as just shapes, but shapes is what keep them all together as a continuity in the inner image, even if not all of them are recognized for some meaning beyond their looks.

Even when completely integrated into the more comprehensive and multidimensional meaning which comes up in regarding, the overall structure of shapes is still always present. If in the process of regarding the sight we come to change our mind quite radically about its meaning, the structure of shapes will always be there as a stable and necessary reference. The structure of shapes fulfils a role of keeping all elements together as part of the function of interpretation, of *understanding*, comparable to the discursive structure of sentences. Using the term of syntax for its most elementary sense, we could say that the structure of shapes fulfil a necessary part of a syntactic task in our regarding of a sight, in a visual image. This is not to say that formation of meaning in the process of regarding does not engage functions of a different, complementary syntactic order. Quite many fragments of such an order will appear in the following text, even if a more comprehensive discussion in this respect has to wait for further research.

Meaning produced in the act of regarding is determined by previous experience and learning, as well as by clues provided by the visual context. On the one hand, the meaning of the sight as a whole and its constituent elements is completely open to revision, until – and this depends on one's level of ambitions – the visual image is achieved and accepted as an irrefutably consistent one. On the other hand, the visual features observed in things in the field force us to identify them in accordance with how we have perceived them earlier and how we related them to our experience – or alternatively we have to deduce meaning from their relations within the field as they appear in front of us.

It is easier to reach a consensus on which elements convey meaning in a specific sight when the latter is generally well-known and not too complex, is lacking unusual objects, or elements that are difficult really to discern. This is not to say, however, that it is at all unusual for two spectators to reach even very far-reaching consensus in relation to even very complex and unfamiliar sights.

When it comes to language, reference to meaning as such is a fundamentally communicative phenomenon. Language is by definition communicative and relies on conventions; its words are used to direct the attention of others to some objects etc. as conveyors of meaning. And just because language does not in itself contain meaning either in its structures or in its words, but only rules by conventions – including causal concessions from the reader/listener – the range of reference of each word is restricted.

Visual images cannot in themselves be communicated from one person to another; they owe nothing of their basic nature to communication, and are more immediately dependent on personal experience and learning than on conventions as such.

In a situation where people are exchanging views about the object of vision using gestures only, communication may be more sharply delimited or, alternatively, have a broader scope than that permitted by a few words. In such a situation it is often possible to reduce the normal linguistic structure to a minimum, or use it very fragmentarily, provided the listening party keeps the object of vision firmly in sight. Phrases might well open the mind up to the representation of something spatial; e.g. the word of Paris stimulates many complex visual representations, to which may be added words as "quay" lending the representation further precision. If then "clochard" is also added, this might stimulate individual recall of an event, of a tableau.

Descriptions are discursive by nature and are to be linearly continuous. Even

if a normal dialogue in front of a sight generally contains descriptions alone these nouns and descriptive phrases have no special power to produce consensus of opinions. If nouns and descriptive phrases are used in such situations, their task may well be to re-establish an already existing consensus, rather than to make such consensus possible in the first place. A pertinent word or phrase may be employed to call forth associations which only when linked together form meaning around phenomena for which there are no words.

The situation described above is thus neither thoroughly linguistic nor thoroughly visual/spatial, but it engages the two structures of meaning without mixing them. The formal object of reference is always the sight, while the real object can be no other than the visual image, or rather two non-identical visual images of the same sight.

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Any image is a visual image before it becomes some specific type of image. This being the case all images must share the necessary and basic conditions for forming meaning in relation to a sight as it is regarded. There can thus be no difference of principle between for example the primary conditions of a view of the immediate physical environment and that of a picture in the newspaper or on the wall, etc. Such a realisation has certain advantages for the present study. It must then be possible to deviate from the above discussion to concentrate all our attention on examples of images of relevance to the present discussion without attempting systematically to distinguish different and present types of cases.

In the discussion which follows a series of pictures will be analysed and discussed. This will be done not from the aspect of representation, but from that of a dynamic formation of meaning. In our context all photographs with comprehensive motifs are suitable examples, but especially those which are 'pure' photographs without traces of manipulation perceptible for the average spectator. With the exception for one painting which closes the series, all the pictures to be discussed here are photographs.

Allowing a man-made picture to represent any sight certainly entails a lot of theoretical problems; none of these, however, seems to have any importance in this specific context. The appearance in mind of a meaningful image when one looks at photographs might well involve the idea of a creator, and his/her intentions and ideas. The photographer, however, does not create my visual image, only its object. On the other hand, even without being manipulated, one is guided. Associations and ideas prompted in the photographer by a particular motif may have caused the photograph to be taken, and may be intended to

direct the attention of the onlooker in a particular way. This is one of the reasons why I believe it to be appropriate beyond what we are doing here also to approach photographs from a semiotic aspect.

Even if the producer of the picture and possibly a number of the spectators might regard different features to be symbolic of something in the picture, this certainly does not mean that everybody with normal senses will experience the same thing. The picture itself with its structure of shapes and immediate references to the physical world lends itself to an independent approach, i.e. to be experienced without recourse to any form of symbolism. It is quite normal for us to look at pictorial representations of something without any previous familiarity with the sight which they represent. The focus here is thus on the sight itself, to which we will try to apply all our skills, expectations and associations in exactly the same way as we would if that which we saw were just immediate physical environment.

In the sequence of pictures which now will be scrutinized, discussed and further commented upon, there is only one, a work of art, which definitely cannot be related to any consistent motif in the physical world, i.e. – for which any individual "interpretation" is acceptable to the artist. Far from trying to reconstruct his ideas and intentions, we will, and – with his express approval – try to use his work as a terra incognita, to the same extent as all the other examples to be identified and explored by the spectator. There is, however, a difference in so far as symbolism in elements and relations may appear at any given point. This will give occasion for reflexions beyond our scope concerning the artists' ways of making us experience images as individually and articulately meaningful without to stear us towards one specific act of appreciation.

There is no limit to the type and extent of meaning we may derive from a direct view of physical reality. Usually, one can return to the same sight and continue one's observations, perhaps with renewed aspects and recently acquired information. You can never exhaust a sight as a source of meaning in visual images. In relation to the immediate physical environment we anyhow normally strive for reaching a rich and confident conception of it as a whole and in its individual parts. We expect further observations to verify our previous image, adding details and nuances.

This is however a poor way to characterise *regarding* as a mental act; from our first glance to the moment we turn away from the sight meaning is produced. It arises then to be refuted, kept or further developed, causing new directions of attention and associations, broadening and narrowing the scope of viewing, etc., as the onlooker maintains or changes his/her inner intentions.

When it comes to works of art like paintings – and to related attitudes – it can be argued that however much meaning we find in or attribute to them on any

one occasion, we cannot expect additional attention to result in a mere confirmation of what has already been achieved or to the addition of new details. It can just as easy lead to a deviating conception and an experience of a very different nature. Art-lovers are likely to derive different experiences from one and the same major art work when regarding it at intervals at different occasions; no matter if it is question of a Rembrandt or a Rauschenberg. When it comes to works of art fresh experiencing is normally prioritised before stable assurance.

Approaching any art work from new aspects, with additional experience of things, new life experience, a different state of mind often leads to stressing different features and characters in the work, and to pay attention to relations between elements within it, which had not attracted attention before.

The above thesis should not, however, be seen as having an exclusive concentration on aesthetics. It can equally well be applied to the experiencing of some landscape, or any sort of unsophisticated photographs and to any spectator however involved or unaffected s/he may be by traditions of art.

On the other hand in everyday life and in familiar environment it is not in giving free rein to extensive experiencing that we observe physical reality to satisfy our needs for stability and non-contradictory meaning. Even if there are unlimited possibilities for meaning to ramify in different directions when one regards the same sight and reaches a primary apprehension there are unlimited possibilities for meaning to ramify in different directions, within the mind there are also strong forces in opposite direction in response to our need to distinguish immediate danger etc. and maintain continuity in our understanding of the reality which surrounds us.

(The outcome of this discussion can be resumed in more general visual image terms: the same sight, picture or reality, not only gives rise to different visual images in different people; it also stimulates different visual images under different conditions of regarding and at different times in the same person).

Visual images never last, and what one retains in one's mind only a few moments after having contemplated a certain sight is much more complex at the same time as it is more fragmentary and less stable as a representation of that which was physically present but no longer is so.

The *orientational awareness* emerging in the regarding of the visual field before us is an entirely continuous spatial structure, complete within its limits, so far obviously suitable as a model of a comprehensive visual image. So far it would be a tempting object for a schematic analysis.

However, to go into detail with such a theme before as far as possible having presented and discussed more in greater detail all the main aspects of the present theory might lead to oversimplifications. A thorough presentation of the concept of dimensions of meaning, and a theoretical discussion of the interplay of

dimensions within a visual image has not yet been presented. The concept of "meaning", the way categories, conceptions, and concepts are designed to function in the present context will be elaborated on in the second part of the text.

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It is with the dynamic character of emerging visual images and patterns of meaning arising from interactions in the act of regarding that the present part of the text is intended to deal. The examples should present possible structures of meaning due to specific aspects and correlations within visual images, under regarding, elucidating a spatial function in the emanation of images, where the latter's cognitive structures contrast clearly with linguistic structures of meaning.

The focus is here on structural conditions which are syntactic in a pre- or non-linguistic meaning. Searching for any single "correct" interpretation of sights and images is not relevant to the present task, as may already be evident. I discuss possible – and possibly alternative – functions of meaning that arise during the process of interaction between aspects. I focus on situations of meaning which most probably would disappear when aspects are changed. It is hoped that the reader will bear those conditions in mind when reading the following part of this text.

The question as to whether the positions and effects of meaning would be immanent in the object of regarding itself or not is not relevant to the present discussion.

The first two pictures here display physical conditions, which can be regarded as easy to identify and suitable for developing consistent meaning. They are the objects of more thorough descriptions and analyses – albeit from selected aspects. I have not assumed any problems for the reader to identify and get consistent meaning out of parts and relations discussed here.

For the following three pictures there is no extensive description or analysis; instead the focus is upon some specific conditions of possible meaning which have arisen out of my own regarding, furthered by incitements from certain shapes within the pictures, or emanating from my personal associations. It is improbable that other spectators have developed precisely the same aspects and meanings. In one particular case one can, however, assume that the cultural tradition will have an impact on the emerging meaning. Whatever the case it should, given the way in which the image is presented, be perfectly possible for spectators to use their critical faculties to assess relevance and consequence of those proposals and suppositions, as well as to judge whether related diagrams ("graphs") and comments are relevant and appropriate.

The picture on fig. 1 is quite old and shows part of a Swedish summer landscape, more precisely, the area in front of a major amusement park in the middle of a forested rural area.



Fig. 1. "15th of June." Summerland in Skara. Photo about 1980-85 by Stig T. Karlsson.

There is a broad gravel road which widens into an extensive parking lot. The tightly packed cars and flimsily dressed people form with their ground a land-scape within a landscape, the back of which is the edge of the wood framing the conspicuous entrance to the amusement park. Relatively near to the spectator's (camera's) position there are some young people in light leisurely clothing, further away there are a few more, and others form a small crowd near the

entrance. In this space the vegetation of grass/reeds and conifers play an important role as part and frame. The landscape is dotted with human tracks. The picture permits us to discern a modern separation of functions with the main road to the right and the parking lot and entrance to the left. The indistinct character of the parking area creates a striking contrast to the tight curve of the motor road to the right of this area.)

Almost automatically one's eye measures the distance away from the eye, in three of four leaps, taking support in the relative sizes of people and cars. You can never see further than to the edge of the wood. Features in the environment enable one to judge of the distances from the edge of the wood and even further. One looks for support in the environment in order to judge of the distance from the edge and perhaps further back to the entrance building.

Other onlookers may, as I first did, have taken the spruces in this background for one consistent line of trees, broken only by the passage to the entrance. Closer scrutiny reveals that the part of the wood to the left is more distant than the one to the right. It is from behind the latter that the main road emerges and bends round sharply. Here the relative sizes of the wood to the right as well as the road with the car coming down give to determine them to be much nearer than the wood behind the parking area to the left, not to talk of the entrance.

At first one may possibly have been surprised to observe the half-naked male body in the grass/reeds of the foreground. Is he alive? The presence of people in holiday clothing may cause one to dismiss the idea that the body is lifeless. One might assume that the flattened spot within the grass/reeds in the foreground is just part of the further wall of grass/reeds-wall which follows the curve of the main road. There are, however, two posts between the reclining man and the wall along the main road. In this way the grass/reeds spot is seen to belong to the part of the scene which is dominated by leisure.

The picture is entirely continuous; there is a coherent pattern all over – like there always is in visual images. There is one overall topography, a landscape that we most normally take to be a part of a further continuous landscape in both directions beyond our sight.

But there is also another way to conceive of space within this sight. By focusing one's attention on the different contexts in the picture at least three different *endotopical*\* entities may be distinguished. The entire area to the left can be

<sup>\*</sup> The terms "endotopical" and "endotope" are new in the sense they are selected for here to stand for any comprehensive visual form or closely connected forms, with relevance for mere appearances as well as for elements and more articulate forms creating consistent meaning. A grove is an endotope, just like the continuous enclosing wall of a room, a pack of birds, or a couple before the photographer, etc. Trying to introduce a new word is always a delicate task, but in this case there is an evident need for an unpolluted term. Certainly, there are other terms – like that of "gestalt" – which from one aspect or another seem to concern something of the same nature. But I have found those which I have come across inappropriate to use because of the frequency with which they appear with further and deviating connections of meaning.

called a landscape within the landscape. The motor road comes from the right, appearing from and disappearing into territory which is beyond the field of vision. It breaks into the total topography without being able to make contact with it. The contrast is particularly clear when one compares the moving car to the right with the cars in the parking lot to the left. And even if the passive sunbather in the foreground belongs to the leisure people, he is at the same time apparently fenced off from the rest of the world. However, the vegetation round the sunbather is tramped down, suggesting that others have been there earlier. That marks out a separate endotope.

The above conditions allow for alternative interpretations, which may be mutually consistent or inconsistent. The overall focus on leisure may make us feel that the grassy section is part of the major endotope including the parking lot etc. On the other hand we may lay focus on the use of the small area for full relaxation, and then contrast it to the activities in the arriving cars and people walking towards the entrance. And then it is natural to experience that spot as an endotope of its own.

When distinguishing these spaces, single individuals or events or ongoing activities have been focused on as much as the overall visual context. It is however conceivable that everything suggesting individuality, an integrated group, or event, etc., invariably involves the immediate environment. It may even be normal while meditating on individual things or units, no matter if one really is aware of a physical space, that we decide to involve the surrounding space necessary for them at all to have a body. When this is the case, an area needs little support from other features to create a decisive impression of separate endotope.

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Seeing, regarding, is always in the present tense, is here and now. To state that, however, is something quite different from saying that also the act of understanding that which is present would be entirely handling elements which themselves are in the present. Even if one is not in the least concerned about the past as one regards the present, it will anyhow be necessary to rely upon ideas of past uses and functions or events in order to find a tenable meaning in something present. In observing that the vegetation is trodden down in the example above we have drawn a conclusion about an event which now belongs to the realm of history.

Each moment of meaning, representations, concepts, constellations, has its own history, and no systematic rules can restrain the influence of the past upon the present.

Reality does not present itself as chaotic, but as organized. In seeing it we organize it. What is manifested for mind may be physical reality as it is sup-

posed to be in itself, although we can never be quite sure of this. Or perhaps reality as something to be talked about or managed is experienced in the form of facts and conditions according to how sense impressions have been articulated by the mind and stored in particular but not given orders.

A sight has a given appearance, as all of its visible elements. Thus far one can consider it to be a comprehensive endotopical totality of which every spectator is conscious, and out of which we all are working in giving it meaning. In so doing we are never able to mentally separate the meaning which is the visual image, apprehended as a structure of meaning, from the meaning which arises in relation to it.

In other words, we are unable to find the difference – if any – between on the one hand sights as parts of the physical world and on the other hand the way that physical reality appears when we view it. Neither can we in a life situation differentiate between the latter and the inner image, which we build up as a structure of meaning through the act of regarding.

When it comes to simple structures of shapes and endotopes it is conceivable that most beings with more advanced brains develop visual images which are shared within the same species. It is from this level of establishing physical presences that traditional psychological research on visual perception usually starts.

For humans, elements of a new sight which are like such which we have already experienced are normally related by the mind to well-established representations; these are similar to other people's conceptions of the same elements. We respond to concrete reality on the basis of what our visual images tell us; this usually proves to be a successful tactic. We also reach out for objects and interact with people according to our visual images. Our initial conceptions are confirmed by handling the objects and behaving in relation to the endotopes, as well as the way others respond, act and react.

We normally take our visual images to be reality itself. Were the goal just orientation, there would be close agreements between different spectators about an integrated organisation of meaning on this level of ambitions.

The above conditions will simply provide frames for orientation on an existential level in terms of what the sight and its components will come to mean for the observer. Any element and groups of elements within the focused field of vision may be related to or build up other, inner contexts, the relation of which to the present endotopical whole is not predetermined. For contexts which assume importance within the individual's world picture, or in relation to his/her personal conditions (which in reality is just an aspect within the former), one should expect relevance in relation to both spheres.

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In regarding a sight one may first discern certain individual forms; however the mind confronts at an early stage the relations between such elements, searching for clues. It then tries to group these according to different common features and obvious differences. Until mind is able to apply any firmer strategies of established knowledge on the sight it is more depending on its elementary faculties, while all the time bringing associations of specific meaning to the fore. It depends on its skill for discerning specific visual characters within the field, and of comparing them for similarities and differences, finding unities and uniting qualities, contrasts – thus to find its way to patterns of regularity of no matter which kind, while all the time engaging associations of further meaning to any situation and context.

The final assessment of the sight in an act of regarding may often seem to reflect our already established knowledge and no more; this is often the case with common conceptions concerning social organisation and established meaning from systematic sciences. But the different established systems do not fit together automatically, and their concepts are not able to cover all the world of experiences, not even that of any individual. Even a scrupulously critical and well-educated mind will always need to make the necessary connections in order to make the relevant pieces of knowledge from different systems tally; this is particularly important when unfamiliar parts since last encounter have been added to an otherwise familiar sight. A final personal meaning on such conditions contains normally improvised representations and meaning intertwined with matter from established systems of knowledge.

We may assume that the former bear the traces of intuitive assessments; but there is no doubt that such elements of meaning as well can be the result of system-type computations. We may for the most look upon scientific methods as mental artifices built upon contributions of numerous individual and agreed upon in firm conventions. But behind the systematic achievements we have to look for their still relevant preconditions in the human mind.

In the picture of a fishing-port taken half a century ago (fig. 2) one might note that the market is extremely organised. However, no matter the real organisation, the spectator could apprehend that quality anyhow. Nothing guarantees that s/he will lay stress upon those features which in my eyes constitute that impression of a thorough order. The scene can like as well be approached from quite different aspects.

The following represent my own understanding of the image, which on the one hand of course is quite random, on the other hand is authentic, and so far also relevant as a model of a possible approach.

This is what I see, in short. Herring cases arranged in blocks, with fishers, dealers and buyers between these, forced by them to line up, while two people stand somewhat isolated in the middle.



Fig. 2. Fish market in Gothenburg. Photo c:a. 1955 by Erik Liljeroth.

Strictly speaking, it is not just herring, which are exposed in the cases. In the lower right corner there is a glimpse of mackerel, and in the upper middle portion of the image there are some small plaice. It is thus possible to divide the contents of the cases into three categories of fish, or into herring and non-herring.

By studying recurring visible features here, one can discern two relative regularities: fish-cases and blocks, which provide the basic principles of organisation of the space, but tell us a little more: people positioned at different angles with different directions of attention. Once the principle of organisation has been established it becomes possible to imagine consistent roles and relations. These make it possible to tell a story which is likely to be true or at least to seem self-apparent. The space is broken up so that a position within the physical space is just one denominator, a more decisive one comprises people's clothing and the directions of their attention.

You can make distinctions between the people there out of their headgears and their jackets or coats. They can be roughly divided into at last three types. There are those who have overalls and peaked caps or just blue jackets, or professional light coats, and those who have middle-class jackets or causal dress. One can also distinguish between those who have something on their head and those who are bare-headed. The man with a peaked cap in the lower middle section of the picture is dressed in an overall, and equipped with a large purse; he has a stick in his hand, apparently in the right one. Behind the nearest block of cases there are three people holding some papers or note pads, apparently about to write; three people are actively watching the two of them. Both the men in the middle have grey coats and pointed caps, one of which is white, and the other dark. The third man holding papers is bare-headed and isolated from the others. To return to the man with the purse we find him facing the three, but turning towards a bare-headed man in a bluejacket who is to his right and turned towards him. In the lower portion of the picture, next to the camera, there is a range of people who appear to be just watching, two in hats on and three without, one of who is a lady, and all in everyday clothes.

The above description may of course be regarded as just an enumeration of elements in the picture. It is however not offered as an account of spontaneous impressions; rather it represents the results of a concentrated analysis over a period of time. When using the term of analysis this primarily intend that in the primordial sense of that word, i.e. a breaking up into components of the composite whole; a breaking up which in this case leaves all the components at place.

The attention thus far has been on differentiating between present people and between them and the fish. Other methods of separations could have been employed which could have had lead to a different pattern of understanding of the overall organisation and interplay of the various components.

The next step has already been initiated: the formation of systematic relations which in turn identify the denominators of the image as an integrated cognitive whole.

The above account produces a story. The man in the middle is the auctioneer; the man to his right is his assistant. The auctioneer and the others in overalls and blue jacket are those who handle the fish. Those with notepads behind the cases the block are the buyers. It is difficult to identify any specific group of observers. But behind the main group there is a man with hat who may be a buyer (but perhaps just a casual bystander, or even someone representing the port authority?).

No doubt, one could say that all the people in the picture can be assigned roles and identities by concentrating on specific attributes. If we suppose that the spectator already previously has identified certain attributes or considered other clues/features s/he may be ready to consider the cognitive structure of the picture as a semiotic totality, in contrast to an open structural approach. There is however in the present discussion no self-evident conventional support for the proposed functions of attributes. And when one ventures a semiotic description, it is only one out of several distinguishing functions for respective features which one has emphasised. The then proposed function of signs and complexes of signs can neither account for the mere cognitive act as a dynamic course, neither for the visual image as a continuous and simultaneous spatial context.

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In the most well-established theories of knowledge it is supposed that categories most normally become established in mind in series of events over time. A category, and ultimately a concept, arises out of a synthesis of impressions from repeated confrontations with one and the same phenomenon or similar phenomena, often over a period of time and in different contexts. The representative features of any specific object then fall out as denominators, which have shown to be common for all (or near to all) relevant items at all occasions.

However, there is nothing to say that the entire process of synthesis must demand different confrontations. When many variations of the same (type of) object etc. are present in the same field (as in the case with the fish-market above), one may already have made all the necessary comparisons before turning away from the sight. You can reach a tenable even if not entirely adequate idea of what constitutes magpies as a species when for the first time seeing some of them in the middle of a crowd of crows or rooks.

In the process of finding meaning in a visual image there may all the time be found tendencies of meaning, that in extension might effect the establishing of stable cathegories. But a synthesis is a process with abstractions and moving towards abstraction. Abstractions are part of any spatial proceeding without necessarily to be accessible for inspection, if not indirectly by inferences from the traces they leave in achieved meaning. In many cases a number of simultaneous relations within the field of the image may provide critical clues which are not necessarily less informative and stable than those, which in a discursive argumentation come out of successive critical confrontation in pairs and within hierarchies.

I have just alluded to the possibility of forming conceptions in the non-discursive way. In the same way that one assigns a specific quality to a person, thing, endotope or relation, as a consequence of conclusions coming up under regarding which contribute to establishing the identity of other things, indi-

viduals, etc. And any overall function we may assign to a given scene – that of a fish-market, a landscape, or a classroom, reflects upon the supposed nature of each individual or group within the visual image as an integrated scene.

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Since the life of a visual image does not extend beyond the period of regarding, the way in which its appearance is organised in mind is congruous with the shapes of the sight only as long as the later is still before the eyes. It shares the organisation of appearances with that sight. Thus far in the discussion it may seem as if it is nature or reality itself which organises our visual images; this in turn leaves us with the idea that an image is just a reproduction of reality and nothing more. However, there is a good possibility that the number of factors which we retain from one single regarding and which can be understood as qualities immediately reported from the sight are in qualified minority within the meaning which constitutes the visual image as an achieved cognitive entity. From objects and their relations within the visual field meaning has been developed, or might appear as direct consequences of encounters with elements represented in the same field. Elements which are teased out from multidimensional internal confrontations and extrapolations, engaging all sorts of previous experiences and knowledge. From the joint effect of incidental factors in a specific view and those which are familiar and regularly recurrent the pattern of appearances (if ever perceived as just that) becomes a pattern of integrated meaning.

Visual pictures in memory retain a substantial portion of the initial pattern of appearances. But they are in fact different by nature. While a number of elements of the sight being regarded are no longer the object of attention they may still have contributed to the way we remember objects and conditions from the same. Not few elements of the sight seem most rapidly to be out of attention after regarding, while they may have contributed to some meaning persisting as part of the visual picture in memory. And meaning which we retain from the act of regarding might besides the "episodic memory" of the scene in question also be further developed and mixed with memories and ideas from other contexts, etc. that orient the individual in her/his immediate physical environment.

There are good reasons for using such an orientational image for standard representative of the unrestricted visual image of an unabridged sight, and as a point of departure in the search for specific conditions of developing meaning from visual impressions.

Doing so, we get the advantages of a readily accessible model of a relative elementary completeness from the aspect of structure. Typically it represents a continuous orientation within the immediate physical present. It might or

might not be the most common type of visual images. When regarding we often turn our attention almost immediately away from the overall scene and concentrate on some particular part, perhaps in applying some particular aspect.

However, not least in relation to the orientating image, it should be borne in mind that several senses are most often involved in the orientation; the pattern of shapes within the sight then becomes a common denominator as indispensable part of the general structure. Thus, the inner spatial field of meaning can not be expected alone to function for comprehension of the immediate environment. Also impressions from the other senses are in reality related to and located within the overriding orientation in which visual images for the most has to hold the unifying role.

Any impression deriving from the senses is contingent, all visual images are contingent – any sight is contingent as such one, even if its pattern of shapes seems almost identical to an earlier encounter with the same sight. You never enter the same river twice. Objects and features are thus to some extent unique as they appear in each particular situation. Especially, at each occasion of sense impressions the objects etc. appear in combinations, which are at least somewhat different. So even visible elements of the sight which appear unchanged from the one impression to the next come out a little or significantly different as meaning in the regarding.

The above-described contingence and the authenticity that we ascribe to the individual impression is inter-twined with the one between that and the relative authenticity of an individual visual image as a formation of shapes and endotopes.

The visual image is a continuous structure of meaning and not just a structure of shapes which are bestowed with meaning.

Trying to see the visual image as a conceptual structure of static meaning would lead astray. The meaning of the visual image emerges from internal confrontations within the present context, and cannot thus be tied to elements which are pre-determined. Similarly, the meaning does not constitute structures of signs or symbols (even if elements of that character may come up there). This is also and primarily because visual images lack communicative function. Meaning in this context if not always has a presence as long as it is processed; and no matter how distinct, familiar and clear-cut something may appear to be there is nothing to say, that in the final image any significant number of original qualities will be retained.

A tall tree which we recognise as elm, may, when growing among smaller trees, initially be perceived as just a tall tree in a particular spot and at the particular time in question. It might even be seen as part of a grove, an endotope. There it especially retains a distinguishing feature which an elm has in common with other trees, being relatively tall. It is no necessarily the case that traces of

the initial understanding will be part of the ultimate, no matter if it has been helpful in working out different correlations on the way to a final assessment.

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That most theories of knowledge focus upon generalities explains in part why philosophy has shown so little interest in contingent meaning from a structural aspect or for the cognitive nature of unique contexts – of which visual image is a recurring example. The fact that visual meaning is derived from an overall structure of meaning different from that of language may be the primary reason why philosophy has not been nearly as much concerned with meaning in visual images. For structural reasons language, as we know, is unable to account for visual images as meaning, if not as selections of impressions out of them. It is thus no wonder that most theories of knowledge stop short within the realm of language. Language is a primary instrument for philosophy at the same time as one of its most cherished objects, while the structure of a visual image is spatial, and by that systematically alien to language. There is then a paradigmatic incompatibility between the structure of meaning which is object of this book and most of traditional epistemology.

It is a most common fiction that physical present is immediately given to the mind in the visual image, and that everything in it can be directly represented in verbal meaning. But not less commonly held is the insight that we have no certainty at all that sense impressions don't provide any confident knowledge of the physical reality.

Rational tradition has relied heavily on the visual qualities of things and conditions in the world, by successively singling out their categorical qualities and relating these within further categorical systems. In the individual sense impression things appear in contingent contexts as individuals with changing features, while the corresponding concepts with which language can refer to them are aretfacts, isolated from each other in the contingent context while connecting them to different absent categories.

When describing the same scenes and things in words and sentences, we give much more and partly different meaning to the individual words in relation to their standard senses. But however skilfully the words are linked, they never escape the discursive limitation, they never capture the spatial structure of visual reality.

There are good reasons, however, why we should trust the testimony of our eyes in everyday experience more generally than we trust verbal descriptions of it. Our way of confidently handling the everyday physical environment and our social interactions has a basic condition made evident by the fact that two people looking from the same aspect at the same sight normally come to confirm each other's opinion of the physical appearances before their eyes.

Diverging opinions in regarding a sight, as we said, are usually the result of different aspects. Opinions out of diverging aspects may complement each other, or they can be alternative and still both incontestable. One can, for example, agree about a shape or endotope etc. but disagree about which meaning to attribute to it. Such oppositions are, however, not exclusive to dialogues; this can as well apply to one single person. Opposing views usually arise as the result of multiple critical confrontations between elements of possible meaning.

Different aspects and changes in aspects thus usually produce different specific elements and sets of meaning within the overall meaning. Attention may have been taken from the very beginning from the entire visual field and focused on a particular object within it the field or a specific section of it, or even distributed among specific types of elements dispersed throughout the field. However limited the scope of attention may be it is highly dependent on the general conditions of visual images, as well as of the entire field. This does not prevent the mind from looking for relevant meaning in something observed in isolation. In this respect there is nothing which can restrict the application of human intelligence, experience and knowledge.

In the confrontation of the elements in view with elements of meaning from the individual's earlier experience (involving all his/her previously established meaning, here summed up as his/her world image) earlier acquired representations are verified, rectified, modified or amplified, and new meaning arise. And it is in this process that all meaning related to the field is refined and summed up to a conception which is in itself unique and which lends unique qualities to its constituent parts. No matter their well-established meaning the whole and its parts become contingent in constituting the understanding of present reality.

The world as we conceive of it in small portions is a noetic space (a space of meaning and potential reason) in constant motion and developing; within it we successively create *terra cognita* out of the earlier unknown territory. We proceed in a variety of directions and become absorbed in different regions and aspects.

Regarding is thus not just a process of receiving, but rather one of thinking in perception, essentially and mainly without resort to language. Such action is not only instrumental in providing immediate orientation and an understanding of things and relations in the present. It is as much a vital process, repeated continuously and sometimes ongoing for long periods. While regarding we relate to our environment irrespective of whether our goal is to further a particular need or activity, or simply to be aware and meditate. Even when we have no other objective than to achieve immediate understanding of the present, we then also give our personal response to the visual world in its variety.

The *world* to which we can offer answers is the one we have internalised as meaning and which in regarding is interacting with the field; we bring together that part of the world which is before our eyes with our knowledge and our belief – our emotions and desires being parts of our inner world.

In this ongoing and ever repeated process ambiguity is thus by no means the same as chaos, neither is it the same as uncertainty. It is primarily expressive of our present awareness on a spatial level, combining understanding from different aspects of the same things and conditions. Such combinations may produce completely unexpected moments of understanding, long lasting or as a short flash.

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What in the following comes out somewhat anecdotic need be no less representative of spatial meaning as it is normally derived from visual images when we relate to what they represent in providing firm data and a confident orientation in the real world.

The following discussion presents tangible examples of certain typical or possible structure of meaning arising in visual images. I have no ambition to try for any exhaustive analyses of the pictures to come (figs 3 and 4), but only to utilise them for demonstrating certain possible structures of meaning.

In fig. 3 two men seemingly in their early forties, well-combed and in overcoats are standing near each other; apparently talking together. They are visible from the elbow upwards. Between them a woman appears; her head is in semi-profile facing towards the right while her gaze is directed to the far left. She is in a negligee and has a small nosegay in her raised left hand. She appears in a natural centre of attention, filling the gap between the two men. There is no means for judging the distance between the two and the lady; she appears however to be squeezed between them. If the picture is considered under the aspect of a premeditated photograph one may become aware that all the three can be seen to form a semi-circle in its upper half.

If in first getting to see this picture one has been aware of an amusing effect in the relation between the three people in the picture, one is normally more or less conscious of the discontinuities within the upcoming meaning in relation to a possible reality. If it remains possible to conceive of them as a group of three, this should be because there is a part of fiction and desire in the experience.

Bearing in mind that this is a photograph, one cannot for long defend the idea of a group of three persons together somewhere. The effect of intimacy might be dissolved when one focuses on the fact that the woman is much bigger. She also seems to come from a different walk of life.

To see things here in that simple way, however, has its point; one might be amused by some other contrasts. There is a contrast between the two men dressed for the city and the woman in negligee. Another is between the small men and the large woman. And finally the contrast between the two men's internal relations as indicated by their gazes and the woman's apparent lack of interest in them, in anybody else for that matter.



Fig. 3. In the underground. Detail. Photo c:a 1955 by Erik Liljeroth.

To the right of the woman there is a somewhat darker, narrow strip which disappears behind the back of the dark-haired man. There is a suggestion that the space between the men and woman will be divided both on a human and a material level.

The picture discussed above was cut out of a larger publicity poster; the latter is more visible of the next illustration here. The white tiled background in the full picture, as well as the dark horizontal strip at the level of the men's feet, indicates that the scene is an Underground station platform with a wall behind the trains which is covered with white tiles. This could be in London as well as in Stockholm. The woman is the main subject and is featured on the sizable poster on the tiled wall.

The photographer has seized a favourable moment and taken a snapshot in which even in the full-size presentation below (fig. 4) the funny contrast between the men and the woman is very obvious. In cutting out the central portion of the previous illustration I have disrupt the original picture's subtle interplay between immediate reality and pictorial suggestion. But in both illustrations there is a point in the attraction and tension between the former and the latter. On the one hand we tend to see three people together; on the other

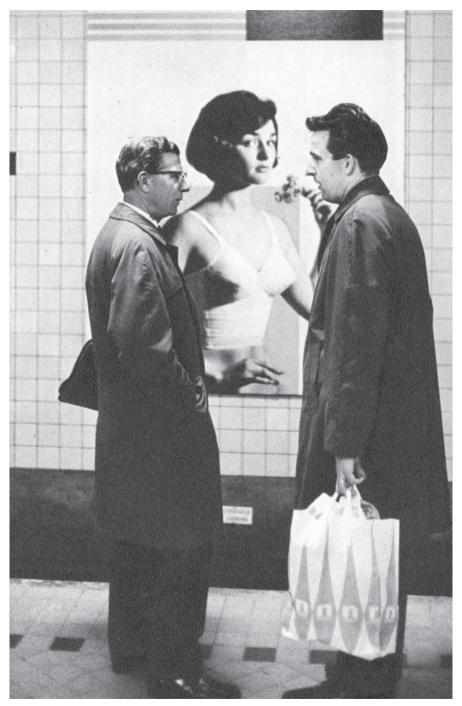


Fig. 4. In the underground. The entire picture. Photo Erik Liljeroth.  $\,$ 

the disproportional size of the woman ensures that our understanding will be only momentary; it is only when we see the full picture that we understand what is being depicted.

But if we feel a point in that experiencing, what is then that point really? The amusing but fragile meaning as it relates to the reduced picture? Could it be the moment when a closer study of the full picture gives us a full understanding of the true situation? We can always smile over the faint suggestion of intimacy between the three. *Ambiguity* is certainly part of the experience, and ambiguity is not at hand unless there is an awareness of two or more simultaneous conceptions of the same elements.

It is possible to explain the above situation in verbal terms, and even account for all this just verbally and possibly that way to make people laugh. But it is only by viewing the full picture that this intricate structural game can be properly understood, because it is only then you actually *see* the ambiguity, and see it all in simultaneity. That is a *spatial* experience, an experience of spatial meaning.

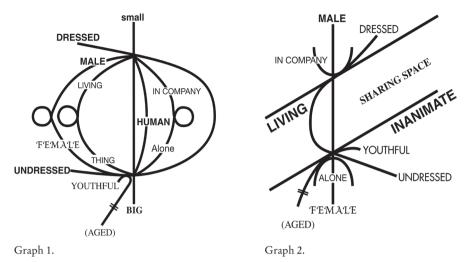
The following diagrams (graphs 1 and 2) depict encounters, thought to happen on one's inner visual field, between on the one hand visual factors, objects, the meaning of which here can be established easily, and on the other hand abstract factors the meaning of which comes as a consequence of further confrontations between visible elements, and between them and recalled conditions etc. This could evidently be discussed in terms of concrete and abstract meaning. But the task of this graph is there merely to present a pattern of interaction.

On the one hand there is a marked stress upon main objects and conditions; on the other features common to different elements are indicated. Some factors are shown in terms of diametrical oppositions; others appear here in positions on one and the same dimension of meaning.

The vertical axis in graph 1 accounts for a scale of *relative size* (from low to high), where the men are near the "small" pole, while the woman is near the "large" one.

The curved lines with loops in this graph account for the basic oppositions: the opposition *male/female* and the opposition *social intercourse/loneliness*, etc. These distinctions in turn are contrasted with one simple line which unites them all: they are human. But at the same time are the men living, while the lady is part of a thing, which is indicated in the inner left loop-line.

The wide curve to the far right in the same graph relates the state of being *dressed* to that of being *undressed* (continuing beyond this case, to full nudity). The parabola for *age* could, of course, just as well have been drawn to account also for the men's age. However, in this context the only element denoting age to which any importance has been attached in this respect is the woman's apparent full-blown youthfulness.



When the spectator has become fully aware of the physical conditions of the scene s/he is likely to modify the way s/he experiences the pattern of meaning (graph 2). There may appear an overall contrast between on the one hand the men in their everyday environment on the platform, and on the other the poster exposing the inviting female being.

In foregrounding the two aspects of male/female respectively living being / physical object, one can obtain the above pattern which is more representative for the second of the just discussed states of observation.

In this case we are supposed to be fully aware of looking at a full picture, showing a printed picture inside the scene, the work of another photographer. The latter is in a way something that the photographer himself "proposes" within the framework of his own picture

Even in this description the contrast between on the one hand the manliness of the two on the platform and on the other hand the femininity of the woman on the poster remains or returns.

Like in the real world the woman's negligee and her unabashed sensuality do not pose a challenge as they might when the idea of a possible tête-à-tête between three occurs to the spectator. A new interpretation has arisen in relation to the cultural tradition which encompasses such phenomena as commercial photograph, seductive sensuality, and displaying posters in the underground. The relationship between the first, incomplete, and the second, full picture and that of the poster inside it, is not uncomplicated. Some spectators may notice the difference between what the overall picture stands for as a photograph – e.g. in terms of artistry and personal expression – and the poster's commercial

function. The same goes for the difference between the more intimate nature of the artistic aspect and selection process behind the picture, and the disinterest of the publicity buyer for reactions other than desire to purchase.

The idea of a communication in and through the picture is highly relevant in relation to the poster, and certainly not irrelevant in relation to the entire photograph. We still cannot take for granted that the experiencing of the onlooker agrees with the intentions of the photographer. Even if experiencing a picture is not identical with receiving a communication, however, the idea of doing the latter can condition the spectator's approach to it. Even more natural it might appear to experience a painting as a vehicle of communication.

Many people, particularly those who are active in the art world, gain inspiration from the expectation that something which one sees is really communicated. They try to find an extended symbolic pattern of meaning which may reveal the artist's or the photographer's conscious as well as unconscious feelings and ideas and perhaps something of his or her personal qualities.

Other people, and certainly not few, will unconditionally fall back upon the illusion or conscious fiction that the picture just stands for some specific physical reality of which it is a depiction – not exclusively when the object is a realistic painting or photo. From a perspective of theoretical aesthetics this certainly is a dubious way of conceiving, no matter that the experienced content might be both reasonable and satisfactory.

Whatever one's view, in stating that any image is a visual image one also accepts the contention that the normal way to conceive of a visual image of an immediate physical reality is equally applicable to how we understand manmade pictures, even with fictive subject matter.

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A visual image is made coherent in mind in the form of a continuous structure of meaning over the *field* and by the field. The sight does not contain any human meaning in itself. The field may be said to reproduce and retain the pattern of shapes of the sight, keeping the responsibility for the spatial interrelations it retains all the time the same pattern of shape and endotopes. Meaning in relation to the shapes and their relations, on the other hand, may change in the course of regarding. The individual shapes and endotopes are seen in critical relation to each others and combine with elements from memory. The nature of this event will be discussed in some depth in next part of my book.

We must assume that the faculty of regarding at its disposition has a specific overall cognitive capacity which corresponds to that of language and discourse, i.e. a comprehensive system for meaning. It has to be a system which organises simultaneous spatial relations – while as we know language is linear in structure, and it is a hierarchic system.

Hierarchical and systematic (systemic) processes can however be traced in most human representations. Some of these originate from the individual's inner elaborations, others derive from cultural contexts. Within one and the same structure of meaning, linguistic or spatial, different elements of the same entity may originate from different cognitive systems. Meaning arises as I concentrate on one aspect of an object related to a specific paradigm or system; another object which is close by is attributed meaning on the basis of a different aspect, related to a different system, etc. A certain thing has the meaning it acquires in my regarding out of one aspect on that object, related to some certain paradigm or system, while a nearby other thing has been given meaning from a different aspect, out of another system, etc. Once the objects then appear together in a visual image with its own structure of meaning, their different origins do not prevent them from functioning together without discord. There is always some aspect from which they all can harmonize. Familiar objects are more often than not seen from diverging aspects.

Everyday representations take into account visually represented meaning as much as they relay on common descriptive langue. We may think discursively also when the meaning we handle is studded with visual references; it is the overall structure which applies. It is, however, important to bear in mind that a visual image is a state of awareness, and not a proposition.

When we regard new or incidental objects and endotopes the spatial confrontation of different elements in the field may give rise to new meaning as a result of juxtaposition and confrontation in the mind between different elements of meaning, without obligating us to respect their relation to systematic knowledge. During regarding established knowledge is always hypotheses about the present, among other hypotheses.

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Even if one and the same picture were to consist of nothing but a series of individual minor pictures with no apparent or logical relationship with one another, we would see the whole as one single visual image with a continuous field of meaning. The initial aspect highlights the material conditions and the image is conceived of as a coherent group of pictures. So far, there is no difference between on the one hand this accumulation of pictures and on the other an image of e.g. a landscape, which displays one single continuous endotope, a topography.

Continuity within the field is offered – or rather enforced – within the extension of any visual image. Visual images cannot avoid being consistent and continuous and to present at least one aspect of each object; and it must in a tenable way account for at least one aspect on the sight and its elements. Shapes and endotopes require meaning which also has to account for their simultaneous presence. Even if they all have a presence as a shape it is thus sufficient that one

object is recognized as for example a road sign to initiate and direct continued search for pre-established meaning in the other objects. "Meaning" is present when any quality or qualities are discerned, no matter what these may be.

Already in the initial stage of regarding there is a meaning, however frail. In discerning shapes you are aware of meaning just by that. This is not to say that we ever have any awareness of how things look and nothing else. Neither does it mean, however, that consistency of meaning must entail consistent meaning beyond that of shapes and endotopes. Meaning may be obtained by distinguishing a specific pattern of shapes for some elements from which one may derive additional configurational meaning while others seem to be anonymous as parts of other entities within the overall pattern.

Ultimately, consistency may come to rely primarily on abstract meaning linking visible elements, so that elements of meaning which are not representing whatsoever further quality in the visible object interrelate meaning between themselves and other visual elements as parts of the full image as a structure of meaning.

In pictorial art it is easy to find examples of works in which an articulate continuous pattern characterises all identifiable forms and relations at the same time, while different parts of the field encourage approaches from divergent aspects. It is for example a common feature in mediaeval book illuminations that several different small narrative scenes are included in one and the same decorative structure.

The reason which many years ago made me ponder over such conditions is to be found in problems that I encountered in art history with respect to mural paintings from the Italian renaissance. This I mentioned in the introduction. What fascinated me was how an extensive wall painting of one single comprehensive scene as an integrated part of a house-wall showed a decorated stone slab and by the same included a complete narrative scene with an independent subject.

In such circumstances discontinuity between the interposed picture and the total picture is no unshakeably basic condition for the understanding as long as the interposed picture can be apprehended as representing just a material component among others in the same scene. A relief may be seen as a manifest object and picture at the same time. If its pictorial elements are focused on, its material status recedes; if, on the other hand, one focuses on the stone, the pictorial elements may be regarded as decoration. When it is attended to as a piece of decorative stone, there may on the other hand not be felt any contrast at all between this one and its environment. When both aspects are given equal attention at the same time one may experience a dynamic tension between the parts and the aspects.

Once I that way had distinguished parties with different degrees of imme-

diacy/mediacy within this and several other pictorial scenes, it came natural to search for other art works from other times and places in which similar arrangements occurred. Usually the devise is used in a way which makes it easy to see the deviating parts as being either comments to or elaborations on the comprehensive motif of which they are part. Experiencing such a scene on such conditions means to live something dynamic, in that one understands the parts of the image separately on one level of meaning, at the same time that mind keeps them united within an encompassing idea.

The above approach has been adopted extensively in fig. 5, showing an Italian book-illumination from early in the 16th century. Some of the elements in this one are clearly derived from the tradition of full-size wall painting, which has more immediate reason to play with fictive architecture than there are for their presence in illuminations.

The picture shows the front-page of a text by the Church Father Hieronymus; a book the text of which is written by the monk Eusebio da Cesarea. Hieronymus is shown in his studio – in a framed picture hanging in a line from the upper left part of the cornice. The latter is part of a dominant structure, reminiscent of classical triumphal arches. Parchments with full-scale texts are fastened with ropes to the structure. The same ropes are firmly stretched by two small putti standing in front of the structure. Other putti stand on and behind the high bases of the pilasters which are flanking the scene. To the right, there is a glimpse of a landscape behind.

Here a situation is presented as a comprehensive fiction where the triumphal-arc-type structure is presented as a dominant object in the landscape. Hieronymus appears, not as a living person but as an effigie, a picture hanging down from a rope, while the putti below appear to be bodily present and active. While the framed painting as such is part of the integrated artificial structure and should be perceived as physically present just as all the other parts, it is on a different and lower level of reality-fiction that Hieronymus can be perceived as a living person. The scripture on the parchments is present under the same conditions as the framed picture – yet it is more illusory, because the writing does not purport to be fictional: it is what it actually pretends to be. If we compare them on a scale of near-to-reality-experiencing the scripture is two steps over the saint himself.

The overall picture can reasonably be approached from just two aspects: that of matter including all, and that of "living reality" including landscape and acting putti. If we concentrate we may only pay attention to the saint in his studio, leaving the rest of the picture receding into the background. In the back of one's mind the overall scene is never absent, and there is not accepted any inconsistency between those two positions, no matter how different the meaning appears to be when each of the aspects is applied in isolation. In the overall

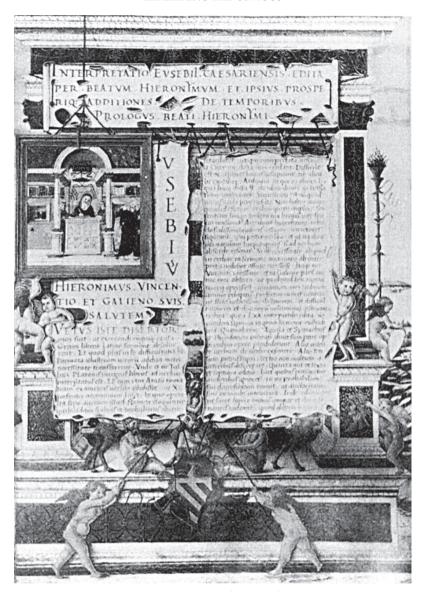


Fig 5. Hieronymus. Front-page illumination of a copy of Eusebius da Cesarea's comment upon S. Hieronymus' writings. University Library, Geneva.

image and on the level of pure materiality everything comes forth in interrelation. This is because there is nothing in visual experience (as opposed to discursive thinking) which forces us to cease to pay attention to the one possible meaning when being fully aware of the other.

This many-dimensional intercourse of elements of meaning in fig. 5 constitutes one main aspect of the spatial condition. After regarding, mind can well be actively aware of just a few elements and wholes from the entire scene, while the overall complex visual entity still might instantly be ready to yield whatever specific information for which there has been any foundation even so incidentally for being discerned in the course of regarding. This, however, is a favour which is lost within very short. The witness of our eyes might not lie (even if we certainly can deceive ourselves in reading it out). But it should be noted, however well we once have understood our direct sights, we cannot be confident about our memory pictures of the same.

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For the purpose of the present discussion it is in our context nothing but a favour when a photographer has put much job in capturing a specific moment in a specific surrounding. The basic conditions for the visual image remain the same. And after all, that which appears in the main material elements of a photograph with few exceptions has had its counterparts in one certain sight within the real world.

A similar procedure as in the previous analyses of photographs will be followed in discussing Henri Cartier-Bresson's photography from Athens between the two wars (fig. 6). It shows a street in the old city. The picture is dominated by the façade of a house in classic style. Among other things it depicts four human bodies, two animate and two inanimate. One is conscious that all four are human in some respect.

As with the photograph of the underground (figs. 3 and 4), our understanding of the picture is supposed in some way to depend on the photographer's intention and of how he uses his camera. There are, however, no clues as to the relationship between the photographer's intentions and the way I experience his picture. We may miss what the photographer wished us to see. Nothing prevents us from experiencing the scene as if we had stumbled on it in person just half a minute ago. It is on the conditions of the inner field that we experience the whole.

The two women in long black coats walking along in front of the façade towards the left are well past middle age. One is in front of the other. Over them there is a large loggia, adorned with two sizable caryatides each of which is located almost vertically above the one of them. There is a balustrade below them and one above in the same design. A narrow shelter protrudes from under the loggia. There is a distinct difference between the trivial everyday environment below and the shabby but glorious front.

The two small dark figures on the ground are entirely part of the everyday

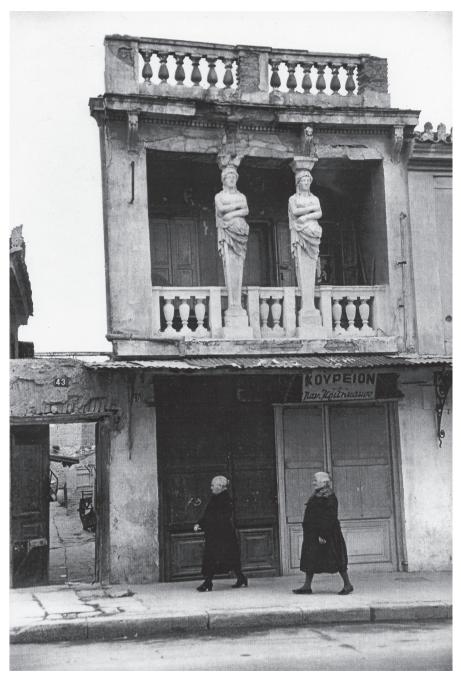


Fig. 6 Street in Athens. Photo Henri Cartier-Bresson.

setting. Even if different in length they both have the same length of stride and they are both walking in the same direction. Both are in profile. In contrast the caryatides are looking outwards, they are large and of the same length, sizable, apparently made in marble, and with classical features. It is hardly surprising if these two times two bodies and their interrelations make a strong impression on the observer. The two marble figures are part of the building, and they are in proportion to it, while the two women on the street, on the other hand, are smaller, proportional to the non-classical everyday world to which they belong. A recognition of the contrasts between the two sets of figures allows for the creation of multiple meanings.

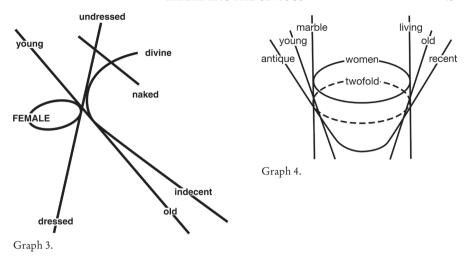
The caryatides are so scantily clad that they appear to comply with the antique ideal of (divine) nudity. Their draping is classical and white, contrasting with the mundane long dark coats of the women below. They are youthful, the women below are elderly. They have the suggestion of immutable divinity, while the women on the street are part of the transient present. And like the earlier discussed lady in the underground poster, they represent humanity without being alive. The two women in black are alive and will remain so no more than a few years or decades, while the caryatides may remain unchanged for a long period until some neglect or an accident destroys them along with the rest of the house. It is also the carvatides that preserve their youthful features. Their young faces contrast with their actual age as inanimate objects, which is accentuated by their classical design, authentic or not. The hoary heads of the women below may remind us of the passing of time, which is part of life itself. All these possibilities of meaning can be present in our minds and processed at the same time; they are or become part of the field of vision, our mental field.

The following graphs illustrate just some of possible positions of meaning generated in relation to the above discussion.

A pre-condition for these patterns of lines is that the reader first gives his/her attention to the living women in the picture's lower part. There it is an immediate relation to the everyday physical setting, and to human and cultural conditions.

To get an idea of how strongly the connection to real everyday life restricts the scope for changing aspects one might as an experiment imagine that it is the women on the street who are half-naked, while the caryatides above are fully dressed. Divine persons can appear naked and maintain their dignity, while old ladies without clothes on are quite simply undressed, and as such are regarded as indecent if they appear in public in this condition.

When we no longer assign conventional roles to the figures in the picture instead we are able to find also other relationships which are not immediately



obvious (graph 3). For example we can draw a lot of distinctions between the two women, which belong to and give life to the street; the two inanimate caryatides as decorative and status-symbolizing parts of the building. The effect of the contrast is related to the distinction already touched upon, between everyday life and solemn elevation. This may prompt one to think in terms of life and death, divine and mundane, or animate and inanimate.

Graph 4 considers only a few of the many possible combinations, which might seem near at hand in this case. There is a striking contrast between the part of the house on street level and how it appears on the upper floor.

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The previous discussion thus far does not suggest that it is particularly important to direct one's attention to the double nature of the field of the visual image. To determine the function of this field, it is necessary to discuss such visual images which do depict real or fictive physical reality as a continuous whole. Clearly, any visual image accounts for the sight before the eyes, but this goes for anything visible; aspects on immediate physical reality are not prioritised. The field, in which a visual image acquires its meaning, is not of any physical nature, it is mental and susceptible to any idea provided that it is the result, directly or indirectly, of a visual impression.

In any photograph the shape of all visible elements conflate with the sight as a structure of shapes. There is no other point of reference for the spectator; the latter's understanding of what s/he sees has the same reference, even if it is an indirect one and evolves through several stages. The same goes for realistic

paintings and indeed for all man-made images, which encourages us to perceive them as analogies of the immediate physical environment. The spectator can use his/her skills for orientation as if the object of vision were real; the painting, though man-made, is perceived as if it were reality. In taking for given a full coincidence with that environment, s/he is enabled in regarding the painting to find matter for an overall fiction in which the unreal and impossible is made possible by its incorporation in a possible space.

Much time has elapsed since modern art broke up from the principle of analogy-to-nature, from the principle of mimesis. In the perspective of the history of human civilisation this shift in primary reference is not very revolutionary. In most western cultures before Renaissance and in all cultures beyond Europe you will find pictorial works the true unifying structural principle of which was not the mimetic one. This contention is not significant for the theory of art alone. It is highly relevant to the present context too, in underlining that human beings are perfectly capable in an advanced way to use fundamental structures of meaning other than that of language.

No matter this historical perspective, the idea that you should be able to see a man-made picture like you see immediate physical reality remains alive among us, and the new conditions introduced with modernism have still not ceased to cause problem for a considerable portion of the general public. This same problem has now to be overcome in our context. And I can find no better way to venture that than in making use of an art work the structure of which is neither linguistic nor mimetic, while still depicting numerous recognizable things.

All visual fields are continuous. The artist's canvas can never be developed into a painting without it being correspondingly continuous. What is initially transferred to the painter's canvas corresponds with the mind's inner field, which promotes continuity. Since it is not possible linguistically to follow how our visual images arise in mind, it might be tempting to conclude that no one is aware of her/his inner field, that we only *see* what is before the eyes. The artist makes a conscious choice to organise his/her canvas using colours and shapes which do not necessarily represent physical reality. The organisation of a painting which does not represent an identifiable physical reality can be based on geometrical and rhythmical relations and on colours the relations of which to other colours make up a system of its own.

Even a painting which is basically mimetic, e.g. a painting by Titian or Manet, can be experienced as a thorough organisation in colours and forms, even without attention to the motif itself.

A painting can be understood as only a pattern of colours and shapes and still appear as an integrated and complete presentation. This is the case with the final image to be used for demonstration here – a work of the American artist

Robert Rauschenberg. This belongs to his earliest production of paintings and combines. It was painted in 1964 and is named "Tracer", a title Rauschenberg used for several other paintings. The present whereabouts of this painting are unknown to me.

Here and in most of his other works from the same period the pictorial field makes no pretence to presenting a fictional continuous physical reality. Instead, a variety of visual representational elements are depicted with diverse origins; these are brought together in the field as different parts of a unified pattern all over the canvas. Among other things Rauschenberg had found ways to transfer all sorts of images from newspaper print, advertisements etc. to canvas, sometimes changing their colours, etc. As a result, his paintings appear as collages even where, as in the picture in question, the colours are dense and broad brush strokes are used. And not least important, the character of the pictorial elements that he uses varies greatly in the same painting, with such diverse forms as diagrammatic line-drawings and direct illusory reproductions of physical objects.

Rauschenberg's works rarely suggest any unifying space in which everything takes place; the only apparent continuity is offered by the field, the flat canvas itself presented as the field. It is also possible, however, to perceive space as just a specific sort of meaning within his works. Some of its pictorial elements even display traces of the original context of the clippings which he has used or reproduced; in others the individual viewer must interpret the relations between the different elements and decide if and how a surrounding space may be assumed to be present. Art critics distinguish continuity, dynamism and harmony among the different parts of Rauschenberg's paintings when they associate unity with pattern and colour harmony etc. This does not, however, prevent spectators from trying to distinguish continuities of meaning on the basis of told stories, fragmentary or otherwise.

Rauschenberg's picture (fig. 7) is painted on an extensive canvas, in mixed media. At different places within the field pictorial elements can be discerned which easily harmonise with one another in our imagination. Blatant contrasts are, however, equally common. In the lower right corner for example, a section of integrated city street wet with rain has been incorporated; above and without connection with that section a white-headed eagle is perching. Further to the right and still in this lower part of the painting there are two small cage birds. In the upper right portion a large copy of P.P. Rubens' painting "Venus at the toilet mirror" (by the latter paraphrased after Titian) in one blue shade and white. In the upper part to the left there are two helicopters hovering in the air. Distributed in the same upper part there are two geometric cubes seemingly drawn in lines as with ruler, etc.

The objects are of different sizes, in different scales, and are incompatible in



Fig 7. Robert Rauschenberg, Tracer, mixed media 1964, present owner unknown.

shape. Whatever theme there can have been for the image, it does not deal with things which in real life are immediately present at the same place at the same time. So even if one disregards the impossibility to reach the idea of an overall space illusion here, one can hardly understand those elements as simultaneously present if not precisely here on the canvas. In appearing together on the canvas, they are also present together in the spectator's mind, on his inner field for meaning. The painting itself is the meeting-place.

The eagle is larger than the cars below, and more illusory. It is perched and yet there is nothing to indicate the nature of its perch. It seems to be taken directly from a book about birds. The two helicopters over it are apparently in the sky, but is it or is it not the same sky as that around the eagle?

The picture of Venus is placed at the same elevated level as the helicopters, but it is possible to imagine that she is in a space of her own, seen through a vague haze. On the other hand one can distinguish specific parts of her body appearing through vaguely articulated forms dominated by white colour, and for the rest with almost the same light blue shade, which also appears to the left. No one is likely to challenge my description of Venus as a vision emerging from light summer clouds. On the other hand, as a goddess of the Olympus she is associated with heaven in a rather different way. From a third aspect, she represents a classical painting well-know as illustration in almost any art survey. There is a thin dashed line somewhat below Venus, of which there is a trace of continuation to the left that help to measure a surface around the goddess which corresponds to the most common format of postcard reproductions. The association to a postcard-reproduction gives reason for imagining that the geometrical cube to the far right has been drawn directly on its surface.

It is possible to understand the painting in at least four different ways already in departing from the previous presentation. That is not to say that these ways must be incompatible, or that indeed they are the only possible ways to approach the painting. Even if the spectator selects just one of these alternatives some ambiguities must remain in his/her mind. Where similar conditions appear in other parts of the image they have the potential of enriching the meaning in individual parts.

The schematic cube-drawing close to Venus and the one more to the left appear to be completely non-sensual representations of an idea. They are difficult to relate to the goddess' sphere, unless – but this would be difficult to defend – one would see Venus as the goddess of geometry or mathematics, in which case the first cubes would be understood as attributes. There may be reasons for laying stress on the contrast between material on the one hand and on the other hand on things with a spiritual aspect which unites otherwise disparate phenomena. This is not, however, an approach which I particularly favour.

Another cube drawing appears underneath the helicopters. The scale is different to the other cube, and if drawn on a surface that would be the canvas itself. That the helicopters are clearly cut out from a newspaper is indicated by the rather coarse print and the fact that it is possible to see the edges.

The eagle is presented to a scale different from that of the cars on the street. It is originally painted like the part below, but even if it had been something printed and cut out it could not reasonably be understood as an object in the same continuous physical world as the cars. Venus, again, neither appears in the world of the cars nor in that of the eagle.

A graphic scheme of a cube defines space without creating illusion of a physical space. It is not sensual in any way, unlike the goddess' however airy flesh, which in turn could coexist with helicopters – but not in the same sky.

Thus, there does not seem to be any way for keeping all those elements together in a single convincing context. There appears to be no chances for a consistent immediate physical reality.

Even where there are certain common qualities – that of space clearly not being one of them – it is still difficult to see any form of general interrelatedness allowing continuity. The visible features of the different elements are so dissimilar that they cannot be seen to represent a common or consistent meaning. Neither can one perceive any endotopes which might give a lead to the creation of specific units of meaning. The only endotope which is not a thing is the city-street below which suggests unity of meaning. If local spaces within the same field can be distinguished, it is not because further endotopes have appeared, but as a result of conceptual affinities. Then it seems near at hand to understand the various elements as carriers of delimited and defined meaning, and as a consequence to approach the picture as a joining of symbols, a conception which then would be reminiscent of the presentation of a text.

Should all the different pictorial elements then be understood as symbols each representing specific meaning? Suppose that Rauschenberg had conceived his image as some sort of message. The elements are distributed in such a way that they cannot be regarded as parts of a single sequence – so it can hardly be question of scripture in ordinary sense. Symbols have specific – if not always fixed – reference. The white-headed eagle is a common symbol of American military forces. Helicopters may, for example, make many people think of the Vietnam War – but this painting was produced before that war. The goddess Venus might be considered the symbol of Olympic divinity. She is also, however, used as the symbol of female beauty, and of love. Is there any clue in the picture itself that might indicate which, if any, of the alternatives to maintain?

It may be easy to find a symbolic value for a lot of the objects in this picture, but there are at least two reasons for requiring further argument before accepting this line of thinking. On the one hand meaning as discussed here has noth-

ing to do with conventions, rather it arises as the spectator draws conclusions based on the field context of that specific object of vision. On the other hand, to talk of symbols one must identify reference which when applied to the same object will have the same meaning in different individual situations. And if we are to talk of a symbolic context this specific meaning has to co-operate with the symbolic value of other things present in the same entity.

Without given conventions for those meanings there is little probability that any two regarders will more than occasionally come to a similar understanding.

Rauschenberg, however, uses in his paintings again and again many of the same stereotype kinds of "quotations" i.e. clippings from newspaper etc. in combination with forms in painting and drawing etc. The same objects in different pictures reappear identically but in quite different positions and combinations without that meaning which earlier may have appeared natural now appears to give any sense.

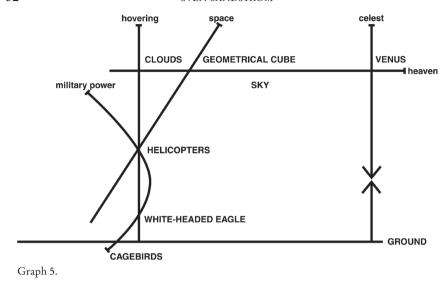
On the other hand one can hardly strip objects like a traffic signs their established symbolic meaning even when appearing among fragments of furniture, branches, news-paper-clippings, etc. A symbol is sometimes part of a cognitive system, sometimes just an object with one established meaning without necessarily to lack possibilities for other and further meanings.

Any object can be viewed and given different meaning from different aspects. Any aspect connects or can connect many different objects to one another. In the present example, it is not difficult in-between themselves to connect different elements out of preliminary meaning, each of which emphasising a specific aspect. This process can be described in terms of dimensionality and dimensions of meaning.

Some dimensional aspects might seem to exclude eachother, such as the diagram of a garden and the physical appearance of that garden itself, because experiencing them represents different basic ways of inquiry. In such cases, however, it is only from a particular modal aspect that they exclude each other. From another and equally possible aspect everything which has to do with the garden is also part of a corresponding dimension of meaning.

In the same way as in the example above, the geometrical diagram of a cube is inconsistent with the picture of a helicopter, and the space which the former defines is of no use for the helicopter when in flight. There are, however, some necessary conditions for both which are mutual, and which each can be expressed in a specific dimension of space.

The meaning which we ascribe to a physical context after a period of regarding cannot be the same as we meant to find in the appearances which we saw at the very beginning, neither is it necessarily different, even if it is necessarily more,



and probably more reliable. But it may look as if it were so. However, the field as area for combinations not only permits the discerning of different objects in different locations, which would seem to be sufficient for reaching an image in the quality of some static scheme of coexisting things. In distinguishing the dynamic events of the *field* as the working principle it is possible to go beyond the apparent scheme of physical presences, and gain access to the multidimensional world of meaning. In this world new and richer meaning develops continuously and is revised through simultaneous confrontations and combinations. Expressed in its simplest terms dimensions here perhaps for the purpose of the present context can be described as different elements of meaning which have certain characteristics in common; when they are considered from other particular aspects the elements come to the fore with other meanings.

A number of subjective examples of how dimensions are formed and new meanings which these have given rise to were presented in the previous discussion. Each of the combinations can be considered in isolation, examples of how a confrontation of two or more elements can give rise to a specific meaning on an individual level as well as become a unifying factor of meaning for the elements as a group. Such confrontations are dynamic, and leave behind an element of tension in their products. In each of them both or all integrating dimensions of meaning can be felt without by that making the new meaning ambiguous.

Graph 5 has for objective to present or remind of some dimensions of meaning which are near at hand, giving possibilities for reflexions concerning meaning out of their interferences.

The dynamic character of such meaning becomes clear if one tries to understand the total picture of such situations of connected meaning and its distribution throughout the field. It is evident that my examples of resulting meaning are personal, and that they are sparsely scattered in relation the possibilities of the field related to the sight in question.

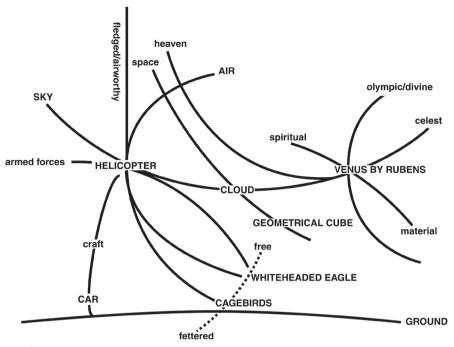
But even if it were possible to work through every part of the surface and confront all significant elements available for interconnection, the result would never be any map of meaning in a complete visual image; the results are not simply propositional. They do not propose to anybody, and moreover they are always facultative with potential for different meaning in one and the same regarder. It is as possible that their imports just complement each other, as that their incomptibility necessitates a choice in the process; meaning which comes up in one combination may well be demented by the outcome of another.

As already suggested among possible dimensions of meaning there is no specific position for physical dimensions; rather it is important to understand space, dimensions, distances, etc. as elements of compatible meaning. In relation to our inner field it gives as good meaning if we discern "space" as an independent dimension, like the extended space of a newspaper-picture, or the mathematical quality of space made apparent in a geometrical drawing, etc. From that understanding we easily find the way to the dimension on which the drawing and the toilet chamber are different positions.

The last diagram, graph 6, proposes several new possible dimensions and intersections of dimensions, and illustrates a number of the statements made in the text. In using capitals for visible elements in the field, respectively lower-case letters for meaning produced in acts of critical comparison, it also accounts for the relation between abstract/concrete meanings in this context.

This demonstration has to be understood in a dynamic perspective; it should by no means be taken as basis for any interpretation of intended meaning. Meaning which comes up from one group of confrontations may or may not be kept in mind and withheld when the attention goes to another group. They alternate in an overall understanding, they may together build up more complex or refined meaning, and not least they may open for a continued exploration of the sight from changing aspects in which the possibilities of the present sight never will be finally exhausted.

This graph shows, for example, that space, air and heaven may have one dimension in common, while each of these connects to other phenomena by different dimensions and so participate in quite different contexts of meaning. Helicopters and ideograms of cubes relate to space as an idea, but for the helicopter space is also the sky, most immediately a condition from the real



Graph 6.

world, while nothing but the idea is needed for the ideograms. Venus is a celestial being, but heaven is the home of the gods and its relation to the sky over our physical world is always somewhat unclear. Venus is alone on the mythological dimension. But as she is painted in such a way that it is easy to see her as a vision among the clouds, even a cloud herself; this also makes her part of the sky.

Equally important as her position in heaven – which sometimes seems purely ceremonial – is that she is solemnly elevated and seemingly floating, which suggests a dimension in the quality on a scale on which life on the earth constitutes the opposite position. Positions on the same dimension can be indicated for all bodies floating or flying in the air, clouds, helicopters, eagle, and cage birds – the latter fledged even if restrained.

Of these elements there are two which can be connected in a different dimension, that of warfare. Two helicopters together tend to make us think upon military contexts, and the eagle in question, as just mentioned, is a symbol for American military power.

The fettered cage birds may prompt one to think in terms of captivity, as indeed one may imagine that the birds themselves do. They may be contrasted with the unbound eagle, thereby creating the possibility for a new dimension with a scale from freedom to captivity.

This also brings to the fore the separate dimension of freedom, which in turn easily can be related to the sky, space, and heaven. The ground, on the other hand, stands for what is under our feet. It anchors the cars to the earth, thereby creating an opposition to the helicopters up in the sky; in this way the ground becomes connected to the dimension of earthbound mechanical vehicles.

One might argue that the chain of sky – cloud – celest (phenomenon) is no more than a paradigm, an axis for selections. Usually, however, we fuse "space" and "sky" in our thoughts and speech, and sometimes we feel that that there is a real connection between "sky" and "celest" area.

At each point where the dimensions intersect it should be possible to discern alternatives or accumulations of specified meanings. At the same time the dimensions in use allow for connections by means of different features between different phenomena. There is no systematic result produced by the upcoming pattern; meaning arises through association, strongly promoted by the application of ever changing aspects.

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It has not been my purpose here to reconstruct any authentic mental situations, something which I think that we know to be impossible. All examples are fictive and facultative. But even if I cannot pretend that anything of all this occurred in my experiencing of the art work just as it is accounted for, it is evident that it has been in regarding it that I have been able to make these proposals, leaving to the reader to consider them in front of the image.

I have attempted to provide fragments of a schematic pattern based on a variety of personal responses to the complex stimulus which is the painting. I have presented elements and spatial relations for a model of a possible space of meaning. A space within which mind can move freely, and within which it might eventually select something like the suggested aspects and connections necessary for the production of a final understanding, of an accomplished visual image.

Even if of short duration, "space of meaning" is not perceived of as an abstract means of clarifying element and interlay within a cognitive mental process. We must assume that such a space is a mental state in is own right, a state flux but no doubt capable of being perceived as a feeling and a readiness for multidimensional events, even when there is no specific goal. Our awareness of something being before us and around us is an awareness of space.

From inside of that sphere of possible meaning we can whenever we wish start giving attention to different elements, allowing them to create meaning in confronting them in all possible dimensions, etc.

When formulating the conditions in such a way, however, one makes the

field appear as a passive ground for mental activities. The real conditions are opposite, all the way dynamic, constancy being something incidental. Had I found the proper method for that, I would have preferred to give the active role to the field, in a more concrete and consistent way presenting the element of meaning as variable factors which it relates in ever changing combinations. That dynamism is a main condition for the inseparable unity of seeing and having a vision in our relation to the world of appearances.

## Visual Images as Cognitive Structures

## Elements for a Systematic Theory

Visual images represent a coherent awareness of that which is physically present before us and can be seen. Two persons regarding the same objects normally distinguish the same shapes. With respect to the formal character visual images of the same objects seen from the same aspect are all alike, and differences that might occur between individuals are of no immediate consequence in a theoretical context of this nature. In discussing the nature of visual images anybody can recognize the same features for example in illustrations to which all have access. However, all visual images are to some degree different for different people, just as they are different for the same person on different occasions.

However, in mind a visual image represents a sight, what is seen, as something made up with meaning; we are never aware of the sight itself as something separated from its meaning. Regarding makes it to meaning.

Visual images are momentary, but seeing is part of the continuous life process. Wherever we are present and our eyes are open meaning arises or is recognized. It is as meaning that the world exists for us.

Once we have ceased looking the visual image has disappeared; what remains are more or less fragmentary and not always trustworthy units of memory, kept together as a *visual picture*. Each time we see the same sight we may think we are returning to the same visual image. However, this is not the case: each time it is a new image that comes forth. It is only in this way that we can get aware of both what has changed since the last time we viewed the same sight, and what has disappeared since the last time we observed it.

Moreover, at different moments of one and the same act of seeing – here called *regarding* as a kind of thinking – a different meaning may be attached to the same sight. This meaning eventually may be richer and more precise in its details, but it may also become different in its nature. None the less, at whatever moment we chose to stop looking, we will have a complete image, and will normally, without any reservations, take the present visual image to be a faithful representation of the sight.

In the present context I am concerned with the question of complex meaning, as it exists in man as a highly developed being which from the onset is guided in his/her existence out of sense impressions. From these s/he has developed

meaning with the aid of given mental capacities, and from these two factors together language eventually has come up. All the senses are involved in these processes, and not just sight. But vision gives us a particularly consistent orientation in the physical world.

Unless otherwise specified, the object of attention here is the overall visual image, i.e. whatever is before the eyes, constituting a pictorial field. Any fraction of the complete field of vision may still be dealt with in an act of regarding just as a comprehensive sight and the visual image of the same, on the same basic conditions.

There are no *visual images* unless they are seen by the eyes in immediate relation to a sight in the physical environment. However, there are other images beyond true visual images that are created in the mind by *imagination* (in the classical meaning of handling visual qualities and entities in the mind without immediate conditions in external factors). Moreover, we preserve visual memories and recall them as visual pictures; these are often more or less uncertain visual fragments. We produce inner pictures in our dreams and hallucinations.

With respect to the primary and most elementary aspect of the present study – that of the cognitive structure of visual images – I have, however, found no evidence for any other difference in conditions between a visual image and inner mental imagery than that of having the object in the physical world and not having any such object. In terms of determining what visual cognitive structure is all about it does not matter which qualities differ between various sorts of images and pictures.

It is just in being looked at, regarded, and perceived as visual images, that any man-made image is an image to us – otherwise a painting or a photograph is just a piece of matter with some pattern. By that reason this text does not make any specific case of images of art, no matter my own background as an art historian. Any sight may contain elements intended to be decoded or to be sensed in very specific ways, but it is only in the act of regarding that it becomes accessible for mind and reflection.

A visual image arises in the mind of the spectator. For the most it presents itself as an instantaneous awareness of that which is before the eyes – and not such as it really is, a product of thinking, a conception within the head. (See further below, concerning concepts and conceptions). In a long course of regarding, however, we may well be aware of passages in our own thinking in the process, especially if they have been discursive. When we regard a sight in the physical world we are only aware of that which is present before us. Impressions beyond might disturb, but if not these relate to the same place in stemming from other senses, they hardly interfere within the process.

In practical life as well as in the sciences, sense impressions, in our case the visual impression and image, are usually regarded as unshakably stable phenom-

ena, however rapidly they disappear. We do not normally doubt the testimony of our eyes. As we regard a sight, an object or an image, we feel certain about what we are seeing, and feel sure that it is identical with physical reality before us.

The certainty that we experience about the physical features of a sight is however an existential necessity for action. This may be supported by experience. But it is not question of any instinctive gift. I believe that normally we would experience that state of mind also if our perception were untenable.

Moreover, it may seem that we often experience a quite similar certainty about the sense of a statement the meaning of which coincides with firmly established conventions and is received without anything contradicting that statement.

Language as a system makes it possible to construe propositions that are undeniably true. "A blue feather is a blue feather". But as we know, even when constituting propositions on the basis of premises which later turn out to be false, we can draw conclusions which are logically true, and maybe also feel quite confident.

In regarding we reach the same degree of confidence in relation to the shapes and endotopes of the sight, we rarely fail any uncomplicated visual quality. In both cases we are right about something.

But in regarding any sight we might still get an untenable meaning because of misinterpreting some ambiguous features, making impropriate use of some knowledge, or overstating the impact of some earlier experience, etc. or because of irrelevant inner associations etc.

Empirical sciences provide pragmatic reasons for being confident of the testimony of the eyes (and conditions for this). But on the one hand it is normally not on extensive visual images that this confidence then repose, rather it relies on focussed observations made within frameworks of carefully directed arrangements. On the other hand such visual observations are always planned in relation to a more or less consistent background of established data and hypotheses. Even if extensive observations also play a role in scientific work, because of previous calibration out of specific frames of theory and expectations. Also these are under influence of a dependent factor. Such observations thus far have not leant themselves to an investigation into primary and unconditioned conditions of visual images as cognitive structures.

The world exists to us as meaning. "Meaning" as used here refers to any object of awareness and any quality or qualities in any given location, definite objects are not necessarily presupposed. This usage may most easily be understood by contrasting it with the impossible idea of something being object of attention while lacking any particular quality. If a sight at all could appear without bearing any quality, no "something" would ever be suspected for being around.

There cannot be words that directly refer to individual perceptions of unique

and ephemeral sensations of light and shadow, or some sudden thrills in the body. It is true that there can be literary ways to talk about them, but that is something else. But the access to corresponding words does not decide whether or not we can remain aware of such phenomena, and especially not whether or not we can make them part of an overall visual image.

Bertrand Russell has discussed the corresponding conditions out of the aspect of empirical experience. When we are familiar with something and give it our attention, it provides experience.<sup>14</sup> A minimum requirement for experience is the awareness of specific qualities. Aristotle directs the attention to the fact that it is our first acquaintance, represents an awareness which is the result of sense impressions. Both Aristotle and Russell, like almost the entire elder epistemological tradition at large, developed a language-related philosophy; but they indicated at least the gap there is between just material being and discursive thinking. It is in this gap that I place my own observations and reflections.

In many older theoretical contexts a distinction is made between shape and meaning, the two being seen as complementary entities. This should, however, be understood as a practical fiction; in theoretical contexts very fem writers now distinguish between shape and content in visual contexts. On the other hand it is evident that one can be aware of a certain shape and distinguish it from other shapes without yet having the faintest idea of it to correspond with something specific in the world. But that would not mean that these shapes are lacking meaning: they are identified by specific and different qualities, and as such they convey or represent meaning. There is an indefinite open interface in our minds between appearances and these appearances' meaning in the world. When distinguishing above between shape and sense or content, I virtually made a distinction between just one out of all possible categories of meaning and all the others, something which in principle could be repeated for them all.

The following discussion about meaning in images and how this relates to meaning in language does not permit further reflection upon the fact that inventive use of language can overcome limitations of language as a system.

My main concern here in relation to language is to deal with it as a structure and a system depending upon conventions of meaning before producing unique meaning, in critical contrast to visual image as a structure of meaning depending upon the screen or field from a unique sight before depending on the onlooker's eyes and his/her individual reactions in the situation at hand.

Any entity of meaning established in the mind with respect to a particular entity is here described as a *conception*. In visual contexts this may often – though it is not by any means a rule – mean the same as "concept" in the usual sense of a firmly established meaning about something. It is, however, normal in such cases to expect a corresponding word or sign. In everyday language

"conception" is often used to indicate ideas of some complexity; in the present context it has, however, a much broader scope of meaning. The term "representation", which can sometimes be used for any of the conditions described here, is by heritage associated with something like "reproduction in the mind of something experienced out there", and reflects an entirely obsolete range of associations. When needed "notion" seems to be a suitable term for a conception of any delimited phenomenon.

In any case the term of "conception" will here designate any type of comprehensive or restricted representations in non-linguistic contexts of recognized delimited phenomena. As for the rest I prefer to let the circumstances in the context make clear whether the restrained or the broader sense of the word is intended.

Nothing prevents the substance of meaning of which we become aware in the process of regarding from being exactly the same as the one that it brought to the fore in the mind by a corresponding word. Only, we can hardly come to know for sure if and when it is so; if it is so at some occasion that coincidence might be short-lived. If the object is viewed from a changed aspect at a subsequent visual confrontation nothing prevents that it evokes elements of meaning for which one easily finds a linguistic convention.

In most contemporary theory of cognition as well as within recent brain research there is a tendency to discuss meaning as if it were of a linguistic nature; as evidenced by the terminology one uses, etc. This is quite natural from the point of view of linguistics and of cognitive systems based upon language. On the other hand, as we know, one of the fundamental theses of linguistics is that words themselves do not contain meaning, but bring it to the fore by referring to it. It is not possible to honour this principle without at least remaining open to the possibility that meaning may exist where there are no words at all.

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Vision allows one to orientate oneself with some consistence towards the physical reality before one's eyes. Each visual image – and this is particularly obviously in a wide overview – has a functional completeness within itself. Nothing absent is part of or condition for the whole. We never go elsewhere to find missing parts of the same image while our memory supplies us unlimited amount of complementary matter. Anything seen has its given position within the whole and is related to everything around it. An image is a separate microcosm – it is a system in its own right. At the same time it reproduces the major system of visual cognition that we are trying to present here; it establishes an inner continuity as individual image that contrasts to the pattern of most other

visual images. This is similar to the conditions in language, where each phrase and sentence reproduces language as a system and presents its individual structure in a relative uniqueness.

Comprehensive visual images are thus, among other things, utilised to produce structurally complete models of human meaning based on visual sense impressions.

In many situations reports from the other senses might contribute at least as much as vision to one's overall conception of the physical present. The entire perceptual process can then only work if it engages an overall system which at least includes the spatial conditions for the visual part of the whole. This could never suspend the cognitive system that gives us visual images without losing the inner conditions of the orientation. Any comprehensive cognitive system related to sense impressions must comprise the overall system.

When considering the fact that already when regarding any sight we reach a visual image with an overall and circumstantial meaning, without requiring complements from other senses, we must concede that there has to be about a complete system for visual images even if the same system would show to have a wider coverage.

Having no words and nothing like the syntax of languages, visual images still have consistency, continuity and account for the internal relations between its different parts. You cannot say that it is to the physical reality being observed that these very qualities belong; it is only on the conditions of regarding that we get aware of all that. So far one could argue that the preconditions for a visual image as an awareness of something physically present constitute a counterpart to linguistic syntax.

Even if linguistic syntax can be described or rather exemplified in a set of rules, it is never finally established as a finite system. In a comparable way all visual images in their endless variations for their coming about depend of constitutive conditions which are recurrent and to a great extent easily determined by their relation to the field of confrontations, while there all the time must be possibilities to distinguish further specific conditions as complications out of the basic conditions.

Directly to compare a visual image of something and a discourse which describes that which one has seen offers certain difficulties, because normally the description is far more incomplete than one probably would believe, given the effectiveness it normally has. The latter refers back to the entire vision in parts and as a whole as something complex and specific, just like the words in the phrase refer to the inner representation. On a level of principles, as we know, the comparison is easy and gives a clear-cut answer: there is a paradigmatic incompatibility between the sight and the description.

Visual pictures imagined in the mind – or recalled from earlier experiences – can be depicted more or less successfully on paper etc.; however, such an operation involves many factors which restrict the likeness and transform the vision. So such an account for a visual experience never communicates the imagination itself to the spectator, but rather informs one of what one has experienced, in principle like when writing down a description of the vision. Making sense in regarding has its own process, while making sense in shaping a representation of something in the same scenery means to start a new and independent process on different conditions.

Verbal descriptions of sights of physical reality or of a man-made pictures are often put forward as substitute of the sight or picture in question. But the description does not constitute any communication of the sight; it just has it for topic.

Verbal descriptions cannot be congruent with the objects or images that they describe (irrespective of what other conditions prevail). They cannot convey space, which by necessity makes them selective in relation to the object – i.e. to the previous experiencing of the object. The primary reason for these restrictions is in the incompatibility between the mere structure of language and the cognitive structure of visual images. The writer or speaker has to make selections from what s/he perceives to be most important about the object and put these together in one or several sentences, without reproducing their spatial relations except perhaps for some linear ones, and without selecting from several among possible elements etc.

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We cannot define humans as beings who are using language in the way we can define them as beings with big brains and walking erect. But we can define human beings as a species with everything required for eventually developing and using a language. Language is a cultural phenomenon, reposing on conventions. However short that period may have been, some time must have elapsed between the coming about of Homo sapiens and the debut of language.

In contrast humans were fully equipped from the beginning to use the faculty of sight in an intelligent way.

From the very beginning human existence has relied on visual images as products of directed mental activity, combined with reports from the other senses. Had humans had less excellent innate preconditions for also a language, so that it never had reached maturity, their chances of survival had been much less brilliant, and the development of culture would have been slow, to say the least. But saying that we would never have survived without a language or that no culture would ever have came about without it, would be to make theories without any support.

In looking for qualities which are necessary and sufficient for visual images to appear as qualified structures of meaning, and to provide related articulate and diversified memories one cannot upon the visual events apply preconditions which depend in any way on, or are expressive of language. In the same way nothing can be taken for granted about seeing and visual images that is dependent on cultural elaborations based on language, e.g. like formal logics and secluded conceptual systems.

In spite of the above statement I maintain that such factors as well as shared meaning are highly relevant phenomena to the present discussion. And being prevented from the use of formal logic in seeing would not mean to be prevented from the use of critical reason and experience. Even if you do not use formal logic in your seeing, you can all the time apply critical reason and evaluate out of experience, even in a rapid perception. Incidentally, no matter the decisive cognitive structure of the image, in regarding one might use any cognitive means available to solve upcoming problems of knowledge and understanding. (With "understanding" is here meant the subjective conviction of having the proper knowledge). Leaving for a moment the spatial main approach you can also apply formal logic when still regarding.

There is meaning in any living creatures that respond to their environment; there must then have been a developmental history of meaning long, long before any language evolved. Language, just like our own species, came late in evolution – but no doubt in the opposite order.

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It was certainly neither the convolutions of the brain, nor the existence of a human larynx that gave rise to language, even if they made our type of language possible. Those are merely among the prerequisites for the development of it. Language is a cultural phenomenon; some would even say "the cultural phenomenon". Increasingly much evidence is coming to light that cultural elements exist among the large apes, they are taught a lot of know-how from their parents, even if they do not appear to have any major consistent vocabulary, and certainly no developed syntax; neither do they have a history – at least not in the most current sense of the word.

The moment in prehistory when humans became equipped with a sufficiently well developed brain should be singled out not as the birth of language, but as the starting point for establishing its necessary cultural basis. No matter how long this has lasted, there has been a period in man's existence before he disposed a sufficient number of firm conventions of meaning for an archaic language to start developing. No doubt, before language there must have been a period of increasing use of separate symbols.

Even if nobody ever communicates visual images to somebody else, individuals always communicate in referring to these. The early humans lived in flocks and groups, sharing a common existence. Much of what they saw and experienced must thus have been seen and experienced together with the others, in the same perspective of interest and protection that was valid for them all. Recent primate studies have given a structured matter for reflection over the place in people's minds which social intercourse might have taken within societies where the members are closely interdependent, at the same time as they are not bound up by any 7 to 5 working scheme. The first people must have developed an extensive passive consensus within their social group about the nature of recurrent things and concerning how to meet needs and dangers in the near environment. Their conceptions of many things must have been very similar, even without means to communicate about them. And there was certainly a good chance that individual actions would have complied well with other's assessment because their experiences were similar.

Such an assumption is not without support. Wordless communication between people occurs frequently even today, although this tends to be fragmentary. As a matter of fact, people today communicating in everyday situations may well omit certain items of communication knowing that the listeners presuppose them on the basis of the prevailing circumstances. This is particularly enlightning when the subject is recognised but never actually has been expressed verbally. The more there is a common cultural ground the more easily non-verbal implications slip and are understood.

The meaning of words is conventional. Linguistic conventions, on the other hand, tend not to rely on formal conventions. When two people use the same word with the same meaning, they testify to a convention irrespective of how the latter has evolved.

The first time a sign is used to indicate an asset or a danger, it is unlikely that all will understand. Far more probable that any meaning attributed to the sign within the human flock relies on already established inner images in the individuals, which correspond and fit into the conception of the one who first initiated the sign. According to various recent theories of how language came about, a successive accumulation of individual signs and corresponding concepts was vital.

But while it is true that amassing references to phenomena in the surrounding world and in social life certainly promote communication, there cannot be messages of any complexity without some syntax.

Words for objects etc. can be felt to resemble what they stand for because using them makes us remember them. A sentence cannot, however, be experienced as simply a chain of references to subjects etc. These cannot denote more complex and/or abstract meaning without syntax. I have not met many ideas about a syntax emerging inside the prehistoric human group in the linguistic

literature. All the more discussion regarding the emergence of syntax can be found in texts departing from features in documented primitive language. Within ethno- and anthropology, however, one has long since, and with good reasons, discarded the idea of supposing any identical features between cultures among the very first humans and recent tribal cultures etc.

To my knowledge there is absolutely no documentation or archaeological evidence providing clues about any achievements or chain of events among the first humans. Being roughly as mentally well equipped as modern humans, the earliest people related to a world which, beyond the limits of everyday experience, might have been almost chaotic to them. Just because of the fact that their brain capacity was adequate we cannot state that they were ready for utilising it like modern people. Indeed, we cannot say that people today have discovered how to utilise the full capacity of the brain. The most interesting question concerning early man does not concern unutilised options or malfunctions; rather it is how such gifted people might have been using their brains and mental energy and their urge for stimulation – in such a cognitively restricted world.

A possibility is that early man only gradually came to acquire the necessary connecting "wiring" within the brain for a language to evolve. There is no "language organ". Instead the brain centres and connections etc. are trained together so that they eventually are working together like an organ for speech. This is a process over some year in the small child in our days. But how it came about in the pre-history might be a very different history.

Early humans must have been constantly matching earlier experience with new situations, as animals do in relation to their environment. There is no doubt that individuals used their primary senses and brain to orientate themselves in their immediate environment before the evolution of language. By being active in a living world they must have collected and considered enormous quantities of experiences, collected knowledge and prejudices which they may have internalised and used to form densely packed visual images of their environment as well as conceptions of its multitude of elements and events. That early humans used a critical faculty in applying earlier experiences to present situations is evidenced by the simple fact that they survived under extremely different conditions, including climatic changes and sometimes dramatic shortage of food.

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Meaning is mental; in the first place it has to be conceived of as the ever-different substance within the individual's inner mental activities. In many cases we feel a need to distinguish between an object in the world and the meaning it has.

It can be said that the typical aspect of a familiar object, such as a banana or a cup, may act as a symbol for those qualities that the individual associates with the phenomenon because of previous experiences or learning. Even then, however, it is not the mere shape of the banana or cup but the previously established meaning related to them which is recognised in the symbolic act.

In an act of regarding it is, however, not necessarily the conceptual stereotype that guides the working mind; the object may well be first recognized because of a typical colour and surface, supported by some minor portion of its shape, perhaps confirmed in its identity by the taste.

No doubt we have all sorts of exemplary ideas of all types of physical objects. But once it appears that the meaning we have about the object in question integrates experiences of different aspects on that one shape as just some of its qualities, or rather group of qualities, its dependency for a final meaning of surrounding and/or in some aspect cognate elements appears all the more evident.

This is not to say that typical shape would be unimportant for our understanding and creation of meaning – only that one should not suppose that meaning about elements of the physical world in some fundamental way would be systematically controlled by hierarchies of qualities, headed by an exemplary shape. The aspect of a typical shape, when observed together with other elements having some quality in common with such shapes, tends to release awareness of those among its own qualities which appear to tally. But the function of a shape to trigger a search for suitable meaning is not the same as one oneself to hold the key meaning. Even if the concept system of language favours a connection shape/primary meaning this must not apply to meaning in regarding and visual images.

Much of what is stated above, however, fits as well to the linguistic model as to the spatial one. In a linguistic model the dualism of shape/content – further articulated in modern theory of language – is conditioned by the conventional status of the words. There is a distance between the sign and the mental response. But while one is regarding some meaning comes up, is applied and developed in immediate relation to other meaning within one and the same system. The source of meaning and the receiver of meaning is one and the same, so symbolism as a concept seems to lack relevance in relation to regarding and visual images, at least on a basic level.

At the time as there were humans but no language an almost constant interdependence must have prevailed between the individuals in the same group. As already indicated, even today sharing the same understanding with other people – *synoptics* – plays a major role in establishing conventions of meaning. Synoptics presupposes that each individual is convinced that the others share the same idea of something. And when two or more individuals are sharing the

same element of meaning and recognise this, there is all that is needed for a convention. Synoptics rests on the principle of shared meaning. A shared meaning is reinforced as such each time it is applied with success to new experiences. And shared meaning is reinforced if confirmed when applied in new experiences. The reactions of others, and more specifically our equals, are crucial to the establishment of one's identity. This is particularly true for meaning that has been perceived as implicit in a particular situation, when the others accept or refute the way one has interpreted it.

Tradition is an aspect of culture, and conventions are part of tradition. We know that already primates are developing traditions in handing over practical skills which they have acquired to their likes. So early man must be ascribed at least the same capacity. One or more generations before the advent of anything like an incipient language our species had capacity for accumulating and handing over shared meaning; which can mean amassing representations and knowhow, but perhaps also beliefs and composite knowledge. We thus have good reasons to believe that an increase in individual signs has corresponded with social development, which in turn promoted further shared meaning within the flock. Even if we have no traces of any culture from the earliest times, we can assume that there was a development of culture emerging within stable social groups. But it all started with visual and sensual understanding.

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All individuals possess and orient themselves on the basis of a consistent *world image*, which is constituted by their assimilated experience and acquired knowledge as much as coming out of the immediate experience. It is by relating our inner world to the world immediately around us that we get to understand the latter.

In the present context we have discussed qualifications which seem necessary for to call anything "image"; so is it motivated to speak about "world image"? Should we accept the expression to be just a metaphor – which certainly is motivated in most cases? Even as metaphor it normally intends the totality of our meanings about everything which we have retained as memories from what we have encountered, learnt and thought. We can conclude about the existence of this general memory and use it, but we can never get even the faintest idea of its totality, not even as a schematic structure. Still, the services it does us has structural implications like these of images. If the elements of an image produce meaning when they are processed by the mind, in doing so they cast a multi-dimensional shadow from the world image on one and the same visual field.

Developing a schematic and static model for the function in our theoretical context of even the smallest fraction of anyone's world image (not intending any description of what it really is) could entail an immensely complex multi-

stored scaffold. In this every point of dimensional meetings were to be charged with meaning of some specific kind and also nearly related to hundreds others, which in turn were related in-between themselves and to others, etc., etc.

World images not least contain infinitely much of different elements which, considered in isolation, would appear mutually incompatible. But it is always conceivable that in individual situations two or more primarily incompatible classes of phenomena in being united by some aspect under regarding, when approached to each other will contribute to the creation of a particular meaning as the consequence of regarding.

There are then a number of events in which meaning is constituted in a pluri/multidimensional interplay beyond the visual present, and in consultations of the world image. From a purely structural (and static) aspect one can thus find some reason for considering world images as a sort of super-images. But we know almost nothing concerning the way in which memory subsists as some totality, and what we know is about it when consulted. This analogy concerning *images* has then sense only when we talk of that part of a world image that is actively contributing in the coming about of each visual image separately.

The prevailing lingua-centric tradition within theories of human cultural behaviour has given few chances thoroughly to discuss necessary and sufficient conditions for meaning, communication and language, without presupposing langue as an a priori model.

However, from the earliest times, each individual within human groups had resources based on experiences to develop and preserve a rich set of conceptions; these eventually became their personal world image, which corresponded to the small fraction of the world in which they lived. This demanded a faculty for critical judgment, as will be argued further. If this had not been the case, the advantage accrued in the struggle for survival would have been limited. Without this faculty of judgment and a rich supply of meaning arising from the observation of the environment they would have had no great advantages in the adaptation to a changing world compared with other primates. As stated people lived in narrow groups and had almost identical interests, including interest of collaboration. Conditions for shared and even exchanged meaning there were already by that reason, while there was no immediate need for a language.

To develop and retain meaning from sense impressions it is not only necessary to have perceptual faculties for distinguishing and identifying etc., but also a dynamic mental structure which can both develop and retain meaning from the sights on the basis of earlier experience. A dynamic mental structure can also form and retain individual patterns of meaning as well as it can interrelate different patterns so that major constellations of meaning come up and are retained.

As initially stated here, a minimum requisite for meaning as such is a mind's awareness of qualities, at least of one specific quality. For any further articulation of meaning to be retained or communicated, there must be some sort of recurrent patterns of meaning. To look for such necessary patterns by reducing linguistic patterns into something more elementary would be as useless as making anatomical studies of muscles upon bodies in flesh-coloured tights. While the nature of linguistic meaning can only be derived from verbal sentences, the nature of meaning based on just eyesight can only be studied in visual images and our way of conceiving of pictures.

The former requires communicative conditions; the latter requires only an individual's urge to satisfy its need for understanding by inner achievements. But independently of whether we in our discussion depart from language in search for the uniqueness of visual images, or if we start with the images themselves in the same ambition, while just comparing with linguistic conditions, the two structural ways will in any case turn out as clearly and articulately contrasted in-between themselves.

In seeing we not least observe the well-known objects, seeing them as parts and constituents of visual images, and as such on the same time often as elements in until then unexplored meaning. Their position within an image might in a local context introduce the very qualities that constituted a previously stabilised meaning related to the particular object. But this is really not definite – other qualities in the same object may well take over or dominate in a specific situation because of their relation to other surrounding objects and groupings etc.

Such events in turn can lead to the emergence of several different stable or occasionally recurrent conceptions of one and the same physical object. And we must assume that this can happen all the time; for any objects however well known there are possibilities for endless new and differentiating meanings.

Any current theory of logical rationalism departs from meaning derived from sense impressions or from a related initial awareness of individual objects, etc. Logical rationalism as a set of methods for cognitive analysis, emanating from language but also apart from common language, depends on stable categories for each phenomenon and condition, on concepts that representatively account for them. Concepts become representative when one critically reduces recurrent features of the phenomenon in question, so that no attention is given to peculiarities which don't use to occur every time one views it – favouring the aspect which is relevant to the current cultural situation or in the topical cognitive context. As each discipline of knowledge has its own aspects on things and its own kinds of interest, there will always be correspondingly different descriptions from different systems of knowledge of the same phenomenon.

But when we see a certain sort of phenomenon in everyday situations which

constantly change, it is not only quite a bit that the meanings of the same specimens are diverging in-between themselves. Often there e.g. is very little agreement between the present individual object as apprehended in a specific act of regarding and its counterpart in a systematically established category. It is, however, not uncommon that we become very familiar with a particular object and even frequently use it in one way or another without having a word for it or be able to find its type in any tradition or established discipline.

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A typical model of how a concept arises concerns several successive encounters with the same phenomenon in different situations. Recurrent features in one and the same phenomenon are gradually singled out as the characteristic ones, from sight to sight. Features that occur just occasionally are discounted, until a synthesis has been reached. The synthesis represents a stable idea of the identity in question and comprises necessary and distinguishing qualities. The series of sights and visual images required for the synthesis to lead to the establishment of a new concept, as presupposed in Kant's theory, <sup>15</sup> are moments of current life experience. They are also wordless events, but with an impact of critical reason. There is then no reason to believe that the advent of a lasting conception that never has been named would deviate from this scheme.

The necessity for a critical attention, reasonable selection of typical features and of reflexive observation of contextual effects of meaning in courses of events such as those described above reveals the importance of intelligent use of experience to be involved as factors. But we do not know how this happens (with the exception for one particular case when it is performed in conceptual analyses of different cultural systems) – because it is question of non-verbal events, *intuitive* in the most primary sense of that word.

There is no general necessity here to maintain overall distinctions between that which belongs to verbal meaning and that which is especially related to meaning in spatial events.

In a perspective of principles it is doubtful whether it is at all possible with exclusivity to talk of some specific conceptual meaning for any specific physical object, etc. Most established concepts reflect dominating interests and uses within a culture, and are liable to change when the cultural conditions change.

The non-verbal meaning related to some phenomenon in an inner event must not, as already maintained, necessarily be something different from that verbal meaning which we would give to the same in a linguistic phrase. On the other hand, without conceptual resistance any object can under regarding come to embrace a different or additional meaning as a consequence of some specific relation in the field.

As soon as language had reached the developed form that we know today, and perhaps even in its earlier states, it must have influenced non-linguistic conceptions in an ever-continuing process. All sorts of classifications expressed in language do, in one way or another, more or less tinge our conceptions and this with probably very few exceptions.

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The fact that visual images are *spatial* should not direct attention solely to the idea of three-dimensional space, which otherwise is part of any visual experience. The primary reference of the word should be to something appearing within and on the conditions of a medium which is extended just like a surface. The latter is no surface in physical meaning but a virtual *field* within which visual forms are distributed in individual constellations, the whole embraced by the gaze. But in being a field for constellations of visible things in the dynamic process of creating meaning it becomes indivisible from the space of emerging meaning, or rather, it becomes an aspect of the latter. This is, however, a very incomplete presentation of the notion; there will be additional propositions.

As spatial entities visual images are always continuous, integrated and complete within themselves. This does not mean that images may never account for breaks between parts within the physical scene; but if so the spectator will always strive for finding some aspect on things and conditions from which such breaks can be levelled out.

Any individual visual image must be conceived of as a complete system in its own right and on the conditions that are distinctive for and efficient in the spatial structure. Just as each sentence and sequence of sentences in language is considered as a system conditioned by the linguistic structure. This is to say, the field of a visual image is not only where present shapes appear in "anschaulichkeit", it is also where the mind organises a consistent and continuous spatial image of meaning. It is thus in the field and its possible qualities and conditions that we must look for the cognitive structure of visual images.

Being linear, language organises its carriers of a meaning in continuous order. As little as its words themselves can contain their meaning its structure has means for conveying the spatial organisation of the physical reality on which it may be required to report.

In as far the spatial quality in the act of seeing seems to account in a reproductive way for the sight as seen, the spatiality is a purely mental structure continuously engaged in the elaboration of and accounting for meaning. That which it has in common with a physical surface is just the fact that it primarily presents and locates only the elements which appear for the eye within the

visual field and thus can be seen. Under regarding, however, mind concludes of further elements that may be hidden behind the visible elements, or in some way are conditions for their presence, and so the field will locate also phenomena beyond the visual field. And as soon as some object within the field is concerned, this is conceived of as a three-dimensional body or as a shape within another body; and as soon as it is considered in relation to other objects/bodies within the field, the latter have started entering into further relational dimensions within the field, and gradually evolves into a space of meaning.

So the spatial quality for which the field stands is of a higher order than that of just physical three-dimensionality. Each confrontation in the mind between two or more elements within the field brings to the fore qualities in common between two or more elements, or the contrast between these will draw attention to any quality in one element which is lacking in the other.

On a purely analytical level each of the elements of meaning resulting from such confrontations can be expressed as an effect arising at the crossing of two or more dimensions of abstract meaning. Or rather, they should be understood as the abstract meaning resulting from the confrontation of several dimensions of meaning.

As a comprehensive structure the field is different for each sight, it is always dependent upon the viewer's aspects and cognitive resources. It is an overall means for surveying and identifying connections, successively producing a structure of meaning. Not least it creates opportunities for development of additional "abstract" meaning from every visual feature and possible connection.

We cannot doubt that all elements and relations which we see in regarding, and which we can test in acting within it, really belong to the sector of physical reality that we regard. At the same time all that belongs to a corresponding pattern of meaning within which the mental elaboration of the visual images has taken place. It is like a pupa of some species of insect, which incidentally, when bursting, gives to see a full-blown insect with identical features, but far more qualities.

In everyday life it is an ever repeated experience that the visual image seems to arise at once at the sight. Even if it is only a conception in the head it is felt to be out there. As we view the object it is not possible for us to look inwards to discover how our awareness has been extracted from the sense impression, and to what extent this has been retrieved from the mind's own resources and previous experiences. There is nothing to prevent mind from including also verbal deliberation as the object is regarded; the cognitive results of such elements of linear structures must not themselves require a linear context, however. It is thus the field which keeps everything visible together and contains the spatial process which organises all meaning within the image.

It is thanks to our visual images as orientational devices and comprehensive structures of meaning that we can conceive of immediate physical reality in the way we do, and relate to it as we do. It is not, however, possible to state that physical reality fundamentally corresponds with how we conceive it: the object or picture which we regard looks for us like it does not only because of inherent qualities of its own, but also and perhaps primarily because we are humans. To dogs, horses etc an individual object might appear to be different from what we get out of it without necessarily incurring a different overall orientation. And how would our conceptions be in relation to the same physical reality if, without being less shrewd, we were born with quite different types of organs and means for reception and reflection?

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The Latin word for "to see" is "intuire", and *intuition* in the common latin translation of Aristotles' philosophy means primarily the faculty of making sense of what you see (or sense). However, early western philosophers included within intuition not only the attribution or retention of meaning to sighs (or other sense impressions). Eventually the concept became extended also to mean the creation of meaning without using words – like we do in regarding – even without any direct relation to sense impressions. And it is normal in modern contexts to talk of "intuition" when meaning seemingly appears spontaneously in the mind – "it is just there", "I see the solution of the problem before me", without any traces of previous thinking. People also often say that they are "making themselves an image" or a "picture" of some context or situation, without actually intending anything visual.

All that can no doubt be understood as just a metaphoric usage, in which "image/picture" respectively "seeing" stand for something different. But for a metaphor to succeed the key word must arouse some analogy, more or less striking.

However, it is not my task here to discuss the problem of intuition in a wider sense.

The above reflects a real and familiar experience of meaning arising without the aid of words and often not even spelled out in words. Critical judgment is implied, in spite of the fact that language is required for logical operations. Such conditions direct attention to the mere structure of spatial mental operations, as a more comprehensive phenomenon that must not necessarily be bound to sense impressions.

Even if our goal here is not to cast light upon the nature of inner intuitive events I want to mention the possibility that our understanding of spatial cognition in the process of regarding in and the spatial nature of visual images may be enhanced by further intuitive experiences.

Words are performing what they are told to, it is always possible to give a practical definition of the sense one wants to use for a particular word in a particular context. But some words are so firmly stabilised in a specific meaning that any change in their conventional signification may give rise to misunderstanding.

That is why I avoid the use of the word "perception" for the act of seeing and making sense of what one has seen – even if that word's meaning in classical philosophy has been sufficiently encompassing. When talking of the understanding of a rapid glimpse of a sight it might seem unnecessary to stress a distinction in using the word of "regarding". But the reason for my change of term is that "perception" in modern usage has mainly come to stand for the seemingly immediate act of determining a sight as an entity of physical features and conceptual identifications.

The dominance of the narrow concept of perception may be explained by the fact that biological-evolutionary perspectives have since the 1950s decided the direction of most modern research within the psychology of perception. Thus far human performances have been considered and measured in the prolongation of what the most advanced animals use to perform seemingly instantaneously in their acts of seeing. It is true that "affordances" at last have been included in conditions for explaining our almost instantaneous perceptual understanding. Those are factors of meaning which demand not only physiological capacities and basic reason but also some general life experience and, very restrictively, elementary tradition. Nonetheless "perception" within that tradition of thought even today almost exclusively intend the condition of semi-instantaneous achievements.

Regarding, on the contrary, is not characterised by its directedness or extension. That act is only delimited by the fact that its continued relation to a sight ceases. In the present study it is to extended attention to the object of seeing that most interest is given – because it allows us to observe or make suppositions concerning traces of many sorts of intellectual approaches which could be part of the act of regarding.

It is the sense's contact with a particular sight and the attention that the latter receives, and only that, which constitutes an act of regarding and gives rise to a visual image. Only in turning away from the sight or engaging in something else do we shut off the process and allow the visual image to vanish.

And it is thus not just on the basis of pattern recognition and elementary familiarity with physical formations that we now understand our sights and visual surroundings; we also relate the sight to elements from modern culture and a contemporary world image. While keeping the sight under control one may well have to make extensive deliberations and computations before establishing even a preliminary meaning for certain features and conditions. While regarding, you might even read a text or consult a map, or receive information

from somebody at your side, and relate all this to what you continue to look at.

As one can stand for hours regarding a sight, the developing visual image may eventually become an extremely rich and composite structure of meaning involving very much matter applied from the spectator's everyday reality and memories. The encompassing structure of such a process is spatial, no matter which non-spatial courses there might have occurred as parts of it.

If there are any absolute limitations within an act of regarding as to the mind's ability to understand and form meaning it is in their structural conditions that these must be looked for. One such condition has already been mentioned, i.e. the inability of the mind under regarding (as well as after it) to recall and to recall earlier phases of a visual image in progress. One other is fundamentally paradigmatic: it is not possible to maintain an overall spatial control at the same time as representing one's awareness of the sight in a discursive way.

Our inability to trace the origins of the meaning that comes out in regarding is however no distinctive condition when it comes to discursive thinking. There are no doubt discourses the origins of which we can find back to, as with certain computations. But from recent linguistic discussion it turns up that for normal sentences and phrases it most probably is not before a rather advanced state that their unified linear structure can be accessible in retrospect. The reasons we normally give to explain our thoughts are no doubt mainly rationalizations.

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When somebody in an ever so ambitious act of regarding has made him/herself an image of the sight before the eyes, and then equally ambitiously describes it in words, there can not be any immediate structural analogy between this verbal expression and the visual image in question. As mentioned, the linear structure of language requires a selection of various elements out of the sight considered significant, as well as an account of relations, constellations etc which one has found significant in the same perspective. The result is then that on the one hand the text will reflect a random or conditioned preference given to certain aspects etc, while often a majority other elements of possibly complementary meaning are left unnoticed without a trace. On the other hand in its linear sequence it is bound to account for the meaning by a chain of binary connections which all the way are preferred before other possible connections, no matter if these would have supported the main sense or not.

In regarding it is also perfectly possible to select and follow just one main course, one dominating interest within the sight. But in contrast to the discursive alternative, in focusing upon a limited and perhaps continuous track within the field mind can all the time be aware of surrounding elements and of complementary or alternative meaning in relation to these.

That which after regarding is left in memory of visual images – that which here is called visual pictures – provides us matter for reflections concerning the difference between visuality and spatial quality of meaning, in distinction from the opposition between spatial and linear structure of meaning.

It is relatively seldom that, in the quality of an integral picture congruous with the sight, we can recall, a sight that we once have regarded. If so, it is still more rarely true in details to the original sight. More often than not there are some parts which we don't remember, and elements from the sight recalled with the feeling of *something to be the case* ("patterns of meaning"), without real visuality, while other parts etc might appear as "seen with the inner eye". These switches between clear visuality and recall of conditions and characters without support of sensual nature is something which we rarely notice unless really feeling a need to re-inspect the shapes and endotopes in a sight seen in the past.

In such cases it might sometimes, although not always, even be possible to obtain a visual recall for parts which were initially recalled just as patterns of meaning. But irrespective of whether the parts which are objects of attention in a recall are visual or not, it is normal that we are clearly aware of how they were internally related and located within the original field. In other words our memory retains a more or less continuous structure comprising as well visual elements as elements that do not show up visually, or don't do so without a certain effort. Thus our memory is able to organise what it recalls spatially in relation to the spatial conditions of the original visual image. In other words, spatiality does not require visuality.

Moreover, if within a spatial field we can reorganise non-visual elements from memory which are complementary to or interchangeable with visual elements, this indicates that the role of the spatial field in the mental activity is something more fundamental in mind than are even the sense impressions. This then prompts the question of whether it may not also be possible to think continuously in spatial structures without involving visual factors of meaning. This is however no small question and its teemingness would demand more particular analytical work than I am ready to do now.

There is no support for the idea that any visual appearance can ever exist in the spectator's mind as an uncompromised "pure image". This would mean a mere pattern of shapes. However, as soon as a shape is being distinguished, it evokes meaning already by the fact that one is aware of its individual qualities of shape. And any shape is susceptible to arouse associations to numerous phenomena with different types of qualities.

On the other hand, the mind instructs its own activities and takes instruction, and elements of meaning that have arisen in relation to a certain pattern of shapes will not necessarily influence the final meaning. And cultural tradition or direct instruction might discard liabilities, which don't fit in while directing

all the attention to qualities that do comply. It should then be perfectly possible to deal with pure shape, irrespective of whether this might or might not be a spontaneous mental response.

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As we have seen spatial structure of meaning is possible without visuality, while nothing is said about to which extent this applies. For visual images as cognitive structures, in their orientational account for the sight, *visuality* in any case is a primary condition. It is only in their visuality that we can apprehend their physical qualities and relate them in-between themselves. Activities and conceptions without visuality are liable to be part of their development and further meaning.

The visual representation of a sight prevails in mind as long as the images are developing and establishing as meaning. After the act of regarding visual pictures in memory most often prevail as imperfect episodic documents, not infrequently fading away after some time. But beyond them, there will be numerous new or revised conceptions and combinations of meaning left in memory, adding to its readiness for new challenges.

Sense data retained from visual confrontations are often just abstract. It is not only at the mere shapes that one must look to explain even the most characteristic and important meaning commonly given to them. As you regard the sight closely, more and more of the meaning which arises in relation to different elements and correlations may be the results of second- and third-degree elaborations. This is what makes the field of visual elaboration truly spatial. In other words, even if one receives impressions in visual form of a sight, there is for the most no special reason why the meaning, which is derived from them and kept in the memory, should be visual or directly associate to visual qualities.

As all verbal meaning is indirect in the sense that words only refer to meaning beyond the words, the substance of their meaning, as we know, is not linguistic. Not least, the final substance of each word is decided by its positions within the syntactic chain which articulates the phrase or sentence of which it is part.

For a visual image there is a comparable condition; how we make sense of different elements is decided by their relations to other objects and constellations, here not within a chain but on the contrary by being interrelated in many dimensions within one and the same field.

In neither case, however, can we be sure that the meaning which respective element acquires in situ has ever existed previously. The field provides visual images with countless possibilities for new combinations of meaning and new conceptions. But even if language in proportion of its need to propose without ambiguity is less resourceful in this respect, its range of expression is incompa-

rably much wider than that of its supply of words. Not only is the meaning of its words separated from the word themselves, its range of possibilities is also entirely beyond what the words stand for within their system.

What can we then say and suppose concerning the mere nature of substances of meaning in language in comparison with substance of meaning produced in acts of regarding? I have not found reason for to make any a priori distinction at all between those two categories. But meaning which arises as we regard sights of physical reality may be seen to cover recurrent phenomena and conditions, and so develop into stable conceptions, and eventually it might become a concept and be allotted a word to describe it. On the other hand, a literary text may well trigger extensive conceptions in more than one reader without these being traced back to specific corresponding verbal expressions.

In one respect regarding a sight may give rise to a perfect but highly restricted match between the sight and the structures of meaning created: every noticed shape has a representation as meaning within the visual image, and nothing being part of the visual image as orientational field then lacks visible hold in the sight.

Not even schematically it is possible to identify the visual image as a structure of meaning with the totality of immediate meaning which is directly related to its shapes. As maintained in the earlier discussion, from constellations of simple and established elements further meaning is all the time emanating without having immediate abutments in the visual scene. The spectator discovers that different elements within the scene can be connected by common qualities, common conditions and common contexts – none of which is immediately visible – and arrives to articulate the images as meaning in including contextual conditions.

Visuality is not a transitory state of mind, and it is not relied on perception alone. Visuality has a permanent role to play in our inner mental activities. We inspect, with greater or lesser success our visual pictures as memories from something which we have experienced, often going back to them in an attempt to recall objects and features as they once appeared in their original situations and relations. And with the aid of imagination we can often make ourselves visual representations of non-existent things or things we have never seen.

If we think of some physical phenomenon without recalling any specific past situation, our representations in the mind may be rather vague; in such cases, however, these may still have the form of "depictive representations". On the other hand precise depictive representations for well-known objects have been seen to occur quite often in human minds.

Each such representation tends to be simple and typical; they reduce the complexity of everyday impressions to a simple and typical form, which is

fairly similar for different individuals. This is a reductive conception, which "specifies the locations, and values of configurations of points in a space". <sup>16</sup> The relatively recent line of research within cognitive psychology which Stephen Kosslyn represents with the above quotation has mainly approached the interplay between depictive and propositional factors of meaning from the aspect of language. Depictive representations have also been shown to come up in situations where all meaning otherwise is in terms of language.

But not even in such specific cases have we reason to suppose that pictorial representation simply replaces or complements the conceptual one. In spite of the stereotype schematism of such inner representations these could hardly appear more than occasionally without having a function in saving mental energy or in adding to the efficiency. This function cannot be to act as symbols inside the mind; if that were the case they would have to be very numerous, which they have not been shown to be. But without adding to the information they can fulfil a role of replacement for the real object in the spatial context, in the multidimensional simultaneous confrontations in the field.

Substance of meaning arises from all sorts of operations of the mind and reason, and is accessible for all sorts of their operations. The only given limitation for human thinking in terms of qualities of substance is the one which corresponds to what is compatible with the overall structure of meaning and verbal thinking respectively; that which they by structural reasons are incapable of providing. A spatial structure can not without some intervening act give rise to discourse; a linguistic structure cannot possibly present spatial conditions.

It is an often repeated proposition, supported by linguistic theory, that verbal meaning is mediate, while visual meaning is immediate – a formula, which from one aspect is self-explanatory, but which invites confusion if taken literally or for an overall rule. But "immediate" stands as well for "at once" and for "without intermediary", and it is not always that you find this distinction observed in texts about perception. Regarding involves and demands critical and derivative mental acts; for these I can hardly find another word than thinking. Verbal reflexion is not only dependent on conventions, but also creates new meaning without detracting any meaning directly from sense impressions – so far remaining within one and the same structural system of meaning.

Up to the middle of last century it was not unusual for even specialists to take for granted that perceptions were immediate in both senses. And even if it is obsolete today, that conception is supported by our spontaneous subjectivity, which e.g. can be seen in contemporary literature. This line of thinking is also reflected in a remaining preference in the sphere of modern theory of perception to deal with relatively uncomplicated acts of seeing and observing, which require very little time.

There are, however, no temporal restrictions of how one regards something, although there are limits to the spectator's physical endurance. Meaning develops in front of the sight as long as one regards in continuity and in continuous sense relation with the sight.

This is not the same as saying that all meaning there is in any visual image is derived from one single unbroken period of regarding in which observations gradually are made and their result is embodied in the field.

The latter might be a normal case. But very often do we build up our meaning about some sight by regarding just for a while, and so break up. Whenever one stops regarding, there is some elementarily complete image at hand. We may then return one or several times and take up the viewing again. Each time a new and richer or more qualified visual image has then been established. An obvious fact to be noted is that each time quite much of the meaning from the previous image is recognised identically in the new image. No matter how satisfactory the image of the previous regarding may be, and no matter how insignificant the additional meaning which is supplied by the resumed regarding, it is the last regarding and the last visual image which represents the entire result. Of the previous regarding we may not experience any traces.

However, in detecting things, which had been added since the last time within the sight, or in correcting mistakes made in the first glance, we show somewhere to retain a very complex and precise visual memory. But we may have difficulties to call forth an even less precise visual memory in isolation from the original sight.

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Visual images collect together elements from the sight simultaneously in one comprehensive structure, which is at the same time throughout visual and throughout meaning. Any visual image is complete as an image, but different images of the same sight are differently informative. A rapid glimpse gives a visual image without lacuna, but sparse in pregnant details. Even after regarding a certain sight very carefully one will anyhow not have a resulting image which accounts for all of the visual elements and relations which could be found within the field. This is probably not even desirable, because regarding means organising meaning in creating it, and creating meaning in finding organisation in which it fits in. Too many elements make this structuring difficult and invites for confusion. It is not because some elements have not been observed that they don't seem to be part of the image, but because they in the process have been found without interest, in relation to the type of need and interest that the regarder has had. The visual image in which our regarding results is always adapted for our use, also when it fulfils its overall orientational function satisfactorily. Any visual image is incomplete in relation to what meaning there can come out of the total sight. This it is of immediately functional reasons – always being the result of a critical selection. Even if we approach a sight with an open mind just wanting to understand what we have before the eyes, there is already some general preferences for what one most want to fathom and a strategy in mind for sorting out that within the sight which most firmly relates to our previous world image and ideas about the environment etc. This can be understood as representing a standing intention. But most normally we have also further and more specific intentions in our regarding, so that different aspects upon the whole or parts of it will direct attention and decide selection among the visual elements.

Physical reality is present for our eyes in its *simultaneous manifoldness*, which is a primary aspect upon space and spatiality. In regarding we work with and establish a corresponding simultaneous manifoldness in the image. As we know the latter is entirely separate from the former; regarding is no act of translation, the visual image is an entirely mental thing and it comes about by mind's constructive working. It is just a working hypothesis, the idea we have that there is a full congruence between our visual images and the physical reality under examination.

It has been shown that human mind is able to focus upon at least three objects at a time. This faculty makes it possible to confront simultaneously at least three elements in a critical and evaluative assessment of similarities, complementarities and differences, etc. This assessment is decisive for spatial formation of meaning. Under favourable conditions, it seems, there may even be additional possibilities for simultaneous focussing when one is regarding a sight. At least we know, for example, that it is possible to embrace even more than three elements at a time, when it comes to colours appearing at different places.

If the conditioning quality of the field is its extension, the distinctive quality of elements or features on the field should be in the fact that they can be discerned spatially as individual components as well as parts of endotopes. If that which we are seeing is a natural setting, the individual visible elements within sight will appear on one unifying condition of belonging to one and the same physical reality, and everything which is to be seen there will be apprehended as one single unbroken continuity. All visible elements then appear within one and the same unifying endotope or in some interrelated endotopes, the limits of which coincide with the field. The field thus far might seem identical with the topography, the scene of action, etc., or vice versa.

There may also be, as already hinted, a manifold meaning attributed to the scene and the objects which has deviating and incompatible origins. While a traffic sign or a billboard on the street has come to be part of the same paradigm, the same objects on the football field remain clearly disparate in relation

to the rest. In the act of regarding, however, this disharmony calls for inventiveness in the act. As we said, mind searches for aspects from which all elements are compatible and from which there is to be obtained an unbroken continuity of meaning. The sight must be true, so there must be a truth about the sight.

We normally remain aware of what we see as long as the field accounts for and maintains a comprehensive space, and as long as one can return to stable visual elements and conditions.

Physical space in a natural setting or human environment is among other things traditionally analysed in terms of perspective; thus far, perspective has either been considered as an overall relevant analytic description of real spatial conditions (a view that very few maintain nowadays), or as a means with some illusion to account for spatial conditions in a picture. No doubt some of the conditions and effects which have been accounted for in classical systems of perspective correspond to common visual experiences, such as the successive decrease in size of things of the same dimensions at different distances away from the viewer. Otherwise, traditional rules of perspective are today only applied in very specific situations and to very specific conditions. Also, light conditions are important for our understanding of space and volumes, and in painting efficient effects of volume are reached with gradations of surfaces from full light to deep shadow. There is, however, no reason to believe that insights into theories of perspective and analyses of pictorial light effects mean much to enable us to deal with sights within our physical environment.

Not all spatial factors of meaning which we experience as visually manifest must necessarily repose immediately on qualities which can be directly observed while regarding. Mind no doubt also contributes factors which it can find to be necessary by reasons of consequence. Whether these are a priori categories or not, it is difficult or impossible to have a comprehensive idea of something material without implying as well space as volume. And as soon as something is conceived of as being material no matter what we discern in seeing, we tend strongly to supplement that conception with the idea of a surrounding space. Normally one does not perceive a cartoon figure drawn in just simple lines on white paper without in mind supplying the space, which is necessary for his presence and action in the fictive situation.

In rational explanations of our perception of space and distances a central role is often accorded stereoscopic vision. That latter certainly has a valuable contribution to the perception in many situations, but it is only one among several factors on dealing with purely physical space, relative distances, etc. When it comes to the field, our awareness of how things relate and are distributed within the physical space it is most often based upon relations and distributions over the field which give the best bearings, while the added contribution from stereoscopy may be unimportant.

A description based on the common percept-psychological tradition of how we achieve a visual understanding of a sight in the physical environment comes out very different in relation to our account. There is, however, nothing in the most commonly accepted psychological model of perception which appears problematic in relation to our task, neither is that model irrelevant for us. The conditions for a rapid orientation in the environment are relevant also as the initial part of a thereafter continued regarding; in the latter mind develops further meaning out of a primary orientation, with the capacity to modify the results of the former as well as to add and further develop meaning on intellectual and cultural conditions which the psychological model of perception usually has left unattended.

It is motivated in isolation to study the conditions for regarding in a wide sense, without much attention to aspects from the psychological model, because this aspect has until now been left unattended. And it has been motivated to study perception in a narrow sense, because there are so many important questions from different disciplines which are best answered if only elementary human behaviour is considered on the study, while cultural influence is left aside. But it is just a paradigmatic accident that the two aspects have been almost systematically kept apart. There is nothing to prevent that individual cultural factors play a role in the very first phases of perception. And when regarding for long we still use the same "perceptual apparatus".

When regarding a sight in the environment, we endeavour initially to account for individual elements, their locations and internal relations, in a setting which almost always contains something unexpected. In seeing and considering we thus verify or refute, complement or reduce our own earlier ideas of things and familiar conditions, and find new connections for and further qualities of what is already well-known. Deriving meaning within the field is never just the result of a simple juxtaposition of two or more perceived elements; in confronting different elements mind works out meaning in reacting critically and selectively to anything in common for them, or contrasting between them, or maybe complementary.

I can find no rational alternatives to explaining the usually confident result of our visual orientation in the immediate surrounding other than as an effect of critical judgment. It is the latter which comes to the fore in our assessment of a situation. The specific critical power of the mind can be systematically exploited within language – which, however, is not to say that it would manifest itself solely or even by preference within discursive thinking.

Regarding is a continuously critical and evaluative process. Simultaneous multidimensionality in the field provides a positioning and a condition for development pursued by mind with ever repeated critical judgments and constructive discrimination.

This critical function is crucial in the process of regarding; it is active not least in relation to earlier established meaning which it continuously evaluates in relation to the present situation.

At least as often as we take an overview of the environment and the scene before us, we focus on some limited part of the present, and then not least on just one single object.

But even in the latter case the mind usually is somewhat active in obtaining an awareness of that which surrounds the focussed object. When we really succeed in ignoring anything around the object of our attention, the latter has become the field itself. There is no context outside the field.

Given the comprehensiveness of *the orientational image* it has seemed reasonable here to concentrate on a closer understanding of how we conceive of the continuous physical presence before our eyes, rather than give separate attention to different typical situations and conditions of visual attention.

The advantages to such an approach are obvious. The orientational situation requires comprehensiveness and as far as ever possible impartiality in the process of regarding. The entire field becomes object of an evenly distributed attention; the need for secure guidance of our immediate decisions and actions works strongly against bias. Even when viewing familiar sights the task of orientation demands active inquiry into elements and conditions all of which might have changed since the last time we viewed them; this is part of a process of reassessing preconceived ideas which we normally take for granted.

If one after a first regarding has continuing access to the sight itself, it is always possible to discern the interplay of some of the basic conditions for any visual image in relation to one's own previous assessment. In the orientational situation, the mind constantly tries to apply earlier experiences and conceptions. It is impossible thus far to create such a visual image without applying preconceived ideas. But equally impossible it is to bring about a tenable orientation if one approaches the sight with prejudiced mind.

Nothing, neither individual objects nor toponomical elements, gets exactly the same meaning from the one place to the other. Thus as we regard a sight any meaning which we may initially associate with a particular element in the sight will be critically examined in relation to the present individual object as well as to other objects and endotopes around it, and to contexts of meaning arising around or near them, etc. The ultimate meaning in the present will most probably deviate from that with which we first tentatively have approached the object.

In such a process one and the same object will frequently take on a particular meaning, depending upon a particular observed relation to one or more surrounding elements. In the visual image the spatial process may have modified and specified the meaning of a certain element by critical confrontations with several surrounding or otherwise connected other elements. Sometimes, no doubt, such effects, or some of them, may even be the result of an impact from all those elements simultaneously.

There is, however, no doubt that standard conceptions have an almost as central role to play in regarding as they have in discursive thinking. It is conceivable that in regarding we start with many ideas about familiar things and these remain the same when we conclude. But within the spatial process these may have been critically exposed to different conditions, which possibly have left traces in subsequent conceptions, while they themselves may still have relevance in their unchanged meaning.

Interplays and similarities between spatial and linguistic conditions for factors within sight like those discussed above were discussed more thoroughly in the earlier part of this text.

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The mere interference of one element of meaning with another in an act of regarding can be described schematically as the product, i.e. meaning, of the intersection of different *dimensions* of meaning. In each case, as just indicated, it can be a question of several dimensions affecting the meaning in just one element, etc. But in the composite network of such intersections which can be at hand within the field it may be possible to find complex patterns involving consequences of meaning in major parts of the entire sight, or to detect common conditions between different and dispersed factors.

Within the meaning in some emanating image which we initially attribute to an element A (like being red, sharp-angled and tiny) one particular aspect can be singled out because of its impact upon element B (which is blue, sharp-angled and tall). From the same aspect we can find other elements, which when we apply the same aspect, share just one certain quality with factor A, while otherwise deviating quite markedly. These qualities, which connect those elements, make up the substance of what is here qualified as a dimension.

Dimensions are entirely analytical facilities; they can only be projected as theoretical perspective of meaning in relation to other cognitive conditions. This of course does not mean that they are lacking similarities with factors in real thought. In developing the meaning of an image mind in its quest for adequate qualifications all the time may prepare new possibilities for meaning in bringing together different conceptions with some quality in common for further consideration.

What really decides the direction of meaning in a dimension is that *aspect*, or those aspects, which in the specific case is relevant for respective participating object, condition and context. Everything in a sight might be seen from some

overall aspect, like being part of a natural setting, but during every regarding also different phenomena will be seen from different aspects. In any act of regarding, numerous shifts of aspects may occur; sometimes only to pick up some complementary or modifying meaning, which subsequently will be modified and combined in a new way. Any tangible element within the sight can be described by partly different sets of qualities, depending on from which aspect it is seen. In an act of regarding qualities of one element which has just been favoured might make us observe some specific quality of a nearby different object, which itself may have been given attention in its context because of other qualities. It is in a continuing series of confrontations – always showing traces of changing aspects – between the tangible elements and the aroused associations that the final meaning eventually comes forth.

All this is going on in a *simultaneous pluri-/multidimensional interaction* between tangible elements on the field and associated meaning sorted out in relation to the same in a process in which two necessary factors are attention for similarities (not least with past experiences) and critical evaluation.

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The orientational function of visual images may make one think of a *map* as a schematic account for a geographical area.

In life situations we normally, however, see the physical reality from a flank and near the ground, out of one specific viewpoint. A map normally presents an area from above, and adopts no particular point of view. In life we judge of distances on the basis of the perceived size, so a person far away is small and one near to me is large; we get aware of things as they appear for the eye, which is relative to the onlooker's standpoint.

In a map all distances are on the same scale, and there is nothing like a standpoint in relation to which things appear; wherever you fix your attention on the map things appear on the field on the same conditions. In life situations we develop our visual image on grounds of individual evaluation of things and conditions that we see. In a map there are conventional and stereotype signs for everything. Once you have learned what each certain sign means no individual interpretation of them is necessary or even possible. It is only their constellations which make differences.

Producing meaning from a map entails relating to an immutable overall pattern of immutable signs. All carriers of meaning in a map are preconceived, conventional. This determines the most specific field difference between the map and the visual image of an immediate reality.

But in regarding a sight we can always, as already stated, simultaneously engage in at least three dimensions of meaning, alternating with one other and with many others which arise under the process of regarding. In using the map

in orientating or planning we may note the linear trace of a road or a creek and through this schematic account for a feature from the real landscape simultaneously relate the road or the stream to a number of different dispersed but adjacent elements around. By focussing on the road that we selected initially, and by following it across the surface, in giving attention to its surroundings, we work out an individual route and note possible excursions from that. This is a pattern of multidimensional meaning within the overall lasting stereotypy of the map, a meaning which thus is as much an individual spatial achievement as any visual image of physical reality.

It is not in the stereotypical quality of the field that the real specificity of a map resides as object of visual attention. Maps can be made with individual symbols. And also in nature we all the time come across familiar shapes of immutable form and patterns made up with just such shapes, which in individual combinations provide us a rich variation of visual images, like in geological cross-sections in the landscape.

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A map may be classified as a type of *diagram*.<sup>17</sup> When it comes to diagrams in general, the extent to which they share cognitive structure with visual images in general cannot be ascertained in relation to just visuality, but in relation to the occurrence of the specific field function in which visual images get their meaning. The spatial quality of diagrams is particularly useful when the object is straightforwardly presented without the ambition of exploiting its own three-dimensional conditions. When this is the case the analogy with real space will show to be restricted.

One example of diagrams is a *semantic space* that describes the outcome of factor analyses. The different factors have usually been determined in individual operations and derived in quantitative investigations on conditions of discursive language or mathematics and accounted for as individual dimensions. When all factors are presented together in one and the same semantic space, related sideways in-between themselves, then a real cognitive space is achieved. When they are lacking connections between themselves, as often is the case, the spatial quality, however, is reduced to pedagogical graphicness.

Ideally a theoretical *model* should account for correlations in several dimensions between entities of meaning within one and the same overall context. When it seemingly brings out three physical dimensions the whole might appear as a schematic body. But most frequently those tree dimensions have nothing to do with physical space, and most often the model accounts for more than three dimensions of meaning. The real gain to be obtained from such

models resides in their capacity of presenting elements of meaning in a multidimensional way in simultaneity. A model can be understood on the same basic conditions as a sight in the physical world, which can give directives for a further and final discursive evaluation.

A model is also often preferred because of its graphicness. But that which is gained in this respect by a spatial model when presented as a schematic body is often counteracted by an element of ambiguity. All the dimensions are dimensions of meaning, which one can't miss in the model when there are four or more dimensions depicted. It is true that the three dimensions that may suggest that the model represents a physical volume sometimes really might have the objective to present physical distances. But even dimensions that are physically complementary to the former, like weight, are there presented on unequal conditions, and thus easily perceived as in some way secondary. Etc.

Such considerations may be strategic rather than essential in relation to the topic. But to take advantage of the spatial condition it is necessary to have a proper attitude to such events – there is no formal direction available for spatial evaluation.

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The visual image is spontaneously identified in the mind with the extended physical reality before us, such as we can deal with it immediately. In fact, it is a counterpart of pure meaning to the sight, i.e. to the immediate visible reality before us as pure material presence. As we are not aware of any interface between these two conditions, what we really relate to when judging about the immediate physical reality is quite simply the meaning of the inner image.

This image totally lacks the at least relative stability of that which makes up the sight itself. It is always susceptible to change in some way, to recede or grow, depending on whether further observations are made and on the critical or constructive reactions arisen during the process of regarding.

A rapid inspection of a sight usually provides an apparently adequate general schematic orientation. We relate to it as if it were pure present reality. But as soon as the object has been more thoroughly scrutinised and understood the initial field of shapes would still be there, but now more cognitively complex, adapted to earlier experiences and more rich in individual elements and correlations, distinguished from other sights and situations by its individual meaning. Had then the first summary inner image been accessible – which it is not – it would have appeared as a hasty supposition about the present in which the most of possible meaning is overlooked.

In an orientational visual image all elements in the sight appear together and contribute to the qualification of the other elements, individually and in combinations. They form a texture of meaning, of which the aspect of shapes coin-

cides with the sight. The field might thus appear to make its debut as the pattern of shapes (which then is an illusion) and finish as an entirely congruent pattern of meaning. Meantime the relation between that pattern and the texture of meaning may be different and changing. But, as already mentioned, whenever we interrupt the regarding mind will present an integral visual image on the level of complexity and control to which on has arrived in the act so far.

Any sight must be understood as an unexceptionable and continuous physical reality, part of a larger continuous reality. In regarding the sight you can disregard parts or aspects of what you see or leave them in a blurred haze, for the most without being punished by erratic orientation. You can never cover the whole, and then the important thing is to look at the sight from the aspects that will serve you best. Different aspects and interests give different constellations and interactions on the field. In regarding one can disregard most of the scene in not going into any detail, but one can never accept however insignificant parts of it to be positively missing, leaving gaps within the field like the famous white spots on maps from the 19th century of inner Africa and Asia. That would disqualify the entire field, because the very nature of as well the field as physical reality is to be continuous all the way, and according to our nature we expect it to be so.

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Regarding as our way of giving meaning to sights has here mainly been analysed under the conditions of a few standard intentions, and without circumstantial consideration for the context of life and environment in which it is achieved. It has been discussed as a basic structure for meaning, but just from the aspect of an intellectual activity, in critical relation to linguistic structures of meaning, while constantly stressing its access to and mastering all of the mind's means for making meaning, except those which are precluded by reason of the spatial structure.

In the following I will shortly discuss the act of regarding and the production of spatial structures of meaning in an existential perspective.

As already hinted, there cannot be any given standard intention for regarding; if we try to divide that activity into distinctly different types we are referred to rough practical aspects and subjective analogies. A long contemplation of a comprehensive sight has the same structural character as a rapid glance, and the latter may imperceptibly pass over into a narrow scrutiny, which then in turn might show to have been just a stage of a continued process.

The constitutive interplay of dimensions in regardings does most often aim at and result in accurately calibrated ideas of specific things from some given

aspect and under present conditions – with exclusion of numerous possible dimensions of meaning which might have come up in the process. From other aspects those would perhaps have contributed to a final sensible meaning for the same object, alternatively – in a more holistic perspective – they would have been involved in the production of some preliminary step towards such one.

If one leaves out the dynamic aspect a basic scheme for the interaction would look quite much like when in a mainly discursive context spatial means are diagrammatically used, with defined coordinates for size, shape, position and colour, to mark out an individual object or a species in adjusted agreement with the given aspects and reductive limitations in force.

The obvious difference between those two cases comes out in the way that they are described: the former as a synthesis of contributing factors, the latter as an analysis using the same factors. The act of regarding has certainly an overall synthetic character. All the way its contributing elements of meaning, however, are first singled out and modified in critical acts, the effect of which must be understood as more or less analytical in type, without of course normally being discursive.

But there is indeed a more essential difference between these cases. On its way to a narrow and precise cognition mind has preliminarily dealt with many elements of possible meaning in the confrontation of things and memories, and with many of these from different aspects. It has produced much more new meaning than that which appears as elements of the final image. Certainty about what sense one should give something appearing before the eyes is reached in a process involving critical selection as much as inventiveness. The elements between which mind makes its choices are produced in relation to the present sight, or called forth from memory in the same relation, to be critically re-assessed. In the process many elements and relations are first seen from the one aspect, attaining certain meanings in that position, but then again seen from other aspects, with results which may be rejected or retained as the ones which decide the final cognition. Or early emanating meaning might first be disregarded and later serve to underpin reasons for some different meaning.

So within a normal process of seeing there might have come up numerous specified elements of earlier non-existent or now modified meaning for which there may have been reasons, but which will not themselves be part of a final image, a final cognition, and which even might be incompatible with that one.

Seeing is a life-process. As primarily as its spatiality should define seeing it is its direct sense contact with the visible world outside us which can tell us what seeing is about. In this relation the regarder's attention is a state of being implied in the world as much as a state of extracting cognitive results from it.

When awake, we are almost constantly connected to the environment by our senses, all the time changing between states like being diffusely oriented or roughly aware of the nearest surrounding, being more actively attending to the present, or focussing with concentration on specific things and relations. Sometimes it is in well-defined acts that we regard and reach cognition. But most of our sense contact with the environment can be better described as an almost continuous flow in which awareness and direction of attention all the time change.

This flow defines spatiality as something constantly present in our active mind, and not just as a set of tools called forth for each new task or event. It goes on in a mental space which itself is part of the production of meaning. I have earlier called this vital and dynamic space *spatium*.<sup>18</sup>

In spatium we relate to the environment and its objects out of earlier experiences, summed up in firm conceptions and concepts or not, and renew bit by bit our world image in observing how the present is similar to and different from that which has already been experienced, by noticing how it deviates from the latter. But mind is not only depending on experiences from outside, it is also continuously trained by its previous actions. So why should not also these elements have left traces themselves? In a reductionist tradition one uses to consider elements of meaning which do not appear in the final cognition to be just deleted. But in serving as intermediaries on the way to achieved cognitions these elements have been part of mind's awareness. And so far nothing which restricts our memory to contain just some categories within the totality of our experiences seems to have been found out or seriously hypothesized.

When walking in our environment with open mind and eyes our relation to it is not just simply cognitive or evaluative. We also in an articulate way experience our present belonging to this particular environment, in physically relating to its space and its elements.

Taking a leisure approach, we can find the walk to be much of a dialog with the environment, in which its own features all the time are apprehended from changing aspects, resulting in changing meaning in parts and endotopes out there. In this context cultural associations at times might mean no more or no less than basic mental tendencies, e.g. the ones of making series and systems of different things that we repeatedly see. And some aspect on the present may give hold for such semi-products from earlier regardings as just discussed, permitting them to participate in new developments or to achieve final meaning themselves.

In one aspect the leaves of trees in the fringe of the wood come out as a systemic pattern like a tapestry, in another they form a mass together while the trees themselves are emphasised by their changing sizes, in a third aspect the trees are considered from the aspect of timber.

In relation to the mental flow during a meditative promenade there is no possibility to make any final distinction between inner meditation and response upon impressions from the environment – quite contrarily, even if both appear

clearly as such, they are still coherent within one and the same mental flow. And the mind's activities during such a meditative walk may be just an example of a normal and common existential relation to the sensual environment.

In such flows the term of "imagination" can be used as much for its most traditional meaning of achieving awareness of something visual as for the nowadays dominating meaning, that of fantasy.

And there is a primordial creativity to be found in the articulations of meaning which, for instance, are coming up in our early dealings with new sights, due to the joint favours of chance and human ingeniousness.

## Notes

- <sup>1</sup> Immanuel Kant, Kritik der reinen Vernunft, (1781+87), Reclam, Stuttgart 1966. Introduction I–IV.
- <sup>2</sup> Maurice Merleau-Ponty, *Phénémonologie de la perception*, Galimard, Paris 1945.
- <sup>3</sup> Edmund Husserl, *Ideen zu einer reinen Phänomenologie und Phänomenologischen Philosophie*, Max Niemeyer Verl., Tübingen /1913/, 1993. Spec. § 1–17, §27, § 47.
- <sup>4</sup> It is not possible here to combine the ambition of a continuous constructive analytical discussion with any ambitious critical discussion, not even with a selection of often quoted authors within those areas. One of the works from the field of philosophical aesthetics which is particularly often quoted concerning the nature of images is Nelson Goodman, with his *Languages of Art. An Approach to a Theory of Symbols* (The Harvester Press, Brighton 1981). It seems important here to state that his book on the contrary does not deal with the nature of images as meaning but of meaning about images as entirely symbolical structures.
- <sup>5</sup> Göran Hermerén, "Representation, Truth and the Languages of the Arts", in Veikko Rantala, Lewis Rowell & Eero Tarasti, *Essays of the Philosophy of Music*, Acta Philosophica Fennica, vol. 43, Helsinki 1988, p. 179–209.
- <sup>6</sup> Ragnar Josephson, Konstverkets födelse, /Birth of the art work/, Natur och kultur, Stockholm 1940.
- <sup>7</sup> Sven Sandström, Levels of Unreality. Studies in structures and constructions in Italian Mural Painting during the Renaissance. Figura Series 4, Stockholm 1963.
- 8 Sven Sandström, Intuition och åskådlighet, Carlson förlag, Stockholm 1995.
- <sup>9</sup> Sven Sandström, "A Theory of Intuition on the Basis of the Visual Image", in Sven Sandström (ed.), *Intuitive formation of meaning*, Royal Academy of Letters, History and Antiquities, Conferences 48, Stockholm 2000.
- <sup>10</sup> Once the idea of conducting a study in the indicated direction had taken root, I looked around for instruments to compensate for the epistemological gap between this area of research and methods and systems which depart from and presuppose language. I devoted several years to extensive but rather unsystematic reading. Eventually I began to ponder over Karl Popper's challenging remark that in principle nothing prevents humanity from getting to know everything she desires in the long run.<sup>11</sup> Taking into consideration the role which the individual world image must have as a constant co-actor in any cognitive event I recalled the idea that new meaning can rise quite simply anytime in the interaction between different and ever-changing visual factors, according to changing aspects. The certainly not unique conclusion came up that new meaning will continue to come about even since our world images would seem to alredy embrace all possible phenomena and functions. The fact that each of the latter can be seen from an undetermined number of aspects and internal relations guarantees that there will always come up more and further meaning. The productivity of aspects became an important point of departure for my theoretical work. Those reflexions among others, resulted in my book "Verkligheten är ett innanhav" / 'Reality is an inland sea'/ 1987, '12 sort of philosophical homework.

At the same time I worked with a number of art images from different times and places, in a search for articulations of meaning similar to those in the above-mentioned studies on mural paintings. The results were accounted for in "Anchorage of Imagination", (1987).<sup>13</sup> In the final part of that booklet I tried to show how within the presages of modernism in art (Cézanne, Gauguin) a concurrence between a realistic presentation of the motif (somewhat fragmentary) and a coherent system of formal articulation in colours, rhythms and shapes could appear in one and the same work. At the same time as there seemed to be opportunities for the spectator to choose between two completely integrated apprehensions of the same picture being of an entirely different nature, there did not appear to be any obstacle to enjoying both structures together as two sets of qualities

within the same overall shape. In the latter case seeing both at the same time is part of the experience; a dynamic sensation and cognitive effect is produced in the tension between them.

Later I found comparable features in art from very different traditions and times. It seemed reasonable to suppose that such features are not just parts of individual traditions and styles, but that they may represent special though more generalised faculties of a cognitive nature that artists then displayed in their images. The question of what artists knew and did within their traditions belongs, however, to the realm of art history. From the perspective of cognitive theory, the focus of interest must be on our innate or early-acquired ways of seeing as spectators, and on possible individual mental operations.

Eventually it became clear to me that viewing a scene or object must be understood as a highly structured cognitive activity which relies heavily on a variety of mental resources – something more comprehensive and much more intellectually qualified than what immediate perception usually is meant to be. In further reflections there were especially two ideas that followed me.

Anything we see – even man-made pictures – is seen as a visual image. If one wants to know anything specific about visual images, then one must avoid favouring any specific category of images/pictures.

A visual image is the product of intellectual focus on a visible object and the results of such attention. The longer and the more intensely one regards a scene or an object the more and better established is the meaning derived from it. There can be no limitations to the mental and cognitive resources which the mind can use in regarding for achieving qualified meaning. While discursive thinking cannot be used to apprehend visual space as such, there is no reason why the mind should be prevented from utilising any of its cognitive capacities when regarding.

The next step was to work out a preliminary theory of visual images based on earlier experiences. It was important to reconsider experiences out of analyses of individual images while confronting the results with preliminary theoretical positions obtained in reflections over the same.

As visual images are spatial, primarily broad as the visual scene, and so presenting their meaning in spatiality, the fundamental difference between them in that respect on the one side, and language and discourses on the other pointed the way to further research. The main structure of the now emanating theory comes out of a profiling of peculiarities within the visual context and the spatial apprehension that was then related to current theses about the nature and function of language and discourse – and to different aspects upon theses of sign theory.

Some eight years after the above-mentioned publication, in 1995, the core of my theory was published as an open argument, in the book "Intuition och åskådlighet" ("intuition and 'Anschaulichkeit'/graphicness"). As a term of cognitive theory "intuition" is here retained or recaptured in its classical, restricted meaning.

I was convinced that I now was working on the core of a comprehensive theory of visual image as a cognitive structure; one which could be compressed into the formula of a simultaneously present, multidimensional and dynamic cognitive structure for which none of the necessary conditions is depending on human communication.

In the spatial intellectual act, within the broad field of vision, the mind observes and compares the different elements simultaneously; each and all of those can thus simultaneously affect and be affected by eachother's meaning. In this way the various visual elements will be mutually connected across the field, under one comprehensive aspect (as the one or all elements are parts of a certain place, or a certain object). Concurrently, decisions regarding individual elements are acted upon by other elements as well as these themselves are acting upon the former, so that further modifications my have happened as consequences of those interactions before the visual image attains a final structure of meaning (if any meaning is virtually final).

However, given the open character of the dynamic field of an image, which is less firmly conditioned by that which is before the eyes, a different decision can be expected which would result in the creation of a different meaning.

- <sup>11</sup> To note 10: Karl R. Popper, Objective Knowledge. An evolutionary Approach, Clarendon press, Oxford 1979, p. 38 et passim.
- <sup>12</sup> To note 10: Sven Sandström, Verkligheten är ett innanhav, Vetenskap och världsbild, Symposium, Lund 1987.

- <sup>13</sup> To note 10: Sven Sandström, *Anchorage of Imagination*. Kgl.Hum.Vetenskapssamf. i Lund, Scripta Minora 1986–87:2, Lund 1987.
- <sup>14</sup> Bertrand Russell, *Theory of Knowledge, the 1913 manuscript*. Routledge, London 1992. This comes out of the discussion in chapter I. E.g. "Acquaintance is a dual relation between a subject and an object which need not to have any community of nature." "... attention, sensation ... presuppose acquaintance" p. 5. "For example when we fail to hear a faint sound which we should hear if our attention were called to it, it would seem that there is no corresponding experience in such cases." (Under reversed conditions, there is one). p. 9.
- <sup>15</sup> Immanuel Kant, Kritik der reinen Vernunft, pp. 144, 147f.
- <sup>16</sup> Stephen Kosslyn, Image and Brain, MIT press, Cambridge, Mass.1996.
- <sup>17</sup> I am indepted to Dr Christina Ljungberg, University of Zürich, for demonstrating to me the interest in my research of taking up the aspect of diagram, and for giving me the necessary references.
- <sup>18</sup> Intuition och åskådlighet, p. 87 ff.