

Dieter Maurer; Claudia Riboni; Birute Gujer

Picture Genesis and Picture Concept

2009

<https://doi.org/10.25969/mediarep/16621>

Veröffentlichungsversion / published version

Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Maurer, Dieter; Riboni, Claudia; Gujer, Birute: Picture Genesis and Picture Concept. In: *IMAGE. Zeitschrift für interdisziplinäre Bildwissenschaft*. Heft 9, Jg. 5 (2009), Nr. 1, S. 34–41. DOI: <https://doi.org/10.25969/mediarep/16621>.

Erstmalig hier erschienen / Initial publication here:

<http://www.gib.uni-tuebingen.de/image/ausgaben-3?function=fnArticle&showArticle=143>

Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

Terms of use:

This document is made available under a Deposit License (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual, and limited right for using this document. This document is solely intended for your personal, non-commercial use. All copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute, or otherwise use the document in public.

By using this particular document, you accept the conditions of use stated above.

Picture Genesis and Picture Concept

1. Introduction

The phenomenological findings presented in the previous contribution, *Early Pictures in Ontogeny*, require conceptual definition of the picture that takes its genesis into account. The following reflections are directed at a principle of this kind, and presented in the form of theses and explanations. Here the sequence of the theses follows neither the order in which the empirical findings were presented nor any other kind of systematics, but the theses are assembled as a set of mutually relating demands made on a picture concept.

2. Theses

»An icon is a sign which would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometrical line.« (CHARLES SANDERS PEIRCE, CP 2.304)

Firstly – a conceptual definition of the picture must consider the fact of the genetic quality, and with it the earliest manifestations of two-dimensional products, as of primary importance. The genetic element should be one of the touchstones against which the value of a conceptual definition of the picture as an object of investigation is tested.

Hitherto, in the debate on pictures, scarcely any attention is paid to the early stages of their development, or these early stages are ignored completely. Thus, phylogenetic references are usually confined to cave paintings, but these paintings by no means represent a beginning, but a kind of end of pictorial quality, as the draughtsmanly, painterly and technical aspects they are based on are highly developed. Ontogenetic references concerning the early stages of pictures lack almost completely in picture theory (in the sense of ›Bildwissenschaft‹ as addressed by German scholars).

Secondly – the picture should not be defined exclusively nor mainly via references to reality as perceived visually and the fictions that run parallel with this, but via what can be understood as two-dimensional quality, which it represents as a product.

Depictions are pictures, but pictures – including all products intended to be understood as two-dimensional – have always been, and frequently still are, not depictions. The fact that pictures, as visual products, can for their part ›mirror‹ things in such a way that we call this ›analogous‹ or ›similar‹, or a ›depiction‹ or ›representation of real or fictitious figures, objects, scenes and events‹ is indeed astonishing, or amazing, but nevertheless relates only to one kind of picture among others.

The attempt to equate picture and depiction (in the sense explained above) leads to difficulties that are probably insurmountable in defining graphic expressions as an object of investigation. These problems are regularly addressed in specialist literature. Therefore, only a few points from the perspective of early picture genesis will be mentioned. First of all, when attempting an equation of this kind it is necessary to decide what is to be understood in general by a two-dimensional, depicting product. Here it would be immediately obvious that frequently depiction is only a partial aspect of graphic products and therefore is not able to define the objects as such. It would not then be possible to talk about ›the picture‹, but at best about ›the pictorial element‹ as the sphere of depicting aspects, and the products themselves would have to bear a different name as such. Then it would be necessary to draw a distinction between analogies in the broader sense (without or only with a very limited possibility of a qualitative assessment of the particular correspondence between the depiction and the depicted ›object‹, and not restricted to references to the visual) and specific kinds of analogies as similarities (including the possibility of a far-reaching qualitative assessment of the visual correspondence mentioned). Furthermore, all references other than analogies or similarities would either have to be included in or excluded from anything named as ›pictorial‹. And so on. – As a countermove to this, all two-dimensional but ›non-pictorial‹ products – because they are not depicting – would have to be defined and named in their turn. The products themselves, as argued, cannot fundamentally be distinguished from depictions. Calling the sphere of non-depicting aspects itself ›abstract‹ at least needs an explanation. Calling the non-depicting phenomena themselves ›draughtsmanly‹ or ›painterly‹ would require the qualification ›merely draughtsmanly‹ or ›merely painterly‹ – a depiction can also be either drawn or painted – and it should be obvious that the two qualities themselves can be distinguished from each other only to a limited extent. And so on.

The problem addressed here does not relate to a view in which the so-called ›abstract‹ represents a borderline case of the ›pictorial‹ that appears late in the development of pictures, as a phenomenon of modern art. It must constantly be insisted that, on the contrary, the so-called ›abstract‹ precedes depicting in genesis. And more: it is only separating out the ›abstract‹ that makes depiction possible, the former is fundamentally inherent in the latter.

Or, interpreting a formula taken from Gombrich: »making comes before matching«. (GOMBRICH 1956: 116) The copying process is not possible without a form that is already in existence. Depicting requires ability. The graphic as such is constituted first by the differentiation and the development of the ›abstract‹. Only with time does the ›abstract‹ provide the means for depiction,

for depiction as *well*, but *not only* for this kind of manifestation of the pictorial. And hand in hand with the increasing distinction between different types of the pictorial goes their mutual influence and motivation, which itself runs counter to their strict conceptual separation.

Or, taking up a point made by Lorblanchet: »Pre-historians and art historians use the expressions ›figurative‹, ›non-figurative‹ and ›abstract‹ in a sense prescribed to them by the Western societies of the day: their meaning is clear, and they help specialist to understand each other better at an academic level. And yet some comments need to be made about using them. Firstly, distinguishing between ›figurative‹ and ›non-figurative‹ or ›abstract‹ probably makes no sense for prehistoric people, and also makes no sense for artists from non-Western societies and traditions.« (LORBLANCHET 1999: 212; translation by the authors.)

If some product shows independence in relation to a physical function in its *produced* qualities – however limited this independence may be, and however concealed it may seem within a particular context –, then this is as a result of independent thinking, understanding, and a corresponding intention.

If the distinction drawn in English between the expressions ›image‹ and ›picture‹ can be used to define the difference between ›image‹ as the generic term and ›image as a physical product that can be visually perceived‹ as a specific type of image (note: two qualifications), then the linguistic difference between the German expressions ›Bild‹ (in the sense of ›picture‹, that is, ›erzeugtes, visuell wahrnehmbares Bild‹) and ›Abbild‹ should be used to distinguish between ›picture‹, now itself a generic term and ›picture that relates analogously to figures, objects, scenes and events that can be otherwise visually perceived or imagined‹, as a specific type of picture. Observing early pictures in picture genesis leads to the claim that ›picture‹ should not be equated with ›depiction‹ from the very outset. – However, this kind of distinction between ›picture‹ and ›picture that depicts‹ should not gloss over the continuing conceptual problem that depictions as products have to be distinguished from depicting aspects in pictures, that pictorial analogies to the non-visual exist, and that other and varied types of picture references exist that were not discussed here at all.

Thirdly – the fundamental distinction between ›picture‹ and ›ornament‹ should be abandoned.

All the above arguments lead to such a claim. ›Ornament‹ as an expression can define a certain function of pictorial quality in a particular context, but is not suitable either as a term for the so-called ›abstract‹ or as a counter-term to that of the picture as depiction.

Fourthly – equating the expressions ›picture‹, ›pictorial‹, ›pictorial cognition‹ with the expressions ›icon‹, ›iconic‹, ›iconic cognition‹ requires clarification.

Equating ›picture‹ and ›icon‹ (and related expressions) requires linguistic clarification because it frequently brings together two different traditions, which can lead to a fundamental misunderstanding.

On the one hand, the expression ›icon‹ is often used as a technical term for ›visual image‹, and then takes up a particular kind of debate that goes back to antiquity. On the other hand, the ex-

pression often appears with reference to Peirce (1931-1935, 1958) and is then identifying a certain relationship of a sign to its object, as ›likeness‹ (in the broadest sense). But the two uses cannot be made to agree, because according to Peirce, the ›iconic‹ does not have to be visual.

Admittedly it is possible to argue that also according to Peirce all pictures are ›iconic‹ (even though this is not intended to suggest that they are only ›iconic‹ and definitely not that they ›depict something real or fictitious‹ in the present sense): »An icon is a sign which would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometrical line.« (PEIRCE, CP 2.304) To the effect that all pictures are created to appear as graphic products, and these also have to be perceived as such – to this effect all pictures are iconic: the streak, this material thing, must be understood as a line, this graphic thing. But corresponding points can be made about other objects with the nature of a sign.

According to Peirce, pictures can be fundamentally (although not exclusively) ›iconic‹, but not every picture depicts, and not every ›icon‹ is a picture.

Fifthly – pictures should be counted as signs.

Whenever the question arises of whether a picture can be defined as a sign, first of all the question has to be clarified of what definition of a sign this judgement should relate to.

Graphic products for which the word ›picture‹ is used here are made in such a way that they are understood as flat, as two-dimensional. Because understanding constitutes the pictures – both in their production and the way they are perceived – they belong, following Peirce's approach, within the category of signs: everything that shows an effect on the basis of understanding is a sign according to Peirce. As the expression ›understanding‹ is assumed but not explained in this formulation, turning it round may clarify this view: everything that makes a physical effect outside understanding is (to this effect) not a sign. But seen physically, pictorial quality makes no effect.

If Peirce's definition is rejected, and if it is claimed that pictures can be something other than signs, then once more we are faced with difficulties that are probably insurmountable. The current German attempts to establish a ›Bildwissenschaft‹ present a very impressive ›picture‹ of these difficulties. Apart from a substantial consideration of the critical aspects, only two indications will be given from the perspective of picture genesis. On the one hand, assuming that some of the early pictures are not counted as signs, once more the problem arises that it is possible to define only aspects, and not products. Frequently – if not always – only sign qualities and other aspects of a graphic product would be under discussion, but not signs and other pictures or, even more varied, signs, other pictures (as depictions) and other graphic elements. On the other hand, if, in the case of pictures, sign qualities have to be distinguished from other pictorial qualities when dealing with graphic matters (to remain with this simple distinction), then in the case of three-dimensional products, sign qualities would have to be distinguished from other sculptural ones, in the case of sound products, sign qualities from other musical ones, in the case of something expressed in movement, sign qualities from other dance-related ones, and so on. This would mean losing any higher perspective, or, looking at it more closely, postponing it: despite some lack of definition, a pervading ›sense‹ or ›meaning‹ is probably always assumed to be a prerequisite – pervading

not just the various possibilities within a sphere of production and expression, but also all these spheres.

However, on the basis of all these arguments, the present approach to understanding pictures as signs should not be attributed to a single party in the current positional dispute, above all in the ›Bildwissenschaft‹ dispute. The starting point here is not a view of signs and representation deduced from verbal language. Different kinds of signs refer to different kinds of cognition, and, thus, counting pictures as signs does not mean seeing them as phenomena that are very close to words in every case.

Sixthly – Picture are not necessarily and in all their aspects subject to convention.

Observing the universality of early picture genesis, with regard both to so-called ›abstract‹ and to analogous aspects, demands that the picture be understood as such.

Observing the universality of an important part of the genesis of early graphic structure requires critical examination of the characterization of pictorial representation, as stated by Goodman (1976). The same holds true for Eco's concept (Eco 1972), structuring the visual code in terms of ›iconic figures‹, ›iconic signs‹ and ›iconic semes‹.

To avoid misunderstandings: empirically establishing a universal aspect of picture genesis, and consequently rejecting a fundamental cultural coding of all pictures in all their aspects does not mean insisting on an ahistorical and socio-biological perspective (both adjectives are borrowed from Mitchell; see Mitchell 1986: 37) and saying that pictures are natural because they are not coded. Referring to the universal aspect of picture genesis means reopening the question of how to understand quasi-equal picture qualities for different cultural contexts.

Seventhly – pictures are not necessarily and in all their aspects subject to communication between two or more people.

Observing the universality of early picture genesis again demands understanding the picture as such: a structure with universal character excludes any concrete communication *by that very fact*. Observations made in investigating the early graphic process, as well as the above-mentioned findings about early analogy formation that adults understand only when children comment on them verbally in their term confirm partial autonomy of the picture from concrete communication between two people.

3. The ›concrete‹ as sign

The above theses express demands on a general concept of the picture which are to be deduced from the perspective of early picture genesis.

One of the most important questions opened up for further clarification relates to the graphic as ›concrete‹ itself, and thus also to other objects with sign quality, and is concerned with the distinction between ›syntactic‹ and ›semantic‹. So, in conclusion, some reflections about that.

The distinction between qualities of the sign itself as qualities of the signifier (›syntactic‹ qualities) and of the signified (›semantic‹ qualities) is generally derived from a linguistic or structuralistic approach. Yet, according to this approach, the ›syntactic‹ side is articulated, separated out, at the same time and in a mutual relationship with the ›semantic‹ side (Saussure 1916/1092), and this by no means corresponds with picture genesis data.

According to the structuralistic approach, both the ›syntactic‹ and the ›semantic‹ side are subdivided into ›substance‹ and ›form‹, with, in the case of the ›syntactic‹ dimension, ›form‹ representing an articulation of a material that is physically present and therefore open to description. Put more simply, the structuralist approach works on the basis that a given material is ›marked‹, in order to use these (oppositional) markings as defining qualities. Albeit with the important rider that this material is not seen as something merely physical, but something sensory, i. e. a mental image of a perception of something physical.

Let us first consider such an approach with regard to voiced speech sounds: the tonal characteristics of the movements of the vocal folds and the resonances created in pharynx, mouth and nose (in the vocal tract) form a physical sphere of resonance phenomena which can be described as a physical dimension in terms of possible resonance patterns of the human vocal tract. According to the current theory, the vowels in a particular language emerge by a ›marking‹ of resonance patterns that are clearly distinguishable from each other (Fant 1970). In a particular language, resonance patterns that are very similar to each other each correspond to one vowel, and resonance patterns that are clearly distinguishable from each other represent the differences between various vowels.

But how can such a distinction between ›material‹ and ›form‹ be applied to graphic qualities? In terms of colour it is tempting to define the physically given spectrum of light and the corresponding human perception of it as the given dimension, and the colours and mutual colour relationships in a graphic product as ›markings‹ of this dimension. But important difficulties emerge when considering drawn lines and forms. The line does not correspond to a physical dimension that is perceived as such and then is ›marked‹ (as straight, wiggly, curved, undulating, with corners, but this series does not make a lot of sense, and definitely cannot be continued satisfactorily to include all phenomena in pictures). In consequence, it is not possible to provide a physical property or value to which the phenomena of the line can be related.

The possible objection that lines, patches and contours in a picture are not based on a physical dimension, but very probably on general processes or structures of visual perception, has not been proved, and it is permissible to doubt that it ever could be proved successfully. In any case – early picture genesis represents one of the touchstones for this thesis. If the thesis were true, then the temporal sequence of early graphic forms emerging in ontogeny would have to ›mirror‹ the general structure of visual perception. Early picture genesis would have to correspond with a kind of hierarchic structure of visual perception itself, a parallel that we assume cannot be established.

It may be right to say of colours in pictures that they are sensory in the narrower sense, ›prints‹ of something physical in perception and imagination. But no corresponding simple statement can be made for drawn lines and forms.

However, let us take up the apparently plausible example of voiced speech sounds again. Remarkably enough, vowel sounds do not behave according to the principle of ›substance‹ and ›form‹ that has been described: every broadly based phenomenology of actual sounds shows that the resonance patterns that can be observed deviate strongly from the values to be expected of it. And it deviates so strongly that the same resonance pattern and with it the same expected physical qualities for one single vowel can be identified for vowel sounds of very different perceived identities (Maurer & Landis 2000). Remarkably enough, a particular resonance pattern does not define a particular vowel identity, but reveals itself as ›ambiguous‹.

So why not assume that the ›concrete‹ element of some signs – including words and pictures – cannot be compared with other concrete things? Why not assume that going back to the ›sensory image‹ of a physical property and its marking is not successful for some signs, and that is precisely where the ›concrete‹ element *in them* lies?

So why not assume that the ›concrete‹ element of some signs itself carries sign character? That it does not exist without understanding? Why not assume that, when questioning the emergence of such signs, the primary aspects lie in their qualities themselves, as such, and not in their ›meaning‹ as a relation to something outside themselves? When applied to the early development of pictures, then, the non-derivable quality of the observable phenomena from physical, motoric or sensory properties would have to be investigated and discussed first, and only subsequently their ritual ›meaning‹ (phylogenesis) and their qualities as copies or codes (phylo- and ontogenesis).

So why not assume – as indeed some current thinking does suggest – that it was not Homo sapiens who was the first Homo pictor, and not even Homo neanderthalensis, but Homo erectus.

Acknowledgements

The research reported here was supported by the Innovation Promotion Agency CTI Switzerland, the Swiss National Science Foundation, the Lotteriefonds Zurich, and the Swiss Foundations Baugarten, Susan Bach, Göhner, Zurich Assurance, Mercator, National Assurance, Alfred Rietrich, Claire Sturzenegger-Jeanfavre, Mobiliar, Vontobel.

The research is under the patronage of the Swiss Commission for UNESCO.

We thank Michael Robinson anew for his attentive and accurate translation of the German text into English.

Literature

ECO, UMBERTO: *Einführung in die Semiotik*. Munich [Fink] 1972

FANT, GUNNAR: *Acoustic Theory of Speech Production*. The Hague [Mouton De Gruyter] 1970

GOMBRICH, ERNST HANS: *Art and Illusion*. London [Pantheon Books] 1960

GOODMAN, NELSON: *Languages of Art*. Indianapolis [Hackett] 1976

LORBLANCHET, MICHEL: *La naissance de l'art*. Paris [Errance] 1999

MAURER, DIETER; LANDIS, THEODOR: Formant pattern ambiguity of vowel sounds. In: *International Journal of Neuroscience*, 2000, 100: 39-76

MITCHELL, W.J.T.: *Iconology*. Chicago [The University of Chicago Press] 1968

PEIRCE, CHARLES SANDERS: *Collected Papers of Charles Sanders Peirce (CP)*. Vols. 1–6, CHARLES HARTSHORNE; PAUL WEISS (eds.), vols. 7–8, ARTHUR W. BURKS (ed.). Cambridge [Harvard University Press] 1931-1935; 1958

SAUSSURE, FERDINAND DE: *Cours de linguistique générale* (1916). Edition critique préparé par Tullio de Mauro. Paris [Payot] 1972