

Groupe µ and the system of plastic form

Andersson, Fred

Published in:

Heterogénesis: Revista de Artes Visuales

2008

Link to publication

Citation for published version (APA):

Andersson, F. (in press). Groupe µ and the system of plastic form. Heterogénesis: Revista de Artes Visuales, (57-58).

Total number of authors:

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
 • You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 17. Dec. 2025

GROUPE μ AND "THE SYSTEM OF PLASTIC FORM"

— FOR AN EVALUATION

By Fred Andersson (Lund University, dept. of Art History)

1. In general

It was a long time ago that the agents in the field of visual art were supposed to be concerned with visual issues only. But does it follow from this that we must dismiss the whole concern with such issues as being elitist formalism? I don't think so. On the contrary, I'm convinced that the present situation offers exciting possibilities for reconsidering visual aesthetics. Because when the so-called "global" art-world denounced the modernist idea of purely visual art, it also denounced the idea that there could be such a thing as pure and empty visual form — form without content. As a matter of fact, the art/design transgression of today's "object art" tends to expose the ideological nature of what was once supposed to be just a matter of form. Consider, for example, the Argentine duo Zinny & Maidagan and their "interventions" in modernist architectural environments.

So if contemporary artists can study form without accepting the myths of aesthetic "formalism", why can't semioticians? We wouldn't even need the problematic concept of "art" — because if art doesn't equal form (except in the world of surviving "formalists"), form couldn't be supposed to equal art either. What we need is some comprehensive models of how forms, colors and textures can carry meaning and evoke associations. And we need straight, empirical data on how certain visual phenomena are received and interpreted in various environments, groups and cultures.

As for the first level — the model level — Groupe μ has offered the hitherto most complete definition of the plastic sign ("le signe plastique") in its seminal work *Traité du signe visuel* (1992). In its account of the plastic dimension as precisely a sign, Groupe μ aims at a synthesis between what it calls the provincialisms of

¹ One of these "interventions" took place at the Konsthall in Lund during March and April 2004.

methods ("provincialisme méthodologique") in disciplines such as perceptual psychology and aesthetics. As for the second level — the empirical one — the findings of Lindekens in the Seventies and of Espe and Krampen in the Eighties could provide a platform for further investigations. Let's hope that they can take place within a truly interdisciplinary field of "visual research" — a field in which problems and hypotheses could be formulated quite independently from the temporary conjunctures of the art-world.²

In relation to such wide prospects, my aims with the present text are quite modest. I wish to give a brief summary of some parts of Groupe μ 's theory of the plastic sign — parts that hitherto have been directly available only to those familiar with French, German or Spanish.3 In addition to the plain and simple presentation of the theory, I shall also suggest some interpretations of laconic or unclear passages, and present some reservations.

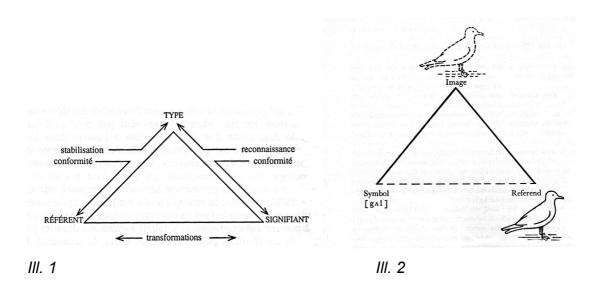
Whilst Groupe μ performs an analysis that concerns both the system of visual forms ("systématique de la forme"), the system of colors ("systématique de la couleur") and the system of textures ("systématique de la texture"), I shall focus solely on the system of forms. In accordance with the German translation of the relevant passages of the *Traité* (passages actually published before the book itself), I shall refer to this system as the system of plastic form ("Das System der plastischen Form"). It's important to note, however, that Groupe μ use the word "form" in two very different senses. On the one hand the popular one, which has to do with purely visual qualities and which is the one referred to in the phrase "system of plastic form". On the other hand the semiotic one, which is far more complicated. To make things more clear, I shall from now on use the term "plastic form" for the former and the term "semiotic form" for the latter.

The system of plastic form is of course more basic than the other ones — those of color and texture. The reason is that in everyday perception, we experience most colors and textures as belonging to distinct objects and hence to visual forms. And this gives the former a secondary role in the visual rhetoric that is the main and final

² Such an alternative is actually vindicated by Klaus Sachs-Hombach in his program for a "Bildwissenschaft".

 $^{^3}$ I refer to Groupe μ , *Traité...* (1992). This work has been translated into Spanish as *Tratato del signo visuel* (Madrid 1993). The German translation of the passages concerning "the system of plastic form" I refer to as: Groupe μ , "Das system..." (1988).

topic of the *Traité*.4 It's almost trivial to point out that color and texture lends itself to a lesser extent than plastic form to distinctions and classifications, and hence to the repetitions and regularities that constitute the basis for rhetorical deviations.



2. The iconic/plastic distinction and the notion of "Type"

Consider Groupe μ 's model of the iconic sign, reproduced here as illustration 1. At first sight, it looks quite similar to the widely known "semantic triangle" of Ogden & Richards — a variant of which I reproduce in illustration 2. The position of the "Type" corresponds to that of the "Reference" or "Image" in Ogden & Richards' model, whilst Ogden & Richard's "Symbol" has switched position with their "Referent" and is now called signifier ("signifiant"). It's however important to notice that the notion of "Type" cannot be synonymous to that of "Reference", let alone that of "Image". It certainly has much broader implications. The following quotation from the *Traité*, about types, should make this point quite clear:

"[...] il ne s'agit de réalités empiriques brutes, antérieures à toute structuration: ce sont des modèles théorique. Entre une forme type et la forme perçue, la couleur type et la coleur perçu, l'objet type (qui sera plus loin défini comme icône) et l'objet perçu, il y a donc le même rapport qu'entre le phonème et tous le sons qui peuvent lui être associés [...]".⁵

⁴ See also Groupe μ, "Toward..." (translated extracts from *Traité...*).

⁵ Groupe μ , *Traité...*, p. 97. My translation: "it's not a matter of raw empirical reality, independent of any structuration: [types] are theoretical models. Between the typical form and the perceived form, the

So for Groupe μ types are at the root of the very order that makes it possible to fit the objects of our everyday world into kinds and categories, and thus to attend to the content of iconic signs. But even the expression plane of such signs — i.e. colors and plastic forms — is said to be a matter of types and of typifying. From this, the valid conclusion would be that there are plastic types of the plastic sign as well as iconic types of the iconic sign. This is also in agreement with the definitions in the *Traité*, even if iconic types ("types iconiques") and plastic types ("types plastiques") are for the most part subsumed under the common term "Types", plain and simple. And "Types" in this general sense are in several passages defined as semiotic form — i.e. as form in Hjelmslev's sense ("au sens hjelmslévien du terme").

The complex status of the "Type" is shown with arrows in the upper part of Groupe μ 's diagram (illustration 1 again). The referents of our everyday world are defined as "stabilized" in relation to the types under which they are subsumed — a stabilizing ("stabilisation") of the "order of things". In a symmetrical manner, the mental act of catching the content of an iconic sign is said to be one of recognizing ("reconnaissance") types in the Signifier. This mediatory function of the "Type" supposes that its relation to both "Referent" and "Signifier" is one of conformity ("conformité"). The lower axis of the diagram, between "Referent" and "Signifier", is however an axis of transformation. This means that the signifier is always to a greater or lesser extent altered and transformed in relation to the referent — to a lesser extent in photographs, to a greater extent in simple or deformed representations.

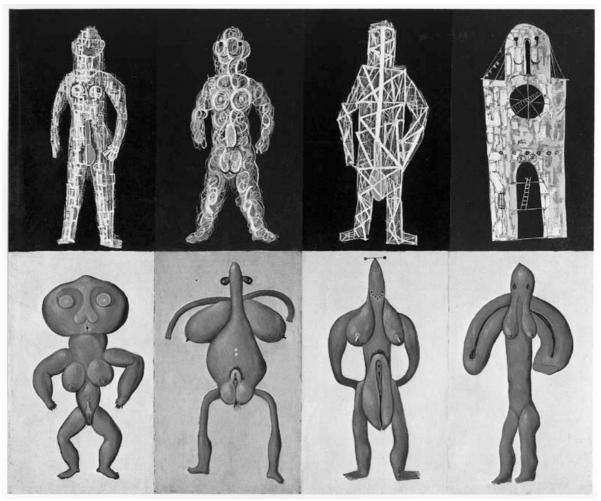
At present I can find no better example of the dynamics of transformation than the painting reproduced in illustration 3: Victor Brauners *Little Morphology* of 1934. This is actually a piece of applied semiotics, just like the work of so many other surrealist painters. The reason that the last "man" in the upper row could still be seen as at least "human", in spite of the fact that he has now become a tower, is that there is still enough left of the type "human" in this image of a tower. But the only way to trace an analogue or "motivated" connection to the referents of real humans is through the preceding variants — i.e. along the axis of transformation. The signifier-

typical color and the perceived color, the typical object (which will later be defined as icon) and the perceived object, there is consequently a relation similar to that between the phoneme and all the sounds that might be associated with it [...]".

.

⁶ Ibid., p. 97.

type relation is, on the contrary, claimed to be "arbitrary". Because, as Groupe μ writes: "many different objects can fit one type (whether as signifiers or as referents)". The difference between the heads of the "women" in the lower row is a good example of this relation. But it is hardly "arbitrary" in a strong sense.



III. 3

The plastic sign, by contrast, "has no referent by definition".⁸ This statement of Groupe μ could be modified, if we say that the plastic sign must be a sign in which the referent is identical to the type (like in an "exemplification").⁹ But there could be no axis of transformation here, and the reason is obvious even if I can't see that Groupe μ spells it out anywhere. Think of a circle again: if it was to be deformed in a way

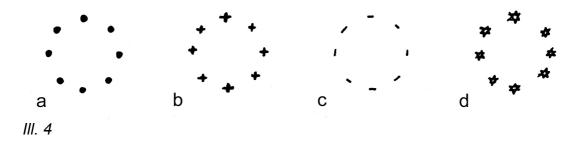
⁷ Groupe μ, "Iconism", p. 34.

⁸ Groupe μ, "Toward...", p. 584.

⁹ This must amount to the same thing as Peirce's definition of icons as the only signs in which "the Interpretant may be the Object". See Peirce, The Essential..., p. 277.

similar to how the man and the woman are deformed in Brauner's picture, the plastic type "circle" would no longer be there. That is: if the deformation is considerable. Because even highly imperfect circles are in fact seen as circles.

By contrast, the signifier-type relation of the plastic sign cannot be dramatically different from that of the iconic sign, because even in the plastic sign different objects can fit one type. 10 I give an example of this in illustration 4. And this obvious constancy in pattern recognition must be the main reason that Groupe μ , today and in the *Traité*, considers the plastic sign to be an utterance ("énoncé") whose semiotic form could in fact be separated from its substance. 11



This later theory of the *Traité* is however very different from Groupe μ 's first systematic account of the iconic/plastic distinction, in an article of 1979. Here, it actually chose the circle as example. If the circle might stand for such things as "head" or "balloon" on the iconic level, the group argued, then it would on the plastic level stand for the concept of "circularity". By the same token, the group defined both the iconic and the plastic associations as signs in a strong sense, i.e. as "denotations". It then stated that both kinds of denotations, respectively, are connected on a secondary level to "connotations". As a possible connotation to the iconic content "balloon" they suggested for example "joy", and for the plastic content "circularity" they suggested "God" and "formal perfection". But if we read Groupe μ 's master Hjelmslev closely in his original Danish, it becomes obvious that the

¹⁰ The "type" here equals the "gestalt" of mainstream perceptual psychology.

¹¹ Groupe μ, "Toward...", p. 584.

 $^{^{12}}$ Groupe μ , "Iconique et...", p. 180.

mentioned "connotations" cannot be connotations in his sense.13 This is one of the main points of Göran Sonesson's critique in *Pictorial Concepts*.¹⁴

And strangely enough, the 1979 definition of the plastic sign as a denotation with connotations happened to be incompatible with what Groupe μ had to say, in the very same text, about its basic nature. In 1979, Groupe μ hadn't yet arrived at its later conclusion that both the iconic and the plastic layer must involve semiotic form. Instead, it stated that plastic language ("language plastique") is something that is always unique for each and every plastic statement — for each and every picture. The consequence of this, it concluded, must be absence of semiotic form, because:

"Une 'forme' serait, par example, une opposition de bleus reçue comme un lexique établi, investie de valeurs fixes (non nécessairement sémantiques) pour chacune de ses unites". 15

But the necessary condition for there to be a denotation is, still "in Hjelmslev's sense", semiotic form. So if there is no such form on the plastic level, there could be no denotations either — and consequently no connotations, as long as we stick to Hjelmslev's definition of the connotation as a function in which the denotation itself is a functive ("funktiv"). As a consequence of this, the definition simply turns out to be contradictory. And from such conditions it would come as no surprise that the concepts of "denotation" and "connotation" are almost absent in the *Traité*.

3. The system of plastic form

Groupe μ observes that each of the three plastic systems that it defines — the system of texture, the system of color and the system of plastic form — is determined

 $^{^{13}}$ Hjelmslev, *Omkring...*, p. 104. Here, Hjelmslev draws a clear distinction between connotations ("konnotationer") and signals ("signaler"). Groupe μ 's examples must be defined as signals.

¹⁴ G. Sonesson, Pictorial..., pp. 119-23 and 150-51. Sonesson here uses the term "stylistic connotation" in a sense close to Hjelmslev's "signal".

 $^{^{15}}$ Groupe μ , "Iconique et...", p. 182. My translation: "A 'form' would be, for example, an opposition between standard blue colors, standardized as a lexical code that invests fixed values (not necessarily semantic) into each and every one of its units". Note that the term "fixed values" here implies both phonetic ("not necessarily semantic") and lexical values.

¹⁶ Hjelmslev, *Omkring...*, p. 101 ff.

by its own set of basic factors. These factors are called, respectively, texturemes ("texturemes"), coloremes ("chromèmes") and formemes ("formèmes"). The number of texturemes are said to be two, namely the "textural element" (as for example a brushstroke) and textural repetition (as for example the repetition of brushstrokes). The number of coloremes are said to be three, namely chroma ("dominance"), brightness ("luminance") and saturation ("saturation"). The number of formemes are likewise said to be three, namely position, dimension (i.e. size) and orientation. These distinctions seem both valid and fundamental. As regards plastic form, it is however possible that the number of factors could be extended.

A more debatable question on this level is that of terminology. Why does Groupe μ speak of texturemes, coloremes and formemes? These neologisms surely have strong connections to linguistics, and to the notion of the phonemes of spoken language. But Groupe μ 's categories are hardly comparable to phonemes. The distinction between position, dimension/size and orientation is an absolute distinction — in fact a distinction between "dimensions" in a more abstract sense. In the realm of speech and phonology, they would be comparable to such dimensions as tone and duration. A phoneme is another thing altogether — solely determined by the articulation of language structure. It is, as Groupe μ itself remarks in one of the passages quoted above, a "theoretical object" of language analysis. So why not speak of "dimensions" or "categories" rather than "formemes"?17

In the system of plastic form, there is a hierarchic relation between two of the "formemes" in relation to the third — because position and dimension must be determining factors for orientation.18 As an example: consider a rectangular figure, composed as it is from two long and two short lines. If the short lines are posited at the bottom and the top of the figure, it will be vertically oriented. If the lines are, on the contrary, posited at the left and the right, the figure will be horizontally oriented. So the orientation of the rectangle, or of any figure, is a function of the dimension of its different parts in relation to the position of them.¹⁹

_

¹⁷ See Felix Thürlemann's definitions of "plastic" and "topological" categories ("catégories") in: Greimas & Courtés (red.), *Sémiotique...*, pp. 239 and 168.

¹⁸ Groupe μ, "Das System...", p. 220.

¹⁹ An analogy of sound would be increasing or decreasing intensity as a function of intensity and "position in time".

All three "formemes" are by definition relative in relation to the picture plane (Fr: "fond", Ger: "Grund") and to its central point of focus (Fr: "foyer", Ger: "Blickpunkt"). This means that depending upon the position of an element in relation to the picture plan and its centre, we would characterize it as for example "behind", "in front", "in the upper left corner", et cetera. The analysis of position must therefore take the form of a system of oppositions between for example "left" or "right". And the fact that orientation is determined by position also means that the system of orientation is isomorphic to that of position. The system of dimension, by contrast, must have an intermediary function between those of position and orientation, and can only involve the oppositions "big versus small" and "distant versus near". The system of position then looks like this according to Groupe μ 's analysis:

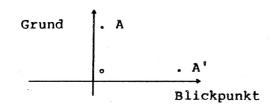
- The basic opposition is that of figure versus ground
- The second opposition: figure and ground could be seen as if they were at the same plane (as in "planar geometry") or as if they were at different planes (in which case enclosed shapes are seen as either massive objects or holes)
- The third opposition: if seen as a different plane, the figure could be seen as either in front or behind
- The fourth opposition: the figure could be central or marginal in relation to the center
- The fifth opposition: if marginal, the figure could be above or under the center (opposition of verticality)
- The sixth opposition: if marginal, the figure could be to the left or to the right of the center (opposition of horizontality)²⁰

The system of dimension, by contrast, could intuitively be anticipated to involve only one opposition: "big versus small". But this is but one aspect of the phenomenon. Dimension must also be defined in relation to the point of focus, which is always the point of focus of the spectator. Groupe μ gives one quite clarifying example: think of something that has been spilled out on a big table. The resulting stain could be tiny in relation to the table (when seen as a ground), but quite big in relation the ones sitting near.

_

 $^{^{20}}$ Groupe $\mu,$ "Das System...", pp. 218-19.

The group also gives an opposite example: think of a miniature portrait with a stain on it. Here, the stain is gigantic in relation to the picture plane, but very tiny in relation to the spectator (i.e. in relation to the point of focus).²¹ This is illustrated in the diagram of illustration 5, in which the arrows indicate decreasing size in relation to the picture plane (vertical) and increasing distance in relation to the spectator (horizontal). The coordinates A and A´ stand, respectively, for the stain on the table and the stain on the miniature.



III. 5

The system of orientation, being homologous to that of position, is analyzed as follows:

- Given: that there is a figure that is experienced as having a position either within the picture plane or behind/in front of it.
- First opposition of orientation: that the figure is oriented either within the plane or beyond it (this separates fronto-parallel styles from more realistic ones)
- Second opposition: if oriented beyond the plane, the figure could be oriented either outwards or inwards in relation to the plane
- Third opposition: either if oriented within or beyond the plane (either if frontoparallel or receding effect), the figure could be oriented either outwards or inwards in relation to the center (opposition of the centrifugal and the centripetal)
- Fourth opposition: if oriented outwards in relation to the center, the figure could be oriented either vertically or horizontally
- Fifth opposition: if oriented vertically, the figure could be oriented either upwards or downwards (opposition of verticality)

²¹ Ibid., p. 220.

 Sixth opposition: if oriented horizontally, the figure could be oriented either leftwards or rightwards (opposition of horizontality)²²

But this turns out to be an incomplete analysis of orientation, Groupe μ contends, because it only does justice to orientation experienced as direction — i.e. as "vectorality". Orientation and direction are, however, not synonymous. As the group remarks, even a circle could be said to have an orientation, namely the inwards orientation of all the positions of the periphery in relation to the center.²³ But of course it has no direction. And when we say that openings and cavities are "oriented" in certain ways (as in "the entrance is oriented to the South"), this is certainly not a question of direction either. Groupe μ therefore adds the following oppositions:

- Seventh opposition of orientation: a figure could be concentric (i.e. absence of direction) or not
- Eighth opposition of orientation: a figure could be open or closed²⁴

In case of a concentric figure that is closed — i.e. a circle — orientation is experienced as completely stable. But as soon as an opening is created, the dynamics become more ambiguous. Groupe μ takes the example of a semicircle, but we could for the sake of simplicity think as well of the letter "C". What is its orientation? If the cavity were seen as relevant, we would describe it as oriented towards the right. If the convex left side were seen as relevant, by contrast, the orientation would be described as leftwards. And depending upon the overall plastic form of the letter (i.e. the typeface), its character would be seen either as horizontal, vertical, or both (i.e. diagonal/italic).

However, this whole analysis only concerns the signifiers of the system ("les signifiants"), i.e. the expression plane of the plastic sign. The signifieds ("les signifiées"), i.e. the content plane, correspond to the signifiers in the following manner according to Groupe μ : position to attraction, dimension to dominance, orientation to

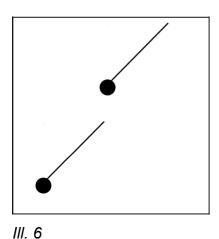
²² Ibid., pp. 220-21.

²³ Ibid., p. 220.

²⁴ Ibid., p. 222.

balance.²⁵ This is merely taken for granted by the group, and the examples provided are quite obscure. However, the theory can be validated as follows.

Lines or plastic forms that are identical in all other respects could be experienced as different as regards either attraction, dominance or balance. As an example of the first alternative: consider the experiments of Goude and Hjortzberg (referred to by Rudolf Arnheim) in which a circular black magnet was moved on a quadratic, white metal plate. Experimental subjects were told to indicate whether they experienced any variation in attraction at the various positions. It turned out that the positions at which the subjects experienced the greatest variation in attraction coincided with the structural skeleton of the picture plane (i.e. its medians including the diagonals).²⁶ The variation could then be regarded as a plastic content that has nothing to do with the object as such, but only with its position in the picture plane.



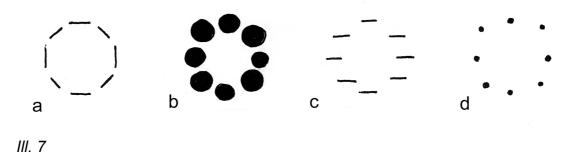
This is shown in illustration 6: here the lower dot is obviously attracted towards the lower left corner (on the diagonal), whilst the upper one lies in a zone with weak attraction (around the center). I have inserted the two diagonal lines to demonstrate as well the phenomena of dominance by dimension and balance by orientation. I think that any experimental subject would say that the lines are in both cases appendages to the dot, rather than the reverse. But this dominance of the dots — or the experience that the lines are actually rays that are projected either inwards or outwards in relation to them — is in no way an objective fact. It's rather a plastic content, determined by the sheer size of the dots. As for balance, the bottom line will

²⁵ lbid., p. 223 f.

²⁶ Arnheim, Art and ..., p. 14 f.

probably be reported as balanced, the upper as unbalanced. Why then? Whilst the bottom line conforms to one of the diagonals of the structural skeleton, the upper line doesn't. Balance as plastic content must be determined by orientation.

According to the theory, a second level of plastic content is manifest when various positions, dimensions and orientations coincide to give the impression of distinct plastic forms or constellations. It must be remarked that such plastic forms and constellations can conform to plastic types to a higher or lower degree — see illustration 7. According to linguistic analogy, they are of course the morphemes (from Greek: "morphes") of the system of plastic form. As Groupe μ remarks, plastic forms (and thus plastic types) are in themselves carriers of values of position, dimension and orientation — and thus of attraction, dominance and balance. Here, the group provides the example of triangles — being experienced as balanced if oriented upwards, but as unbalanced if the opposite is the case.



The third level of content is said to be that of relations between plastic forms, and between the position, dimension and orientation of such forms. The latter relations constitute the structure of ornaments, and as Groupe μ remarks ornaments are basically variations of the positions, dimensions and orientations of identical, repeated plastic forms. My examples in illustration 8 could be details from simple ornaments. They show how attraction, dominance and balance can result from combinations of separate plastic forms. The constellation in example (a) is basically the same as in illustration 4, and in both cases the dots can be regarded as plastic forms in their own right. Example (b), a famous illusion, shows how far removed

 $^{^{27}}$ Groupe $\mu,$ "Das System…", p. 224 ff.

²⁸ Ibid., pp. 226-30.

plastic content can sometimes be from objective facts (as in many other illusions involving dimension and orientation).



4. Coda: what's the use of it all?

Once again, it might seem like a quite limited occupation to busy oneself with the system of plastic form. But it certainly has wider implications — and applications! Maybe the most important application is the one that Groupe μ performs itself, in its theory of visual rhetoric. According to the group, there are three levels of meaning ("sémantisme") in which plastic features are involved, namely the purely plastic level, the mixed icono-plastic level and finally the "extra-visual" level ("sémantisme extra-visuel"). The last one is the level of arbitrary symbolism: such as the colors that symbolize different sacraments within the Catholic Church. ²⁹ The purely plastic level includes what the group defines as plastic rhetoric — for example certain positions, sizes and orientations that unexpectedly break the continuity of certain patterns. As for icono-plastic meaning, it has been at the heart of Groupe μ 's theory ever since the 1979 article. There, the group referred to the simple example of a Japanese print in which a heron and a weeping willow had the same downward curvature ("même courbure") that was said to express the same sadness ("même tristesse"). ³⁰

In this manner, icono-plastic analysis basically shows that plastic features can be endowed with a striking and even rhetorical meaning at the background of iconic content. In the *Traité*, Groupe μ assures that there must also be rhetorical effects of unexpected iconic content at the background of the "plastic order" ("l'ordre plastique").³¹ But without some knowledge of the group's own analysis of the system

 30 Groupe μ , "Iconique et...", pp. 187-88.

 $^{^{29}}$ Groupe μ , *Traité...*, p. 194 f.

 $^{^{31}}$ See also Groupe $\mu,$ "Toward…", pp. 586-91

of plastic form, it would be very hard to understand what this notion of the plastic order means.

As I have mentioned, Groupe μ are opposed to the methodological "provincialism" of such sciences as esthetics and perceptual psychology. Whilst the former studies images from the macro-perspective of philosophical discourse and cultural tradition, the latter operates at the micro-level of isolated visual phenomena. Both approaches can appear highly frustrating: too much theory make one long for some raw evidence, too much unrelated data make one ask for "the use of it all". However, a very useful aspect of Groupe μ 's work is that it relates both experimental science and aesthetic theory to a semiotic framework that makes it possible to see more clearly the consequences of both.

I would like to insist also that this is a great pedagogical gain. To teach the skills of image description and interpretation is much easier with the aid of a coherent terminology into which the "provincialisms" of various theorists and schools (for example gestalt psychology) can be translated. Moreover: to let students perform systematic image description on the plastic level, and to make them connect this activity to the notions of plastic content as visual rhetoric, would provide a powerful counterexample to the contention of most newcomers that the impact of images has to do solely with their capacity to faithfully copy reality. A resistance to what Jean Baudrillard calls "the surrender of the image to the real".32

5. References:

Arnheim, Rudolf, *Art and Visual Perception: A Psychology of the Creative Eye*, revised edition, Los Angeles & London 1974.

Baudrillard, Jean, "Photography, or the Writing of Light: Part 1" in *CTheory*, vol. 23, no 1-2 (<u>www.ctheory.com</u>, update of 04/12/00).

Espe, Hartmut (red.), *Visuelle Kommunikation: Empirische Analysen*, Berlin och Hildesheim 1986.

Greimas, A. J. & Courtés, Joseph (red.), Sémiotique: dictionnaire raisonné de la théorie du langage, 2: compléments, débats, propositions, Paris, cop. 1986.

-

³² Baudrillard, "Photography..."

Groupe μ , "Das System der plastischen Form" (German version of pp. 209-26 in *Traité…*, with a short introduction) in *Semiotische Berichte* nr 2/3 1989, pp. 215-233. Groupe μ , "Iconique et plastique: Sur une fondement de la sémiotique visuelle" in *Revue d'esthétique*, vol. 32 (1979), no 1-2, pp. 173-92.

Groupe μ, "Iconism" (English version of pp. 124-45 in *Traité…*, with a short conclusion) in *Advances in visual semiotics* (red. T. A. Seboek & J. Umiker-Seboek), Berlin & New York 1995, pp. 21-46.

Groupe μ, "Toward a general rhetoric of visual statements: Interaction between Plastic and Iconic signs" (English version of extracts from pp. 255-58, 264-266, 268-669, 279-83 and 346-61 in *Traité…*) in *Advances in visual semiotics* (red. T. A. Seboek & J. Umiker-Seboek), Berlin & New York 1995, pp. 581-99.

Groupe μ , *Traité du signe visuel: Pour une rhétorique de l'image*, Paris 1992.

Hjelmslev, Louis, *Omkring sprogteoriens grundlæggelse*, Copenhagen 1993 (facsimile of the original edition from 1943, with comments in English).

Potter, Simeon, Modern Linguistics, London 1957.

Sonesson, Göran, *Pictorial Concepts: An Inquiry Into the Semiotic Heritage and its Relevance for the Analysis of the Visual World*, Lund 1989.