

The Iconography on Decorated Ware *L'icôno-graphie des Decorated Ware*

Gwenola Graff

IRD UMR 208 PALOC - Paris (France)
gwenola.graff@ird.fr

Abstract - The lecture I am going to give deals with the Naqadan painted vases. We will not deal in great detail with the White cross-lined vases of the Naqada I-IIAB period, but will focus on the Decorated vases of the Naqada IIC-D period. The ornamental patterns of the different elements of these vases, the links between these elements and their position on the surface of the vases have obviously been chosen in accordance with strict rules. These rules display a hierarchy within the elements making up the ornamental patterns. I will first try to explain these rules in order to understand how the syntax of the Naqadan ornaments works and then compare them with a broad outline of the oldest hieroglyph writing syntax which is known, that of the Old Empire.

Keywords - Iconography, Naqada, Painted vases, Semiology

Resume - La présente communication porte sur les vases peints nagadiens. Les vases White cross-lined de Naqada I-IIAB ne retiendront que peu notre attention et nous ne nous concentrerons que sur les Decorated de Naqada IIC-D. En effet, il apparaît au travers de leur décor que des règles strictes régissent aussi bien le choix des éléments, leurs associations que leur positionnement sur la surface du vase. Elles sont strictes et témoignent d'une hiérarchie au sein des éléments constitutifs du décor. Après avoir dégagé autant que possible ces règles, pour reconstituer une syntaxe de l'image nagadienne, on tentera une mise en parallèle avec les grandes lignes de la syntaxe la plus ancienne connue pour l'écriture hiéroglyphique, celle de l'Ancien-Empire.

Mots-clés - Iconographie, Naqada, vases peints, sémiologie de l'image

During the Naqada I and Naqada II cultures between 3,900 and 3,400 BC a certain amount of ceramics were painted. The shape of the vases which were painted is not different from the shape of the non-painted vases. Very few painted vases were produced compared to the total amount of vases. Their number nevertheless grew over the years. There were more painted vases produced in the Naqada II period than in the Naqada I period, especially towards the end of the Naqada II period.

This production is mainly known as part of grave objects. However, these vases were not only used for graves but also for everyday purposes in settlements. This impression is more the result of the history of research on the Egyptian predynastic period than a realistic picture of reality.

The painted vases from the Naqada I period, named White cross-lined by the father of the predynastic period, WM F Petrie, are different from the Decorated ware of the Naqada II period. There are differences in the types of ceramics used and also in style and pictures. The shapes and colours are different and also the way in which the elements are drawn and how the patterns are set up. It is very easy to see the difference between a White cross-lined ware, which is red with white paintings and a Decorated vase, which is pinkish beige with red and brown ornamental patterns.

C-Ware and D-Ware do not fully correspond to the cultural separation of Naqada I and Naqada II. C-Ware has been identified between 3,900 and 3,650, which means from Naqada IA to Naqada IIA-B, and D-Ware from 3,650 to 3,400, which means during Naqada IIC and D (fig. 1).

The main difference between the C and the D ware is the way the picture is set up. The strict and restrictive rules on how to choose the ornamental patterns appear in the Naqada II period. They did not exist in the Naqada I period. The wide range of combinations in the choice of ornamental patterns became more limited between the "C-Ware" and the "D-Ware" periods. This could be explained by the fact that structure and hierarchy played a more important role in society, which could also be observed in the funerary field.

In any case, we consider that these strict rules make it easier for us to study this period, provided that they can be identified and interpreted. They give us useful keys to understand the ornamental patterns. These constraints facilitate in particular a semiological approach. We can consider that they provide us with a proto-syntax in the meaning given by G. Sauvet: "Dans le domaine de la communication graphique préhistorique, la syntaxe représente l'ensemble des lois qui fixent les relations que

les signes entretiennent entre eux" (Sauvet & Włodarczyk 1977: 551).

The fact that the structure of the D-Ware patterns is easier to study explains why I am going to concentrate on them here. Chronologically the Decorated ware marks an important stage in the setting-up of the ornamental patterns. They are closer to the first signs of writing, although there is a big gap of 300 years between them and the dockets on the U-j grave.

The corpus

The corpus on which the study on the D-Ware is based was started in the framework of a thesis published in 2009 (Graff 2009) and the database has been growing ever since. To date, this work is based on a total of 475 items of D-Ware, which includes complete vases or sherds (fig. 2). Insofar as my study focuses on the analysis of the combinations of different elements, vases needed to display at least two signs of different categories in order to be taken into account. As a result, the numerous vases dating back to the very end of the Naqada II and Naqada III periods were not included, because they only had a spiral or undulated lines as patterns. These vases should be studied separately since their ornamental pattern seems to be trying to imitate the veins of stones. During that period of time, stone vases started being produced. Since their production required exceptional technical skills and admittedly they had a decorative effect, copies out of clay were produced. But this is a different issue.

The items on which the study is based come from old excavations as well as from more recent excavations which provided more information. A large amount of items are kept in museums, but their origin is unknown. However, we can draw a map which shows the different origins of these items. It shows that the highest concentration of these items is located around the area of Naqada, the core zone of this culture. But the Naqada II culture starts to extend towards the North as well as the South until the Naqada III period. Painted vases can be found in the Nile Delta or in Lower Nubia.

Sets of themes

Types of scene

The ornamental patterns on vases are divided in scenes. With a few exceptions, there is only one type of scene on each vase. However the same scene can appear two or

3900		
3800	Naqada IA-C	
3700		
3600	Naqada IIA-B	
3500	Naqada IIC	
3400	Naqada IID1	
3350	Naqada IID2	
3300	Naqada IIIA1	
3250		
3200	Naqada IIIA2	
3150		
3100	Naqada IIIB	
3060		
3000	Naqada IIIC1	1st dynastie
2900		
2800	Naqada IIIC2	
2700		
2670	Naqada IIID	2nd dynastie
2600	OLD KINGDOM	3rd dynastie



U-j tomb = first occurrences of writing




1. Painted vases in the Naqadan chronology/
Vases peints dans la chronologie du Naqada
pictures/photos: G. Graff

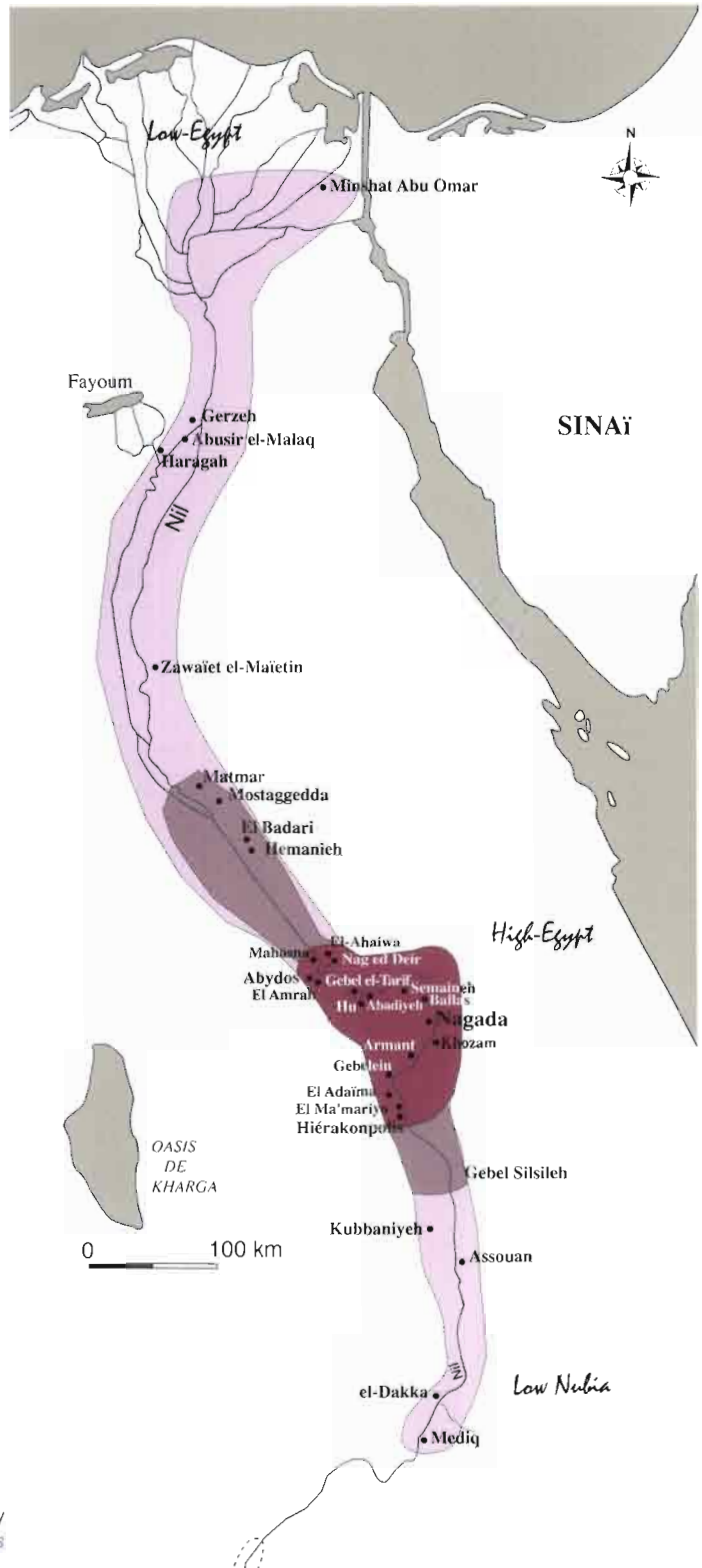
three times on the vase in different sections interrupted by the handles. The range of different types of scenes is quite limited. There are 6 types, including 2 which can already be seen on the C-Ware. The other types are only to be found on the D-Ware (for a complete description of each type of scene, see Graff 2009: 79-89).

The two common sets of themes which can be seen on the C and D-Ware are the scene with animal presentation and the plant scene. The scene with animal presentation shows animals complemented by plants or geometrical signs displayed without any specific order on the surface of the vase. It looks as if this type of ornamental display dates back to the Naqada I period and has developed further in the Naqada II period. The two most frequent animals are the ostrich and the ibex.

The plant scene obviously shows plants, and only plants, which means neither animals nor human beings. This type of scene can be complemented by some geographical signs or non-identified signs (double circles, dots ...), but there are only a few of them and they do not fill a lot



-  Extension zone of D-Ware: low concentration
-  Extension zone of D-Ware: medium concentration
-  Extension zone of D-Ware: high concentration



2. Map of Egypt with zones of concentration of the D-Ware /
 Carte de l'Égypte avec les zones de concentration des
 céramiques D-Ware

of space. There are more plant scenes in the Naqada II period than in the Naqada I period.

The four scenes dominant in the Naqada II period are navigation scenes, scenes with animal row, scenes with animal skins and ritual scenes. The navigation scenes can be identified as such on the condition that a boat can be seen on the pattern, with human beings or without or with any other kind of signs.

The animal row is a type of pattern in which animals can be seen standing in line, a mixture of different animals, all standing in line, on an imaginary ground or on different registers. The animal rows from the early Dynastic period can be found on some handles of ivory knives, for example on the Brooklyn knife, the Carnarvon knife or on the Pitt-Rivers knife. Unlike the scene with animal presentation, the lay-out is structured.

The scene with animal skins has a separate place within the group. It can be considered a particular type of a ritual scene. This type of scene is built in the most rigorous and systematic way. It must display at least one animal skin fixed on crossed sticks. It is very often surrounded by boats, shrines, trees, birds and mats. We will deal with these questions in more detail later on.

Defining the ritual scene is actually quite a difficult task.

Therefore, in terms of the image, we can expect that some of the motifs will be out of place and are improbable in the midst of a seemingly banal scene. Another level of reality emerges in a discreet or not so discreet fashion. The presence of entities or divinities to which the rite is addressed is vital for identifying the scene. Unfortunately, they are not always represented. In the case of the Naqadan image, it would seem that they are not directly depicted (even if they are perhaps evoked by the feminine figures or the mast standards).

In this particular case, there are a certain number of pieces of evidence of the presence of another level of reality.

While there are numerous combinations indicating a ritual scene, they are generally based around three motifs: the orante, the addax and the horn, simple or double. We can therefore deduce that these three motifs are therefore the most significant or representative criteria of a ritual scene (fig 3).

The presence of one of these criteria is enough to indicate a ritual scene. Nevertheless, as a general rule, two or three appear together.

The scenes occur show a slice of reality at odds with the contingent logic of daily life. We have moved onto another plane.

The elements

The elements of a scene are placed next to each other, juxtaposed, with little links between them. Usually the elements are isolated, but some of them are always multiplied, for example the full triangles, the undulated lines and other non-identified little undulated signs. Some signs can be isolated, but most of the time they are multiplied. This is the case for two animals: the ibex and the ostriches/ or flamingos (both interpretations are possible).








Altogether there is a range of 124 elements displayed on the D-ware (compared to 261 if both C- and D-Ware are taken into account). Some are displayed only once and others about 200 times.

These elements are classified in categories organised in a way similar to the Gardiner Sign-List (fig 4).

These categories are:

- human beings, subdivided in men and women
- animals subdivided in the following groups:
 - mammals (divided into little bovines and canidae)
 - birds
 - saurians and reptiles
 - fish
 - other non identified animals
- plants
- navigation (the hull and other parts of a boat)
- mats and fences (which prove the existence of a light architecture)
- weapons and traps
- horns and the "fan"
- animal skins
- geographical elements which indicate two environments:
 - firstly, the desert and the steppe
 - secondly, valleys and oases
- elements not yet identified (55 altogether)

These elements were chosen by the painters themselves or the persons they worked for but we have to keep in mind that the Naqadan field is much wider in terms of patterns. There are entire parts of their environment which we cannot see. This means that these items can only play a limited role in the study. They do not prove whether this population was settled or not, whether they lived in villages, divided in stockbreeders and farmers. There is no evidence of houses or cultivated plants (the plants which


General category	Invocation / évocation gesture	Transitional object	Unrealistic situation	Animal's sacred meaning
Concrete application on Naqadan vases	- women with raised arms 	- single or double horn presentation  - fan presentation  - masculine feathered or foliage like hairdress 	- wild animal contact  - "floating" animals 	- Presence of addax 

3. Criterium for the identification of a ritual scene/ *Critères d'identification d'une scène rituelle*

4. Elements categories on D-Ware / *Catégories d'éléments de la céramique D-Ware*


HUMANS

Males Females




ANIMALS

Mammals

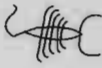


Little bovines Canidae


Birds




Reptiles & Saurians



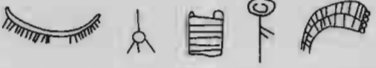
Fishes




PLANTS




NAVIGATION




MAPS & FENCES




WEAPONS




HORN & "FAN"




ANIMALS SKINS



GEOGRAPHY



NON IDENTIFIED ELEMENTS



can be seen are difficult to identify, but they are obviously small trees or long grass, some of it growing in water) There is evidence of very few cattle, one single ovine, a ram Although Naqadan food was to a large extent based on fish, ornamental patterns with fish can only be seen twice on the D-Ware It was not a habit to paint ordinary food I should point out that the bestiaries of the Late Paleolithic caves do not show any painting of food either, which shows again that it was quite normal not to paint food

The bestiary itself does not exactly reflect animal life in the Nile valley and its desert surroundings from the middle of the fourth millennium What about big cats, monkeys, insects, small birds and small carnivorous animals?

The flora seems to be very poor as well In the Naqada II period the flora is limited to the Naqadan plant (probably the banana tree or the aloe) and a kind of bush

But certain elements are proportionally over-represented which shows how much these elements were appreciated by the society which produced these drawings Examples include 16 different elements used to illustrate the various species of gazelles, and in particular 25 sorts of banners on mast, these kinds of shields stuck on the side of the boat cabins, with hardly legible symbols written on them

Ornamental pattern construction

In order to advance in the study of these pictures, we will have a close look at their components in terms of quantity This will provide us with a number of keys which will help us understand the meaning

Number of elements per vase

As a first stage we will find out how many different signs were used to make up an ornamental pattern We only used undamaged vases to carry out this study Different versions of the same sign were not taken into account For example, when a boat has several mast standards, we counted only one sign

The big majority of the D-Ware have from 2 to 9 signs with two peaks from 3 to 8 signs per vase Sometimes, but very rarely there are up to 15, 16 or even 29 elements in one pattern, which means that we had a limited choice of elements compared to the wide range of signs (as many as 124) which illustrated the vases in the Naqada II period

Having completed the counting of signs as a first step of our study, we can proceed to the next, the study of the associative field

Associative field

The associative field is based on the number of possible links on a given element depending on how many times it appears Bearing in mind that most D-Ware have from 2 to 8 signs on their patterns, it is interesting to check whether all the represented elements of this period can be combined with any other, or if some follow a different system of association with more links to certain elements than to others (fig 5)

All elements identified at least 6 times have been taken into account, which leaves 34 elements only In order to observe a possible chronological development, the elements composing the ornamental patterns on C-Ware were reintroduced

The elements which were observed can be divided into three groups, according to their coefficient of association The first group includes the elements with a coefficient lower than 1, in other words, those which are associated with the highest amount of different elements

The second group includes the elements with a coefficient between 1 and 2

The third group includes the elements with a coefficient higher than 2 The last ones are associated with a more limited number of elements It is worth mentioning that the elements of the first group (with a coefficient lower than 1) are often associated with other elements which only appear once in the whole corpus The fact that they are numerous explains why the table and the chart which we used show only 34 elements and not all those which have been identified 143 elements of a pattern are displayed once only and 74 are displayed between two and six times

If these groups are corroborated with the periods during which each element was identified, a strong correlation can be noticed between the groups determined, on the one hand, by the ratio 'times identified/number of elements in the associative field', and the period of identification on the other The two groups whose coefficient is higher than 1 are composed of signs which are mainly or exclusively identified during Naqada II On the other hand, the last group, composed of elements whose ratio is below 1, consists of elements existing on C-Ware, with the exception of the addax and the ibex The difference

between the group whose coefficient is between 1 and 2 and that over 2 lies in the fact that the signs of this last group are those of the scene with animal skin. It is known that the objects carrying these scenes are among the latest existing in the corpus, towards Naqada IIC-D.

This helps us to conclude that the elements are more diversified in the Naqada I period and also that the combinations between them are not very strict. Nevertheless, with progress in time, the amount of elements decreases, and despite of the fact that elements are more often identified, their combinations are more and more limited.

The development of the Naqadan painted picture leads with the time to a growing structuring of the picture, focussing on a few specific elements which can only be combined with some others in accordance with logical rules. These rules are clearly defined but are difficult to identify *a posteriori*.

The study of the coefficient of association shows that the Naqadan picture became more and more complex with time.

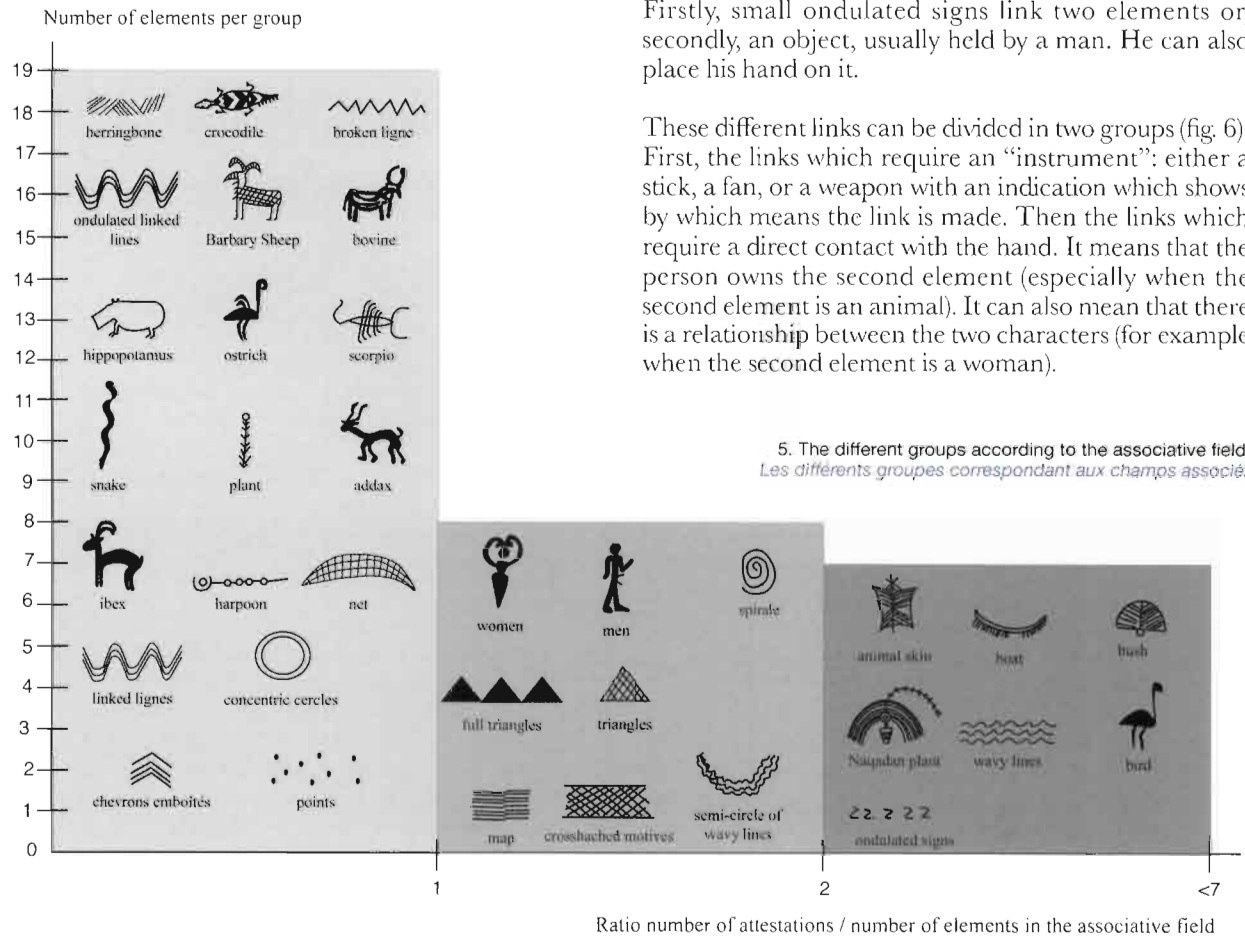
Elements imposition on the vases

We are going to observe that the elements are not at all placed or spread at random on the D-Ware. The elements follow a clear hierarchy and also take into account the material of which the vase is made and the constraints resulting from it. As far as the D-Ware is concerned, the vases have in most cases a closed shape and two or three handles at a regular distance, fixed on the upper third part of the vase.

All these elements are generally placed next to each other in one or two registers or floating, because the line which usually symbolises the ground is missing. The links between the signs can rarely be seen. Two options are used to show a link between two signs.

Firstly, small ondulated signs link two elements or, secondly, an object, usually held by a man. He can also place his hand on it.

These different links can be divided in two groups (fig. 6). First, the links which require an “instrument”: either a stick, a fan, or a weapon with an indication which shows by which means the link is made. Then the links which require a direct contact with the hand. It means that the person owns the second element (especially when the second element is an animal). It can also mean that there is a relationship between the two characters (for example when the second element is a woman).

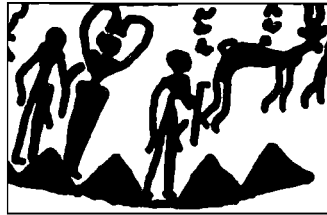


1 Ondulated signs between two members



2 Indirect relationship

a with a horn



b with a fan



c with a weapon or a rope



3 Direct relationship

a with a women



b with an animal



6 The mediator signs / Les signes de médiation


Since there is no link between the elements, there is no question of time. It is not a story which is being told while holding an object in one's hands. The picture can be read like a nebula divided in a central zone and a peripheral area. We first read the zones of higher intensity and then the zones of lower intensity. The elements are not evenly scattered in the scene (what means the space is not filled in a homogeneous way). Some elements are grouped together in a focal area, with the other elements spread outside this area. The density or in other words the meaning is different from one sign to the next.




The focal zones are not placed at random on the vase either. They are usually placed in a symmetrical way on each side of the vase. There is only one in each section. The best example of this kind of structure is a sequence which is mirrored on both sides of an animal skin, hanging on sticks in the middle. They correspond to what we defined previously as the scene with animal skin. They mainly occur in the Naqada IIC-D period. From a

chronological point of view, this kind of scene is the last one to appear on the D-Ware.

The central or axial position of this sign makes it the most important element of this sequence. This is actually the only element which does not change in the group.

One of four boats appears together with a hanging animal skin. There seems to be a strong correlation between the boat and the animal skin. The central position of the elements makes it even more obvious. In most cases the animal skins are placed under the boats, in their axis, and they are framed on both sides by the handles of the vase. The boat placed on the upper part is horizontal, whereas the skin below is vertical.

These are the first pieces of evidence of such a rigorous symmetry and geometry in Egyptian painting. Some elements which are placed very close to the skin have a fixed position, like the shrine  or the Naqadan plant

 . Other elements can change places or be inverted. For example the bird  and the little tree or bush  can change places and also replace one of the elements of the sequence. We can conclude that all the elements playing a role of substitutes have the same meaning or, in other words, belong to the same semantic field. Variants are just different ways of expressing the same meaning (fig. 7).

Should we consider the Naqadan pictorial system to be a form of language in the sense of F. de Saussure, we can say that the way the elements are laid out has a meaning.

The general meaning of these combinations seems to be more complex than a simple addition of the respective meaning of each individual sign. Their interaction creates a more elaborate, a more complex meaning.

It is also very typical of the painting on vases that men are always in action. They are always shown in profile, while doing something, unlike women, who are shown frontal, not moving and hieratic. This can mostly be seen on ritual scenes. Men are almost always involved in an action. The reason why they are so much involved in their action is that they probably are those who benefit from it. Whether they act as individuals or as members of the Naqadan society, they are most probably the beneficiaries of the rites hinted at.

When an individual person is shown, it means that this person has a special status. When a community is shown, it is always represented by a man. Women refer to a different, less contingent sphere. These are probably hierophanies.

There is no sign of time in the Naqadan pictures. They do not indicate in which order the action develops. The only information given is action opposed to passiveness. Animals as well as women are subjected to the action whereas men decide on starting it.

Besides it is clear that in the Naqadan pictures, humanity is divided in men and women and is not considered as an abstract entity. We can see sometimes the same sexual distinction used for animals representations, with the mention of udder or penis.

The purpose of all this is not necessarily to understand directly the meaning of the pictures but to help us understand the broad lines of the internal structure. It is very probable that the painters of the Naqadan period had less and less freedom to improvise and norms were becoming gradually stricter. In addition, the message which passed on through these pictures was becoming more and more complex. Towards the Naqada IIC-D period, the mental structuring which made it possible to elaborate a message was strong and constraining. The

7. The 'animal skin' sequence / *La séquence centrée sur les peaux animales*, pictures/photos : G. Graff



Maximal development of the sequence



Some examples

ornamental pattern is built according to codes and the way the elements are linked together is also based on codes.




We can speak about a real graphic system.





Graphic representations of combinations

Our observations show that ornamental patterns were becoming more and more codified with time. In order to get a better understanding how the painting on vases works, we tried to apply a factor analysis (fig. 8).

The general graphic shows the interactions between eleven typical elements from the Naqada II period and particularly well-identified during the Naqada IIC-D period. These elements are: the women, the men, the addax, the ibex, the bird, the boat, trees, the animals skin raised on sticks, the wavy lines and the map.

These elements were selected because they appeared very often and also because they seemed to follow constraining combinations. What we mean by constraining combinations is that these elements are preferably or exclusively associated with specific elements and are rarely or not at all associated with others.

Among those that are associated with each other there are two groups clearly opposed to each other because they are far apart. One group consists of elements  and , and the other of elements  and the addax. While the male character is close to the second combination, we did not include it here. We will see why later on.

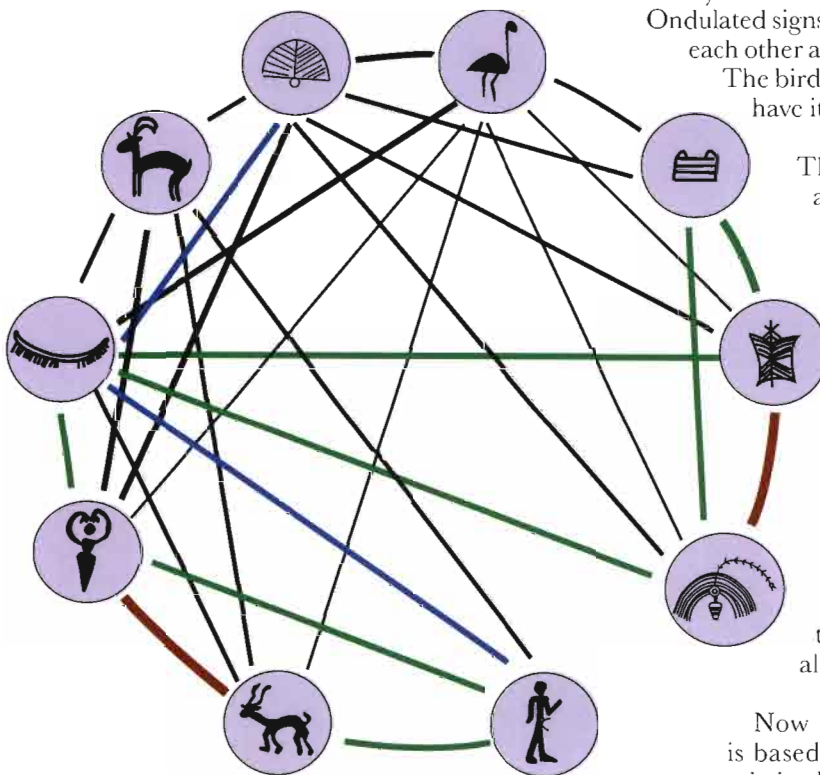
The six other signs (ibex, bird, wavy lines, trees, boat and map) occupy an intermediary position between these two poles. Nevertheless some signs are placed closer to one pole than to the other. One can see very clearly that the ibex, which is closely placed next to the group woman-addax does not normally have any link with either the skin or the Naqadan plant. Likewise the mat is closely linked to  - , but much less to  - . Ondulated signs, the little tree and the boat are close to each other and almost half way between both poles.





The bird, which is linked to both poles, seems to have its own status.

This graphic gives us the main guidelines about the way the Gerzean ornament works but it will have to be refined.

To sum up, we can say that two antagonist pairs which on the one hand consist of the animal skin and the Naqadan plant and on the other of the woman and the addax, strongly linked with the man. A certain amount of intermediate elements are placed between them and can be associated to each of the pairs. These two pairs seem to play a major role in the lay-out as well as the structuring of the ornament. According to the graphic, they are the elements that determine all the others.

Now that we know that the whole system is based on a logic of either exclusion of, or association between, elements, we have a key to find out which are the dominant pairs which exclude each



-  Recurrent associations
-  More important associations, between major elements
-  Major associations, between major and minor elements
-  Strong associations, between minor elements

9. Associations between elements of different categories / *Associations entre éléments de différentes catégories*

other. These two pairs are firstly, the addax-woman and, secondly, the Naqadan plant-animal skin. Apart from them, the function of the boat, the small tree and to a lesser extent of the ibex is to enable the association between elements which would otherwise exclude each other.

Bearing in mind that the dominant pairs are incompatible within one ornament, there can only be one pair at a time on one vase. Vases can be classified in two groups, according to what kind of pair is drawn on them. 13 vases carry the pair woman-addax and 70 vases carry the pair Naqadan plant-skin. An obvious imbalance exists between the two dyads. A graphic below summarizes the most important associations between the 8 higher represented elements on the D-Ware (fig. 9).

D-Ware syntax

Syntactical laws

The study of this specific graphic system gives us a broad understanding of how the syntax is organised. It is interesting to list the main features of this system. This is what I am going to do now.

- These ornaments can not be read from the left to the right. In order to get the meaning of this writing, we have to focus on specific zones and only then look at peripheral zones.
- Most elements are placed next to each other, without any link between them, except when there is a mediation sign. If there is one, it is held by humans.
- Men are shown as members of an active pole, contrary to women who do not move.
- Some elements are repeated, usually three times, and do not have any meaning unless they are associated with other elements.
- Two pairs of elements emerge which are not compatible with each other and which determine the choice of the other elements of the ornament.
- The location of the signs on the vase is organised in a hierarchy and reflects their relative importance for the understanding of the scene.
- The scenes are repeated usually two or, more rarely, three times on the different sides of the vase, interrupted by the handles. These scenes can vary slightly in detail, without any impact on the general meaning.

Parallels with the hieroglyphic writing during the Old Kingdom


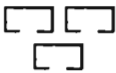











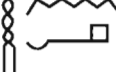

It will be interesting to present what we know about the structures of the syntax of the oldest Egyptian language we know, in other words the language of the Old Empire.

The writing of the third millennium is highly complex. This is partly due to our lack of knowledge of how words and also sentences are linked together. According to P. Vernus, “pas d’*énoncés* comportant une relation *prédicative explicite*, et encore moins de phrases complexes”. Sentences are statements rather than actions. But also “l’écriture ne prend en charge qu’une succession de substantifs, et d’*infinitifs* constituant avec leurs expansions éventuelles - apposition, régime au génitif direct, coordination - des syntagmes nominaux en fonction d’*énoncés-titres*” (Vernus 1993: 95).

A proper noun can contain by itself the equivalent of a full sentence. At the first stage of the oldest Egyptian language, static nominal forms are predominant. Verbs themselves are mostly used in the form of nouns, as is the case for the infinitives or the different participles. There are also relative verbal forms and pseudo-participles to indicate a quality or an acquired state. The sentences are built according to a paratactic way, with the use of juxtaposed clauses without subordinating conjunctions. Linking words do not exist but words follow each other in a logical way.

On the other hand, the written hieroglyph language from the Old Empire has other ways of expression such as the emphasis signified by particles or by different pronouns. It also has a way of expressing the negative form through particles and negative verbs. There are two groups of nouns: those which have a determiner and those without. Proper nouns have a determiner, also the nouns which are combined with demonstratives or combined with a determinative complement. This language also has a passive form and an active form. This seems to have a major influence on the structuring of thoughts. There is also a strong contrast between the masculine and the feminine form. There is no neutral form. Since there is no form of declension, the function of a word is indicated by its position within the sentence. At last, the plural is indicated by the repetition of a word, usually three times.

As far as the word formation is concerned, intensive verbs are formed by the duplication of the verbal root. This total or partial duplication always lays an emphasis on the verbs. In order to form intransitive intensive verbs, an **N** is added in front of the verbal root. A **W** is added in front of the

	NAQADA PAINTING	OLD KINGDOM WRITING
Plural notation		 <u>prw</u> the houses
Duality male/female	 	 <u>sn</u> brother  <u>snt</u> sister
ACTIF vs PASSIF	 	 <u>sdm·tn</u> you hear  <u>sdm·tw·tn</u> you are heard
WITH		 <u>m</u> : by means of, with
accompaniment		 <u>hn?</u> : together, with
Complex forms construction		Word construction with sense evolution: 1. by doubling means: <u>nd</u> to question / <u>ndnd</u> to take advice 2. By addition of N to the verbal root: <u>k3i</u> to think / <u>nk3i</u> to reflect 3. By addition of W to the verbal root: <u>b3</u> to dig up / <u>wb3</u> to open, to drill 4. By addition of S to the verbal root: <u>rh</u> to know / <u>srh</u> to indicate

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 Parallèle syntaxique entre les peintures naqadiennes et l'écriture de l'Ancien Empire

verbal root of the verbs which indicate thorough action. An **S** in front of a verbal root indicates that the verb is a causative verb.

The archaic Egyptian language makes a distinction between the two possible meanings of “with”. Firstly, “with” means “accompany” and, secondly, a means, the way, an instrument.

More than likely the Naqadan spoken language was the same, in a more archaic state, as that noted down at the time of the hieroglyph writing of the Old Empire. As a matter of fact, there is no trace of change in the vernacular language between the middle of the fourth millennium and the beginning of the third millennium.

We can now compare the two graphic systems, the pictural and the written system (fig. 10-1).

1) The plural form is indicated in both systems by a repetition. As a rule, the sign which is put in the plural is repeated three times.

2) There is a marked duality between male and female. There is no neutral form.

3) There is an active and a passive form. The notion of time is very vague. In the painting of Naqada, the initiative of an action is clearly and systematically taken by men. It is indicated by a man holding a tool. We can compare this with the construction of the first causal sentences which contain a genitival adjective of subordination, which means “which belongs to”. This adjective has the same function as the tool on the painting.

4) The meaning of “with” is very precise. A distinction is made between “with” meaning “which accompanies” and “with” meaning “by means of”. This distinction is marked by the use of two different words in the Egyptian language. This distinction also appears in the picture. The second meaning of “with” (= by means of) is materialized by a horn or a trophy, held by a male character and the first meaning of “with” (which accompanies) is symbolized by a masculine character holding another sign.

5) The construction of sequences having a complex meaning is made by duplication or by adding simple elements, which modify its meaning. The global meaning of the whole is not the same as the simple accumulation of the first meaning of each simple element. This means:

- in the hieroglyph writing, the construction of the Egyptian words is based on the addition of prefixes which makes their meaning change.

- in the Naqadan painting, the sequence centred on the animal skin hanging on sticks probably means more than a simple addition of elements.

6) There is no trace of the notion of time (fig. 10-2):


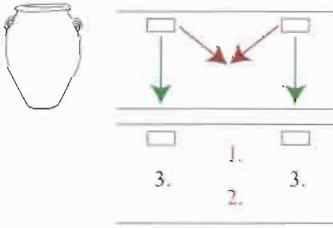
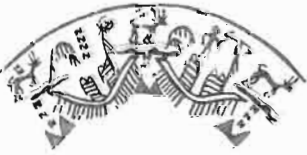
- in the language, there are traces of some unaccomplished and accomplished forms. But the notion of time can be deduced only from the context.

- in the Naqadan picture, the reading is not linear but concomitant.

7) With regard to the way the sequences are built:

- in the hieroglyph writing, the grammatical function

10 (part 2). Syntactical parallels between Naqada painting and Old Kingdom writing / *Parallèle syntaxique entre les peintures naqadiennes et l'écriture de l'Ancien Empire*

	NAQADA PAINTING	OLD KINGDOM WRITING
No notion of time		No time. unaccomplished forms <u>sdm.f</u> I am looking for accomplished forms <u>sdm.n.f</u> I have found
Sequences construction		+ verb + pronom de rappel + * emphasis name of the god the king proclitic particule (heart, see) Look, the god Ra, it is him who shines in the sky, as sun call back of the emphasi s
Intensification of information by redundant formulations		King is powerful: He seizes souls, He takes up souls

of a word is given by its position in the sentence
 - in the picture, the position of the signs within the ornament follows strict rules, especially the position of signs according to a central axis. The handles have a strong function

8) In the sentences of the Old Empire writing, there is no evidence of either subordination or articulation between the different parts of a sentence. The juxtaposition of propositions is without any coordination, in other words the “parataxic construction” is very similar to the usual lack of contacts or links between the elements which are placed next to each other on a vase. The semantic equivalence of the signs in the paintings matches the notion of synonyms and lexical fields in a complex language composed of different constituents. The same idea is repeated in a similar or even identical way in order to emphasise it. Parallelism supports the importance of the information provided

- a vase includes two identical scenes in each section between the two handles

- in the Pyramids Texts redundant formulations are applied resulting from spoken language

The main structures of hieroglyphic writing were perhaps already expressed in the most recent paintings on vases. Naqadan painting has fewer possibilities of expression than writing. Its message is more limited and less precise. It can only express a certain number of messages, always identical or different variations of the same theme. However, it already uses the structures which will be further developed a few centuries later on.

Conclusion

On the other hand, the search, in the Naqadan paintings, for a common structure of the two systems seems much more relevant than in the proto-hieroglyphs. The full triangles are no doubt at the origin of the mountain sign (N25 in the Gardiner Sign-list) and the undulated lines have led to the water sign (hieroglyph N35). Likewise the hieroglyphs designating an addax, an ibex or a hippopotamus resemble their version painted on the vases. The determiners are the category of hieroglyphic signs which enriches most significantly the catalogue of Naqadan elements. However, the function of determiners is not always used in the writing of the Early Dynastic period. Any search for previous occurrence of writing symbols, beyond the few examples given, becomes more haphazard and must be handled with caution. Naqadan paintings do not provide a catalogue of signs for hieroglyphic writings.

A few signs will obviously be part of either system. They are almost universal. One can find numerous examples of writings or graphic systems - other than the Egyptian - using triangles for mountains or undulated lines for water without any link to hieroglyphic writings. The search for internal structures which we have just carried out enables us to draw more profound parallels.

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