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Ivana Šmulíková

Ornament on Greek vases from Archaic to Classical period

–

current state of research

Ornament na řeckých vázach archaické a klasické epochy

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stav bádání

Vedoucí práce: prof. PhDr. Jan Bažant CSc.

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Prohlašuji, že jsem bakalářskou práci na téma Ornament on Greek vases from Archaic to Classical period – current state of research vypracoval(a) pod vedením vedoucího bakalářské práce samostatně za použití v práci uvedených pramenů a literatury. Dále prohlašuji, že tato bakalářská práce nebyla využita k získání jiného nebo stejného titulu.

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Ivana Šmulíková

Abstract: This work deals with the development of ornaments on Attic vases from Proto-Attic to red-figure periods. The author describes the various ornament found under the handles of vases or framing the main frames. Emphasis is places on following the current state of research of Attic ornament and possible sources for description of evolution of the certain types of ornament.

Abstrakt: Autorka se snaží v této práci popsat vývoj ornamentu na attických vázách od proto-attické doby po červenou figuru. Popisuje jednotlivé ornamenty, které lze nalézt pod uchy váz nebo na rámování hlavních scén. Důraz je kladen na současný stav bádání a možnosti dalšího zkoumání attického ornamentu.

Keywords: ornament, Greek vase, palmette, Attic pottery

Klíčová slova: ornament, řecké vázy, palmeta, attická keramika

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1. Introduction

The study of ornamentation on ancient Greek vases is an exciting, but often overlooked subject. Even though ornament is an integral part of majority of vases, there is little literature written solely about it, and even less is published and understood about its origins, influence, development, and typology. Perhaps it is due to the fact, that the ornament is taken for an omnipresent decoration, painted on the vessel without much thought in its symbolism and form, its role being to frame the main scene and fill in the blank space. For some time, it was taken for granted and not much attention was paid to it, and even though many authors complain about the fact that there is no comprehensive book about the typology and development of ornament, no one seems to be up to the task yet.

The general interest in ornamentation is very small, books about development of Greek vase painting mention ornaments only very marginally, if ever altogether. When it is mentioned, it usually just specifies what fills in the back of the vase, or what the reader can connect with certain painters (i.e., that Andokides used palmette lotus chain to frame the upper part of his panel).

Interest in ornament can be divided into two groups. The first is the typology and development of the ornament, in this field not much has changed from Jacobsthal's 1927 (now almost 100 years old already!) *Ornamente Griechischer Vasen* (Jacobsthal 1927). Recently Haug's 2015 *Bild und Ornament im Frühen Athen* (Haug 2015) added to the topic by tackling the unexpected and confusing ornamentation of Proto-Attic vases. Second group looks for the underlying messages and semiotics that the painter may have put into his ornaments. This topic is much better researched, with interest reaching from the beginning of the 20th century up until the present day.

When someone interested in the subject looks for a resource that would map out the development of ornament, as countless books do for figurative scenes or shapes of the vessel, distribution, or function, he / she is in loss, for besides the two abovementioned works, there is not much comprehensive written about the subject.

What I am interested in, and would like to do in this work, is to put together the main resources on the development of Attic ornaments that I could find (and were accessible to me) on the topic and make an overview of where the research in this topic currently stands, what the typical ornaments are for archaic and classical black and red figure are, and where it would be possible to fill in the gaps, so a clearer picture of Attic vase ornamentation emerges. I specifically choose Attic pottery, for there are more resources on this specific region and for a work of this scope it is more manageable.

Let me also clarify, right at the beginning, that I do not want to get into the philosophical side of ornamentation and pattern, the meanings and underlying messages of ornament, for this is an entirely different field, out of my interest and reach.

I sincerely hope this work will be helpful to anybody, who is interested in ornaments on Attic pottery and who is looking to know more than the main picture of the vase portrays.

2. History of research

Ancient Greek ornament first gained wider interest with Owen Jones' 1868 publication of the *Grammar of Ornament* (Jones et al. 1868) – a collection of brilliantly colored ornaments ranging from the ancient times to natural representation and Renaissance patterns, presented to the Victorian designers and tastemakers to encourage them to study these and make use of the underlying design principles (37 in total, that Jones put together to show the principles in arrangement of form and color in architecture, decorative arts, and nature). Since Jones, there were many catalogue-like books published on the ornament (e.g. (Ward 1897), (Hamlin 1916), (Connell 1968), (Bird 2003)), although most of them were focused on the artists' need to have a systematic index of ornaments.

In the beginning of the 20th century, Alois Riegl and Adolf Loos gained attention with their opposing views on the ornament. While Loos in his essay *Ornament and Crime* (Conrads and Bullock (Eds) 2002) sharply criticized ornamentation on useful objects, claiming that they will go out of style sooner. He was not against ornaments altogether – they just had to be appropriate for the object. He concluded that freedom from ornament is a sign of spiritual strength. Riegl, on the other hand in his *Stilfragen* (Riegl 1893) maps, out the development of artistic styles – Geometric, heraldic, vegetal ornament and development of tendrils and arabesque – and gives one of the first concise developments of ornamentation from the ancient times. He tried to do an arduous task to write the collective history of ornaments. Even though his work remains greatly admired, with the current knowledge, it is already outdated. His work was influential on Ernst Gombrich, who in his books written about patterns and ornamentation (Gombrich 1984, 2000), explains the 'schemata' of psychology behind the perception of ornaments, and the human need to have thing in order.

In recent years, books published on ancient Greek ornamentation mainly deal with the perception of ornament as a part of the 'bigger picture' of the artists – they often look for parallels in literature and to try and understand the symbolism behind the ornaments and point of view of the ancient user. Dietrich and Squire's (Dietrich and Squire (Eds) 2018a)

book and the conference that preceded it, puts together articles about the perception of the ornamentation on vases and architecture of the ancient user. Interestingly there is not much written about the development of the ornament, even when seems like the chapter is calling for it to be mentioned. The theme running across the book looks at the relationship of the figures and ornament, and the fine line that often divides but also connects the two. Same tendency can be seen in Platt and Squires' book on the frame in antiquity (Platt and Squire (Eds) 2017), where even the chapter titled "The Frames of Greek Painted Pottery", openly states at the beginning that if the reader was looking for the decorative frames, they are at the wrong spot, for the chapter deals with the relationship between painting-frame.

As for books dedicated solely to the typology on Greek vases, Jacobsthal's already mentioned book (Jacobsthal 1927), is among the first published on this topic. Jacobsthal tracks the development of ornament under handles of vessels, from black to late red figure. Although the book is already a little outdated, it is still most widely cited, since it is the only work on this topic that covers this topic at this scope. Haug's (Haug 2015) recent book on Proto-Attic ornamentation covers both the typological and semiotic sides of ornament. For earlier, Geometric and Proto-Geometric pottery, Coldstream's *Greek Geometric Pottery* (Coldstream 2009) and Kunisch's *Ornamente Geometrischen Vasen* (Kunisch 1998) provide a good guide to the period, if considering that the decoration on Proto-Geometric and Geometric Greek art can be called ornaments. For Proto-Geometric art, Desborough's book is the only one I could find that covers the topic wholly (Desborough 1952).

As for single / specific ornament, there are not that many articles or books published – notably Kunze - Gotte's *Myrtle* (Kunze-Götte 2006), Stibbe's *Archaic Greek Bronze Palmettes* (Stibbe, C.M. 1997), Rykwert's *On the Palmette* (Rykwert 1994), Charvát's *Notes on the Origin and Development of the Lotus Flower Decoration* (Charvát 1977), and Heuer's *Tenacious Tendrils* (Heuer 2019). All these works concern themselves with following a single type of ornament, or its form, development, and symbolic meaning. They however do not necessarily follow the work painter by painter to see the specific development of the form.

Books about Greek figurative art often seem to forget to mention ornaments at all or mention them only marginally. Exceptions to this are Cook's *Greek Painted Pottery* (Cook 1997), that is the only book where I noticed that special attention is paid to keeping track with the development of ornamentation. This book however also has its limit – with progress to red figure, ornament is mentioned only scarcely, even though the beginning of the book (Proto-Geometric, Geometric, Proto-Attic and black figure) have sections dedicated to the description of current ornaments. Although from his notebooks it is clear that Beazley noticed and drew parts of ornament to aid in his recognition of painter, his masterpieces on black and red figure Attic painters (Beazley 1978, 1963) mention ornament only vaguely. Another well-known and loved books by Boardman (Boardman 1998, 1993, 1988, 1989) describe ornaments in detail, but lack the overall description of trends and typologies.

On the subject of influence on Attic vases, Jackson's *East Greek influence on Attic Vases* (Jackson 1976), is a rarity. It is often stated that inspiration of some of the Attic ornaments came from the East, but to my knowledge no author, except for Jackson, dedicated the time and space to map the influence. For books concerning the east Greek ornaments, Cook's *East Greek Pottery* (Cook and Dupont 2003), a brilliant book about East Greek pottery in general, deals partly with the ornaments found on vases from this region, but they are not concerned with the translation of these motives into the mainland art. Concerning the favorite topic of whether the orientalizing style was influenced by Near Eastern textile decoration or not, Brown's thesis (Brown 1980) deals just with this topic. Gadoulou's (Gadoulou 2014) short chapter touches on the eastern imagery (partly ornaments) that are found in Geometric and orientalizing pottery. A very brief chapter by Perron (Perron 2012) talks about selected influences from east on the north Aegean vase painting, pyxides and table amphoras from Argos specifically.

Monographs on ancient Greek painters have almost always a dedicated chapter/section on the ornaments that the painter used on his pots. There are great illustrations and photos of the whole ornament, that are often unavailable elsewhere (i.e., on museum websites, where the custom is to photograph only the figurative fields). Unfortunately, they are mostly just descriptions of the forms without any context of development or influence.

Books on architectural ornament also must be mentioned, although from different field of study, they are much better published when it comes to the development of ornament. Perhaps it is because the architectural elements do not really give the builder much lenience on using various types of ornaments – everything here has its place, planned ahead. Good books about the ornament in architecture are by (Barletta 2001), (Fiolitaki 2011), (Schultz and Hoff (Eds) 2014), (Dietrich 2015), (Vlassopoulou and Touloupa 1990), and (Dinsmoor 1946). Although Dinsmoor’s books starts with architectural ornaments on Athenian treasury, it eventually ends up comparing architectural ornament to the one on vases, while tracking the vase ornamentation development to date the treasury.

As I tried to show above, the previous research in Greek ornamentation was (apart from Jacobsthal and Haug) mainly interested in the symbolism, and not much with its development and typology. But as Hamlin already pointed out in 1916 “Books on ornament are so many that to add to their number may seem at first sight a wholly superfluous task. Yet in all the long lists of bibliographies of the subject there appears a singular lack of systematic treaties on the history of various styles which have marked the growth and progress of decorative art.” (Hamlin 1916, vii). Jacobsthal added in 1927 “It is now popular to trace the multiplicity and the transformation of appearances in the arts to a differently expressed whole, to seek the general denominator for Sappho or Sophocles and sculpture. We must refrain from such parallelization, we do not want to blame Pindar for the ornament of the Munich Hermonax Stamnos” (Jacobsthal 1927, 207).

I hope this short work will be a useful overview of the basic development of Attic ornaments found on black and red figure vases from Proto-Attic to classical periods.

3. What is ornament?

Defined in the Brockhaus-Enzyklopädie “The ornament can structure and emphasize the shape of the object which it adorns, but it can also relate neutrally to it or to overpower it. In ornamentation the variation of forms (the composition of ornament as a whole) moves between two poles: between a purely linear abstractly Geometric form and figural, occasionally naturalistic design which draws upon organic shapes” (Anon 1991). Sommerson calls ornament “surface modulation” to make objects, without affecting their function or shape, more attractive (Summerson 1998). For detailed study on what the different definitions of ornament were Neer’s chapter Ornament, incipience and narrative: Geometric to Classical in (Neer 2018) gives a good overview.

For our purposes the definition of ornament as a decoration that embellished parts of object without any practical purpose, should be sufficient. In this work I take for ornament any geometric or vegetal structures that are not figurative (animals or humans) or part of narrative on the main scenes.

4. Position of the ornament on the vessel

For the development of handles and their division of space on the body of the vessel see (Schreiber 1977). Caskey's *Geometry of Greek vases* (Caskey 1922) gives a great overview of the shapes and their axes. Jacobsthal in the introduction (Jacobsthal 1927, 18) describes the various axes and tensions happening on the vase in relation with its handles.

I do not see it important for this purpose to describe the various axes, tensions and symmetries that happen on the vase, this is better left for someone with interest in the shapes of the ceramics. For our purpose it is however necessary to at least describe the possible positions of the figurative decorative fields with their relation to the ornament, and the possible positions of the ornament on the vessel.

On every shape of the vessel, it is popular to place the ornament below the handles. Where panel decoration is required, the panels are framed either from all four sides, or only horizontally by ornament. Neck ornamentation is popular as is the shoulder where the neck transitions into the body.

On **amphora** – the handles are vertical and in pair. The main panel is either placed between them, on both sides of the vessel (belly / panel amphora), or if it is a neck amphora and the handles originate on the shoulder, the main field has uninterrupted space to wrap around the body. For both types of amphorae, the ornament is most often placed under the handles, above the foot on the lower part of the body, and in the case of the neck amphora on the neck, as well as it is also used to frame the main panel.

Similar system of decoration to amphora has the **pelike**, but here, the lower body ornamentation is omitted, for the shape does not really allow it.

Hydria, having two horizontal and one vertical handles, and a sloping shoulder, creates space for the main panel between the two horizontal handles, and on the shoulder. The ornament is placed on the other side from the main panel, between the two horizontal and under the vertical handles, as well as above the foot of the vessel and occasionally also on its neck panel.

Oinochoe and **olpe** both have single vertical handle. On oinochoe, because of the spout, the ornament is either formed in horizontal zones, or is situated under the spout in a

single field, framed, with additional ornament sometimes placed on the shoulder and the lower body. Olpe is decorated in similar manner. On occasion there is a single large field covering the body that wraps around the vase.

Lekythos' decoration is always in a single field, wrapping around most of the body. The ornament is placed under the handle and on the neck, with the space above foot left undecorated.

The **krater** must be a favorite for the painter to decorate, for on the column krater the neck, divided by the two vertical handles creates two panels of equal size as well as either two or one continuous main panel on the body. Calyx krater, with its two horizontal handles situated on the lower part of the body of the vessel, also creates the popular single continuous panel. On both kinds, the panels are framed an ornament is popular on the lip of the vessel, and especially in South Italian painting also under the handles. The lower body of the column krater may also be decorated with ornament.

Stamnos carries similar decoration to the krater, with the exception that its sloping shoulder and small neck are not suitable for ornament. On stamnoi, the ornament is usually wrapped around the handles, or situated under the horizontal handle.

Cup, kylix and **skyphos** have decoration without frame, which is positioned between the handles. Under the handle, on kylixes and cups, since the space is tight usually a small ornament originates which spreads to the area around the handle. On skyphos, the large area under handles is either decorated with ornament, or ornament flanks the main field (as on the owl skyphoi).

Although ornaments have their designated places on the vase, to make sure when the viewer looks at the main decorative panel, they will be framing it, there are instances when they do not respect this system. Especially in the classical period, when the ornament becomes naturalistic and regains its own 'life', it sometimes protrudes more on one side than the other. This is however usually deliberate to accentuate a certain feature of the scene.

In Attic painting, area above foot, on the lower body of the vessel is usually decorated with upward pointing rays, exclusively in black figure. The rays may be at first

multiplied into two-three rows, on occasion they are also painted in alternative dark (or purple) / light colors.

In Proto-Geometric and Geometric the accentuation of the shape by the ornament was taken very seriously. Panels, zones, and their geometric ornament had their specific place to pull the axes of the vase and create optically taller or wider area. In black and red figure, these accentuations lost their purpose, although the painter did like to use tall and slim or scenes with laying figures to emphasize the vertical and horizontal lines.

5. Proto-Geometric and Geometric Ornamentation

To trace the development of ornaments on Attic vases, it is necessary to start somewhere. Although it could be argued that the prehistoric motives continued and developed into black and red figure, it would be way too much of a scope for one work. I therefore leave these aside, for it is a different field of decoration of vessels, one that I'm not at all capable to get into. The so-called Dark Ages give a good break in the continuity of decorations, and Proto-Geometric and Geometric ornaments, with their at first circular, later angular shapes and altogether different system of decoration practices, give a good starting point.

Proto-Geometric painters' main objective in decorating the vessel was the contrast of dark and light colors, decoration that clearly articulated the parts of the vase and general tendency to decorate in panels and later zones that had their designated place on the vase. It is believed that the style developed from Mycenaean Close Style (Cook 1997; Desborough 1952), where banded décor was reinforced by compact linear motives – concentric arcs and the scale pattern (Fig.1). Proto-Geometric has simple ornament repertory, widely using the concentric circles and semicircles drawn with compass multi-brush (at first with dot or solid core hourglass inside the circles, later divided by pendant group of tongues) (Fig. 2). Of the small repertory of main ornaments: semicircles and crosshatched triangles are popular on the curving shoulder of closed pots; full circles belong to the rectangular field on the body of the pot. Row of solid triangles (like alternating teeth), zigzag and wavy lines are also popular motive on the belly. Of the minor ornaments, notable are triangles, lozenges, and small chequers. The composition is symmetrically balanced – continuous rows are divided by dots or simple lines; the central panel is later flanked by free ornament or smaller panels that are occasionally put into upper and lower registers. More elaborate decorations have several panels or alternating semicircles and crosshatched triangles (these appear later) (Fig. 3). The paint was sometimes deliberately diluted, especially for zigzag row above a series of concentric circles, or when framing the lip of the vase (Cook 1997). The bottom half of the body of the vessels, below the panel, was usually lines with various thicknesses of horizontal lines and left blank (black).

Proto-Geometric is a severely abstract style, the few rare organic motives (such as a horse or a bird) appear often under the handles, a place that is later reserved for the ornament. As a style it highlights the shoulder on closed shapes, and in open the field between the two handles was often accentuated, with larger vessels often supporting a secondary decorative field around the belly (Desborough 1952).

Desborough's (Desborough 1952) Proto-Geometric Pottery provides a good overview of the development of style, the book follows the shapes of pottery, and not the different varieties of decoration, so the reader must follow alongside with being mindful of the variety of decoration and their occurrence. Lemos' (Lemos 2002) The Proto-Geometric Aegean is an updated version of Desborough's book, its pottery chapter is also divided by shapes and subsequently by findspots. Haug's brilliant book dedicated to the relationship between picture and ornament in early Athens (Haug 2015), follows the fine line between what is figural and what is ornamental to us. She argues that especially in the early stages of Athenian vase painting there is weak contrast between the two. Depending on their relationship to one another, the elements can be interchanged and oscillate between one another.

5.1. Geometric ornament

In Geometric period, there is a shift in emphasis from shoulder to belly and neck. As a strictly linear style, with late additions of human figure, it first followed the system of panel decorations continued from Proto-Geometric. With time, these panels were multiplied, until they covered the entire surface of the vessel. Decoration is usually a multiplication of horizontal strips, periodically interrupted by vertical panels. The rhythm of the decoration highlights the shape of the vessel. The strength of the Geometric ornamentation becomes with time its weakness, the rigid repertory and panel system will not let the painter to pursue new and more naturalistic ornament that often ignore and contradict the shape (Cook 1997).

Ornaments from the Proto-Geometric were continued to be used, with the newest addition being the multiple zigzag and meander. To Cook (Cook 1997) it seems not be derived from elsewhere – for the shape is too simple and the general style suggests

independent evolution. During the early stages of Geometric, the vessel shape has less of a swelling curve, a flatter field mean that bolder and more rectilinear decoration, such as the meander is possible. Meander was first introduced in battlement form (Kunisch 1998), built of parallel stands (an angular version of the Proto-Geometric wavy lines), typically for Attica it was stuffed with dots at first and later hatched. In early Geometric, the vessel was still mostly covered in black glaze, with a strip of decoration running around the body, and panels placed in the neck or between the handles.

In **middle Geometric** (Fig. 4), the transition from neck to belly was sharply articulated and the neck becomes the carrier of principal decoration, for balance, second frieze on the belly was soon added, usually with similar decoration present. The whole ornamental effect depends on careful planning and repetition of formulas. During this time further development in the overall perception of ornament happened – the tone of the vessel lightened – this was achieved by inserting more bands and reserving stripes between the decorative zones. And as in Proto-Geometric, large fields were divided into smaller fields, which give a lighter and more airy effect overall. Both novelties however weakened the overall connection between the shape and the decoration – before the shape was accentuated, now it was just a vessel covered with ornament (Cook 1997).

Middle Geometric brought in some other new ornaments – opposed triangles between vertical strokes, small tangentially linked circles, string of lozenges with central dot and especially animal figures were becoming more and more present – horses, birds and even human figure found their place in the subsidiary decoration (Kunisch 1998).

Late Geometric (Fig. 5) favored even denser decoration, almost tapestry-like, where the whole pot was covered, the panels were divided into series of squarish panels (metopal system of division, already noticed in middle Geometric) filled with hatched swastikas, quatrefoil, chequers, cross hatched batons, usually separated from another by series of small vertical panels ('triglyphs'). Meander became more complex, they were often used vertically on the neck, giving it the illusion of extra height (Schweitzer 1971). Spaced rosette-like stars appear already in the middle Geometric but become more popular at this time. Filling ornament of chevrons, zigzags, tangential circles, tends to be heavier, packed into the space between the arms of the swastika. Another novelty, the cross hatched

tongue appears in the metopes – this is perhaps flattened gadroon, adapted from metal vessels (Coldstream 2009, 51). Ambitious artists turned to animal and human figures, these were drawn repeated in a pattern, heavily framed by vertical strips of meander. Gradually, the importance of subsidiary decoration is reduced, giving the main scene a deeper field, flanked by plain stripes with few narrow rows of zigzag and chevron.

For Attic geometric one best turns to the book by Coldstream, which is for our purposes of mapping the development of decoration, nicely divided into subchapters following the significant groups, shapes, and decoration of the periods (Coldstream 2009). Schweitzer's *Greek Geometric Art* gives a great overview of the influences and development of specific pattern in this period, although it is mainly concerned with the figurative evolution (Schweitzer 1971), as is Rombos' book *Iconography of Attic Late Geometric II* (Rombos 1988). Specialized book about Geometric ornament is (Kunisch 1998), with a great overview of the possible variations of certain motives. Gadolou tracks the Near Eastern influence found in Geometric and Orientalising pottery, a very interesting topic, sadly the article is rather short (Gadolou 2014). Haug's book also continues the narrative of the relationship between the figure(s) and ornament, arguing that the contrast between ornament and figure in 10th, 9th and early 8th centuries is weak (Haug 2015). Depending on the relationship of the figure, ornament, their field, and frame, parts of the image can oscillate between figure and ornament. During the mid-8th century, with the development of complex figural scenes new relationship between image and ornament begins. Figures with the potential of action come into the foreground, whereas the passive ornament recedes into the background. But ornament also gains an important function of tying the figures to the surface of the vessel, providing order and structure to the scene, and emphasizing the figural part of the image (Haug 2015). In late Geometric, however, the distinction between figure and ornament continues to be slim – figures themselves are made of Geometric shapes, sharing them with the ornament. At the end of Geometric, although ornament continues to provide surface variation, and pull the attention to the figures, its role as an ordering element has diminished.

For both Proto-Geometric and Geometric, the available publications that trace the development of the shape cover the individual ornament found on specific types but lack an overall overview of how for example the meander or circle developed in this period.

6. Proto-Attic or orientalizing Ornamentation

7th century BC brings in a greater diversity of ornaments, now increasingly curvilinear and vegetal. They add liveliness and naturalism. With the change to more complex figurative scenes, ornaments are no longer needed to mark the transitions. Some of the complex ornamental dividers persist though. Increasingly images renounce the symmetrical composition, and the place of ornament is now as an accompanying element to the image. Especially on the back sides of the vases, ornaments are now monumentalized into a sort of ‘sceneries’ where they can show their new full potential, without affecting the main image.

It is often said that the ornamentation of Proto-Attic vases is influenced by Near Eastern textiles and metalwork. Although the metalwork connection is more likely, albeit not much explored, Brown (Brown 1980) in her work about Near Eastern textiles, proves that this link is not true, and that Proto-Attic ornament had to be influenced by some other source.

The **system of decoration** remains almost unchanged from the Geometric period. Images are placed in horizontal zones (these are in contrast with Geometric higher, often covering the height of the entire body), either separated into panels, or less often running around the entire circumference of the vessel (Fig. 6). Emphasis is placed on the neck and upper part of the body of the vessel. The area around handles begins to be divided off and decorated with ornament, that still echoes the Geometric tradition. The opposite (back) side from the main image is often left solely for ornament, it is here where the painters often draw their most adventurous patterns (Fig. 7). The bottom half of the body still retains the Geometric tradition of horizontal running lines of various thicknesses, zigzags, crosshatched leaves, triangles, or step-like lines. Above foot the rays are beginning to form, at first the area is decorated with thick and thin lines, later bowling pin like blobs appear, ultimately replaced by the familiar ray pattern. The overall effect of ornament is lighter and airier than its predecessor, although unlike the Geometric patterns, the variety and possible chaos of the filling ornament, gives it an uneasy and busy aura. While the neck retained some of the old Geometric tradition but evolved into the current form, the main field was revolutionized.

It is hard to make a list of the major and minor ornaments used in Proto-Attic art. I believe Cook described it best, when he called it a “vegetable medley” (Cook 1997). As its neighbouring orientalisising Corinthian has a clearer pattern and can be visualized from verbal description, only illustrations do justice to the unexpectedness of Proto-Attic ornament. At first the **filling ornament** between figures favours multiple zigzag lines, with lozenges featured under the bellies of animals and between the legs of humans. With time, these are replaced by a sort of cactus plant or leaves usually in threes, filled with dots (Fig. 8). Another variable of this motive is a sort of open volute tendrils with similar round, dot filled leaves between them. Perhaps these can be seen as precursors to the volute and palmette ornament, fully developed in the black figure. Haug is sceptical about the symbolic meanings of the ornaments mingling in the main field, although she admits that triangles and cacti resting on the ground can suggest natural setting (Haug 2015).

The back side of the vase often carries purely ornamental decoration, usually made of shapes found on the front, but enlarged and more symmetrical, often painted in streaky paint, as if carelessly. Of the new vegetal motives, cacti get a sort of pedestal with two tendrils coming around it and forming a heart shape. This form can be multiplied and attached to one another, forming a chain like structure. From a far it resembles an early version of the palmette chains later found in black figure. There is however no source that would explore this link, for Proto-Attic ornamentation is too unexpected to over time develop its ornaments.

There are some examples where a bird, present among the ornament, is acting as if it was in a bush, with its head almost pecking the ‘plants’ (Fig. 8). But mostly these vegetal motives are seen only by the viewer, the figures on the vases are oblivious to them. One example that is widely known and presently explored at large in the relationship between figure x frame x ornament x shape of the vessel, is the amphora by Eleusis painter that carries the depiction of Odysseus blinding the cyclops Polyphemus. Odysseus and his comrades hold a spear, that functions as the upper border of the neck frame. This depiction is fully explored in (Dietrich and Squire (Eds) 2018b).

Of the new ornaments, often accompanying the figures, especially in later proto-Attic are **braids** and double opposing snail like structures with the space between them filled with half-circle with rays coming out and on the shoulder of the snail flower like bud with petals (Cook 1997). These almost daisy like shapes are in later Proto-Attic present on many seemingly random ornaments – besides the snails, there are swastikas, volute like tendrils and cacti that carry these. Braids are at first hollow and present among the other filling motives in the main scenes (usually horizontally filling the upper part of the frame or vertically filling the space between figures), framing the lip of the vessel, and later they are used as dividers on the sides of the scenes (together with zigzag, rows of squares with dot and s-shaped ladder) and are painted with dark and light alternating strands (Fig. 7). On shapes that have prominent neck, they are favourite to emphasize the bellow lip are or the area framing the main belly image. Favourite additions are also plastic wavy lines, either on added to the lip, handle, or emphasizing (or covering) the transition from neck to the body of the vessel.

Seemingly wavy, on older vessels vertical S shaped curls found on band decoration on the neck or the body of the vase; later switching to a horizontal S-shaped curls forming a chain are popular towards the end of the period. These transition well into the black figure.

Continuing from Geometric, but also taking inspiration from Proto-Corinthian hatched triangles, are the **solid rays**, at first present on the lip and shoulder pointing downwards, but with time, switched to the foot and pointing upwards. Initially they are solid, with usually small lozenges either single or in groups between the individual rays, later they are alternating between dark and light and have smaller triangles present between them. Popular triangular shape is also a row of small triangles with bottom curled up, forming a sort of a wave or spiral hook.

Attic orientalising later adopted from Corinthian painting the **filling rosette**, initially drawn as a star like shape with dots at the end, later the arms shortened to form a dot-like rosette familiar from the Corinthian ornament repertory. Later painters use a six point like star, with the space between the arms filled with black dots, forming a sort of rosette like ornament. This was a popular motive for some time, until the arms fused together to form a rosette as we know it from black figure.

Filling ornament also made its way on the figures – there are many examples, where the thighs or buttocks of a figure are enlivened with cable pattern or circular rosette.

With time, filling ornament on the main image became sparser, with the subsidiary areas carrying stronger décor, that often had a life of its own (birds among cacti plants, heart like proto-palmette chains). The system of zonal division is slowly being overtaken by prominent main field and fields under handles and on the back side being filled with ornament that does not affect the action on the main scene.

As for the influence on these ornaments, Jackson (Jackson 1976) in his short, but very informative book, argues that the decorative system of dense filling ornament is in essence the same as on Wild Goat Style, but because the specific ornament are unique to the Attic painting, any borrowings are few and random. First examples of “cacti” occur on Cypriot pottery, but the possible development from Cypriot is not yet traced.

Besides Haug’s specialized piece (Haug 2015), Cook’s general book about Greek art (Cook 1997), and his article about Proto-Attic pottery (Cook 1935), there are some articles that are concerned with specific contexts (Brann 1961, 1962), or groups of pottery (Moore 2003), but they do not trace the development of the ornament. Boardman’s *Early Greek Vase Painting* (Boardman 1998) does include comments on the ornament, but they are rather general and scattered throughout the text.

7. Black Figure

Since Athenian black figure marks the final detachment from zonal composition and ornament heavy decoration, it would be supposed that the development of black figure ornament is well documented. But the opposite is true. Besides Jacobsthal's (Jacobsthal 1927) brilliant and always cited work on ornament under handles, there is not much material that would focus on black (or red for that matter) ornament.

Black figure's advantage over red figure is that its images do not need frame to work on the vase, since they are depicted in red-background windows, the figures do not need the support of ornament to not levitate in space.

The black figure **system of decoration** has a straightforward formula – the neck carries panel, at first reserved for a procession / animal frieze, later adopting a strip of small chequers and a palmette or palmette and lotus chain. Usually, the transition from neck to body is marked by above the main image with a row of palmette or bud chain, or downward pointing tongues, occasionally even rays. Body, in continuation from Geometric and Proto-Attic is divided into horizontal friezes, separated by either simple lines, simple meander, or a row of palmette lotus chain. Later, perhaps because it was more economical to draw larger figures, the zones are fused, and the body carries a panel with the main image(s). At this time, the vessel also firmly established a row of upward pointing rays above the foot, a typical ornament of black figure.

Until somewhat of a canon was established, the vases did not have uniform ornamentation. Nessos painter, for example still uses the Proto-Attic filling ornaments, although in smaller quantity giving the figures room to breathe. In the transitioning space between neck and body, on his eponymous amphora, a chain of lotus and palmette appears, multiplication and mirror image of the ornament found on the back of the Proto-Attic vases. Plants growing from the base line now look like fancy palmette trees – it is evident that the painter took what he knew from before and in the fashion of systematic repetition tried to mix it with the current trend of naturalism, achieving somewhat of an organic but still extremely schematic look. Filling rosettes now resemble more natural form of the Corinthian type, almost daisy-like.

Lotus and palmette chains are beginning to be in vogue, with the Gorgon painter drawing his between every division of pictural field (Boardman 1993, 17). There are several versions of this chain, the basic elements remain, but sometimes the shape reminds of eggs with palmettes inside and lotus flowers sticking between them, sometimes the middle connecting chain has rounder eyes with dot inside, another time the two are connected in a braid like shape, without the middle chain (Fig. 9). The lotus palmette also develops into a ‘freestanding’ ornament that Jacobsthal calls the ‘**Chalchidizing**’ ornament (Jacobsthal 1927, 33). It can usually a central space of the composition, often placed between figures, or it can be placed under the handles (Fig.10a-c). I must admit that to me it resembles a sort of a monster, the middle is usually thickly filled with intersecting tendrils that resemble eye on a basket, from there two lotus flowers, horizontally mirroring each other, come out, with their flower wide open. On the side, again in a mirror image, is a palmette with hollow, or on occasion filled with baby palmette, middle, and from the sides reach out to outside two tendrils, their ends split with smaller palmettes in the middle. It is a complicated ornament to draw. During this period (600-570BC), there is a tendency to place large ornament, either the Chalchidizing, or one resembling a tree growing from the ground and developing into two volutes with palmette in between two figures, often in the central part of the composition. The François vase, for example has very little ornament on it – rays are firmly set above the foot, the foot is framed by a row of tongues, handles have palmette chains, and a form of the ‘Chalchidising’ ornament occupies a central position in one of the lower figurative zones (Fig.10a).

The ornament on **cups** is usually simple, the lip has ivy leaves, or is left blank, under the central panel, tongues are painted, often in alternating colors. From the handles tendrils begin to spring with palmette-like ending. The tondo is framed by simple lines, or with tongues pointing outwards. There are some examples of Siana cups that on the outside have only palmette chain panel running around the vase, and on the lower part of the body tongues framed by wavy line, with the area above the foot carrying slim, almost needle-like rays.

From around 570BC a **chain of buds**, either all closed, or alternating open and closed, interlocked from the top (and bottom in some examples), begin framing the bottom of the main scene. It is usually very colorfully painted with purple and white used freely.

At the time of Exekias and other great black figure masters (c. middle of the 6th century), main panels began to be drawn without the **frame**. Only the upper part of the panel retained the ornamental zone – here palmette and lotus chain and tongues found their application (Fig.11). Neck ornament becomes prominent at this time, carrying a fine lotus and palmette chain, often multicolored.

Exekias and Amasis especially (c. 550-530BC), were fond of strictly symmetrical, **geometric spiral type** of ornament under the handles of amphorae (Fig.12a, b). The ornament had a roughly rectangular shape, with large spirals drawn in a fine, thin line are arranged in rough rows, but with an unexpected lightness and vitality. The points where one spiral branches into another were filled by Amasis with little palmettes. Exekias usually left them without any further decoration. Some Exekian amphorae have the bottom half thickly decorated with rows of interlocked buds, chequers / meander, plain bands and obligatory rays, occupying almost 1/3 of the body.

It is most likely, that from East Greek Fikellura amphoras (Jacobsthal 1927, 38) the fondness for **volutes and palmettes** arrived to Attic painting. Possibly the Fikellura painters (Fig.13) were inspired by the acroterion of stelae, but the ornament might have also developed independently. From Fikellura's broad tendril volutes filled at the branching off division with palmette, after the middle of 6th century two notable forms developed. The basic form has large set of spirals flanking a lotus (?) flower hanging from the base of the handle, organized in two pairs, in two rows, with the upper row sharing a palmette, the bottom an upright bud. Sometimes there were turnip-like buds drawn in the divisions of the spirals. At first the painters followed a strict symmetry, but with time the system loosened up a bit (Jacobsthal 1927, 57). Spirals of this type lead the eye of the viewer and carry the rhythm of the decoration. It was a favorite companion to strictly geometric ornaments of Amasis, who usually put four spirals into two rows, with four palmettes, sometimes with alternating dark and light leaves between two spirals. His hanging buds are especially voluminous, with petals often touching the bottom of the frame. Besides Amasis, Exekias (his vases often have only the spirals, no additional details), Affecter and Northampton painters favoured this ornament.

From the spirals under handles two distinctive types developed from the ‘Chalcidising’ ornament – one is the hanging and another hovering. The main distinction between the two is that whereas the first has supportive lines drawn, as to seem to be attached to the handle (Jacobsthal argues that it is because some painters found it unsettling to leave the ornament in space without any logical support, or origin (Jacobsthal 1927, 46)), the other is simply ‘hovering’ in the space below the handle.

Naturally, there are several versions of the **hanging ornament** (Fig. 14a,b), every painter created his own (Kunze-Götte 1992). The basic structure to the hanging ornament roughly covers a rectangular field, from the handle a flower or bud is suspended, sometimes tiny, other times covering the whole height of the field. On either side of the flower are two pairs of tendrils, roughly in a H-shape (Jacobsthal 1927, 48; Burow 1989). Their ends are split into two spirals (resembling Ionic columns) and the parts where the tendril splits into two, are filled with palmette. Some of the early palmettes have a protruding centre and many tiny leaves, comparable to a little sunflower, the later examples carry a well-developed palmette.

The **hovering ornament** (Fig. 15) is similar to the hanging, also covering a roughly rectangular shape. Its middle, right under the handles, is made of four spirals, sometimes they are closer to the handle and in a more of a triangular shape, other times they are situated in the middle of the total height of the space under the handle covering a rough square. Typologically, they are later than the hanging type, its palmettes have well developed round leaves and filled centre. In some examples, any space where the spiral divides, there are small filling palmettes, or at least tiny leaves, so called ‘drops’.

Nikosthenes’ version of this ornament begins a trend of dissolution of the lotus flower – a large upward palmette is situated under the handle, with double spirals underneath and from them a schematic open lotus flower with large petals (almost resembling teeth) hanging (Jacobsthal 1927, 49).

Both types of the ornament are almost exclusively found on amphorae. As for single handled vessels, the ornament is similar, but it is either simplified to have only four S-shaped tendrils coming from the middle hanging flower in a very abstract manner, with more flowers/buds at the end of the spiral. Some versions of the hanging type have a face-like structure inscribed in the ornament (Fig. 16), with the part right under the handle

forming a double spiral, developing into a hanging palmette with the tendrils that form the middle part and later divide into the side spirals, form an eye-like shape.

Of the hanging and hovering examples, the hanging prevail, there is even one where the system springs up from the bottom of the frame, but the two, hanging and hovering, never mix on a single vessel (Jacobsthal 1927, 56).

For all of the above types, there are shared characteristics of the spirals/tendrils – palmettes always fill the bifurcated tendrils, only rarely there are buds or drops. These seldomly conform to the curvature of the tendril, usually they stand upright in the axis. Spirals without filling at the branching point are rare (Jacobsthal 1927, 160).

As for the ornament that frames the main scene, **lotus-palmette chains** are still popular on the upper part of the frame, and around 530BC they found a formula that is going to be used well into the red figure. The palmettes are placed in an ovoid-like shape, formed by the lotus leaves (Fig. 17). The lotus part of the chain is however only hardly distinguishable. The side panels are framed with simple patterns, a zigzag line made of dots, simple lines, or branches of ivy. Double row of ivy is also used to decorate the sides of the handle.

Cups (now eye) continue to have a simple form of ornament lining the handles – from the handle a simple tendril curls up to end in a palmette. On some cups, there is no palmette, but instead a schematic lotus flower is hanging in the centre of the handle.

In the **transitional phase** (c. 510BC) to red figure, the system remains relatively unchanged – on the neck, a large palmette lotus chain is painted, often with strong vertical axis, to emphasize the height of the neck. On the shoulder, in transition to the main image field, a row of tongues may be present, below the main field is now an interconnected upward pointing chain of lotus buds, with the connecting tendrils forming O-shape. Lower and side parts of the frame begin to be decorated with circumscribed palmettes, novelty in the black figure that will soon be a staple of the red figure repertory. The lower part of the body is decorated with upward pointing solid rays. The handle still retains the H-shaped tendrils with palmette, now severely stylized in a sharp S-shape, with palmettes at the end

now finely spread out in a fan, with hollow middle and two tendrils at the base shaped like the spirals of ionic capitals.

There is not much written about what influenced the development of black figure ornament. Jacobsthal traces its origins to the East Greek Fikellura and Chalcidian vases, but with the book being written in 1927, the current knowledge is much wider, and he should be taken with a grain of salt. The only other book I could find, that deals with this topic, is Jacksons' *East Greek Influence on Attic Vases* (Jackson 1976). As the name of the book suggest, he deals with specific motives popular on Attic vases and traces their development from the East. Lotus and bud chain are said to develop from the Wild Goat style and Fikellura, the neck amphora was inspired by Fikellura and with it arrived the lotus chain on the neck of the vessel. Jackson points out that many of the motives loved by the black figure painters, have their origin in Fikellura and Wild Goat style especially. Perhaps Jacobsthal, who wrote similar ideas fifty years earlier, was not so much off. It is interesting to note however, that for East Greek painted pottery, if we were to look at the possible origins of some of the motives, there is not much material published about the topic, besides Cook and Duponts' book (Cook and Dupont 2003) and some articles usually dealing with specific vases or contexts.

Even books like Alexandridou's *Early Black Figured pottery of Attica in Context* (Alexandridou 2011), Hatzivasilliou's *Athenian Black Figure Iconography between 510-475BC* (Hatzivassiliou 2010), almost omits all mentions of the ornament. Sparkers' *Black and Plain Pottery of the 6th-4th centuries* (Sparkes, Talcott and Richter 1970) does have a section dedicated to the various decorations, although it may due to the fact that this is the only decoration on the vases, so some attention must be paid to it. Of course, detailed information about the specific ornament painters used can be found in sections dedicated to it in monographs on the black figure painters, as mentioned above, always with very nice pictures and illustrations of the ornament.

What I find interesting however, is that a lot of authors remind the reader that starting in black figure, specific shapes of vases are tied to specific types of ornament decoration, no one however tried to figure out what exactly these formulas are and how they developed with time and progress into red figure.

8. Red Figure

With the **transition into bilingual** and then red figure painting, a major change happened in the system of ornamentation. In the early days of red figure, black figure ornaments were still used, perhaps because black figure is better suited for ornament, or because with the newfound figure and space representation in red figure, the painters, who often worked simultaneously in red and black figure, did not pay much attention to new ornament, and they kept their old, well worked models.

A drastic change happened in the representation of **palmettes**. Their leaves are now thicker, open in a wide fan-like manner with space between individual leaves, and midrib on the leaves start to appear (Fig. 18). The centre of the palmette, first filled, then hollow, now receives central dot. Usually two tendrils, curled outwards, flank the base of the palmette.

Novelty, that was however already sometimes used in the late black figure, is the **circumscription of the palmettes** (Fig. 19a, b). They are enclosed in a tendril that wraps around the fan, with smaller sprout-like tendrils, usually not curled as much as the central one, growing on the side. The entire system seems lively and organic, the palmettes, even when stylized, retain something of real plant and add a nice touch to the whole image of the vase.

With red figure, it again becomes now necessary to add **frame** to the main image. Because of the dark background, without frame the figures would seem to be hovering in limbo. Frame sets them into space and adds structure to the vessel. Depending on the painter, frame either supports all four sides of the image (usually using row of chequers, tongues, simple meander or small circumscribed palmettes) or only on the upper and lower zone (often carrying more complicated ornament – palmette and lotus chain are still popular, as are circumscribed palmettes either all facing one way or alternating). With the frame slimming down towards the neck, **neck ornamentation** is sometimes replaced with thicker top frame – palmette lotus chain and newly fashionable circumscribed palmettes do the job. It is not unusual for the ornament on the neck and on frame to be in painted in black figure, with everything else being red figure.

During the **transitional period** and **early red figure**, **handle ornament** retains its form made of rows of circular shapes, but the curled-up spirals are now replaced by circumscribed palmettes. It seems that the painter is not much bothered whether his system has a beginning/support or is just hanging in the area under handle. With the more organic forms now used, the rigid system of placement of the palmettes is more lenient, they are at times all over the place, with no clear axis and balance. Jacobsthal (Jacobsthal 1927, 74) calls it **the boustrophedon ornament** (Fig. 19a). Some ornaments of the black figure H-shape develop a sort of central lyre motive – their middle palmettes have tendrils shooting on the sides that resemble a lyre. This motive will become in late classical period became very fashionable. It is worth mentioning, that even when the ornament does not seem to be in balance when looking at it frontally, when switching point of view to the main image, the composition is thoughtfully balanced, with just enough of the palmette showing on the side of the image.

The handle ornamentation of **stamnoi and kraters** reaches the peak potential of the circumscribed palmette development with its hovering circumscribed palmettes from which lotus flowers (in a shape reminiscent of dicentra flowers (Fig.20)) grow. The entire ornament seems to be in an unstable equilibrium / off balance, in relation to the handle and to the main scene, but it has a somewhat organic quality to it, as if the painter clipped a branch of imaginary palmette lotus plant and placed it by the handle (Goemann 1991).

Cups are at this time simply, but rhythmically ornamented. The tondo is usually without framing ornament, but with the handle supporting on either side a large palmette springs. This scheme is almost identical to black figure, with the main difference being the shape of the palmette itself.

In late archaic red figure **meander** interrupted by **squares with saltire crosses** (Fig. 21, Fig. 19b) is favored. It is used to frame the tondos, as well as main panels on closed vessels. Pioneering and advanced artists now do not frame their scenes, in order not to lose the figures on the body of the vase, they stand on a strand of meander or tongue pattern that acts as the ground line. This scheme continues up until the late red figure being favorite for simpler, more serene pictures depicting only a few figures at the most.

In **classical red figure** the relationship between shape and decor is weakened. With the newfound possibilities of figure and ornament, it is easy to enjoy the drawing and forget the shape. Ornament is less restricted, some painters repeat older black figure patterns, other improve the plant forms to look more naturalistic. From about 490BC the rays above the foot disappear. Lotus and palmette borders get new elaboration and a life is breathed into them. General trend seems to be to use the space available to grow the ornament into abstract elasticity.

Innovation to the **handle palmettes** is an addition of an origin, a sort of a branch, that either springs from the ground or from the handle itself (as if the palmettes were growing on a tree) (Fig. 22). It is not a major change, but the system is now anchored in a single point, an element that seems to be important to the painters. It is usually far from a realistic representation of a trunk or branch, these anchor tendrils are usually way too slim to realistically hold the entire ornament (Jacobsthal 1927, 84). Occasionally the painter tries his best to represent an actual palm tree, but it usually ends up looking like a fountain of spring water coming from the ground. What is interesting at this stage, is that sometimes the figures seem to interact with these '**palmette trees**'. There is a lovely depiction of Eos shooting a nightingale from the branches of the palmette, and often the 'tree' is significant to the story depicted on the vase. Birds also seem to like this 'tree' for there are examples where they are sitting on the branches, among the palmettes (Hurwit, Jeffrey M. 1992). Jacobsthal points out that the motive of the palm tree might have come from the East, or Egypt. Both have tradition in representing the so called 'tree of life' (Jacobsthal 1927, 85). He also argues that the tree might have a symbolic meaning and should be read as a determining element to the figures in the story (i.e., Athena and olive tree, Apollonian sanctuary). These trees most likely do not represent any real natural setting for the scene, landscape usually begins to 'exist' in the age without the gods (Jacobsthal 1927, 91).

On **kraters**, the main field may be divided into two horizontal bands, heavily framed by palmette lotos chain and circumscribed palmettes. Both the chain and the circumscribed row of palmettes that frame other vessels as well, are now drawn with precision and great detail. From about 450BC the circumscribed palmette row becomes a

favorite ornament to use especially on upper frame and neck of vessels. The palmettes are usually drawn horizontally or heavily leaning onto one side (Fig.20).

At this point the two main handle ornaments are the ‘palmette trees’ and circumscribed palmettes with lotus flowers growing very naturally without symmetry and often even central axis. The latter ones are represented more naturalistically, with time the palmette opens even more, the central leaf gains lancet shape and the tendrils around the palmette receive small leaves and more flowers added to them. These ornaments can sometimes be more prominent than the main picture scene, and on other occasions they can add an archaizing overall appeal to the vase.

The ornamental systems under the handles on bowls and **cups** have a tendency not to evolve into a complicated complex system (Fig. 23). They fill the empty space available to them and highlight the vertical axis to seemingly add height to the vessel (Buitron-Oliver 1995). At first, two palmettes with saddle-like spirals flank the handle, either not touching at all, or sharing a common tendril coming under the handle and culminated in a palmette or buds (Kunisch 1997). During the height of classical period, cups and bowls (but also other shapes where the handles interfere with the continuation of the scene) are often decorated with animals, figures crouching or laying, or objects / furniture is placed under the handles (Kei 2018). When ornament is present, it has a sort of a horseshoe U-shape centred around the handle (almost like a wreath hanging from the handles) (Jacobsthal 1927, 119).

New form of ornament appears during the classical red figure, first on stamnoi, but later making its way into every shape. It is what Jacobsthal calls the ‘**acroter type**’ (Jacobsthal 1927, 129) – palmette grounded on the bottom line marking the edge of the frame of the picture, with tendrils coming from the sides meeting above it (forming a triangle). This triangle is topped with another palmette that either has tendrils coming horizontally to the side of it, or the tendrils return downward before making a sharp upward turn and come back at the height of the upper palmette (Fig. 24). This ‘acroter type’ of handle ornamentation remains in place until the end of red figure. From the basic form described above it evolves (where the height of the vessel allows) into a multiple storied system (Fig. 25).

When it comes to the neck, lip, and handle decoration of the red figure vases of the classical period, popular ornaments are a chain of slim interconnected buds (in black figure), and ivy, myrtle, vine, or olive **branches with leaves** (Fig. 26). There is perhaps some connection between the choice of the species of the leaves and the scene depicted on the vase – during the 5th century BC ivy leaves are popular, before being connected to Dionysiac scenes. As with vine leaves (sometimes with the grapes too) they are often present on krater, with the figures of satyr often violating the border (Neill 2013). Myrtle leaves were connected with Apollo, Aphrodite, funerary scene, pursuits of love (here it depended whether they were broken or bent, it symbolized unfaithfulness and broken promises). It also appears, together with laurel leaves with which it can be easily mistaken for (myrtle can have small berries present among the leaves), on scenes with victors, or horse chariots (Kunze-Götte 2006).

8.1.Late Red Figure

The ‘**acroter type**’ persists, more often with two or more stories, with the lower tendrils forming the upper ones (like a ladder). In late red figure there is not much innovation added to the ornament repertory. It seems that since the ornaments found their rhythm and place on the vase, the painter did not see a need to mess up this system.

The general feel of the ornament becomes a bit uneasy, there is quite a lot of going on, with the spiky acanthus leaves and heavy filling details (leaves, flowers, small tendrils). The biggest change comes for the palmette, its fan is now widely open, and the leaves curl. It now resembles what can be called ‘**flaming**’ **palmettes** (Fig. 27), where the slim leaves curl up in a hook like shape (it slightly resembles a fountain), with central leaf being the tallest of them. This version of palmette is used until the end of red figure, in South Italian red figure being once more transformed into a feather-like form, with the central leaf ending in a diamond-like shape and the side leaves being gradually decreased in size, while still being very much compact and close to one another.

Small **palmette ‘trees’** begin to appear among the figures from around 370BC. They are drawn carelessly, with curled up tendrils and flower-like structures attached to them. At the end of the classical period, the ornament become simpler in repertory (almost

everything is now framed by tongue / ovoid pattern), leaves and an occasional horizontal palmette chain (the palmette now had a very prominent middle lancet leaf.

The **handle ornament** usually takes either form of the following two: 1) the ornament resembles the ‘acroter type’ but it is multiplied both vertically and horizontally, with every possible junction/division/empty space being filled with spirals and palmettes. It has no clear beginning nor an end, and it is hard for the eye to track the interconnected tendrils and palmettes (Fig. 28).

2) The ornament is drawn with a wide brush, to resemble a shape of a palmette, but looking more like a reversed (quite high) U with small leaves coming from the middle of the U shape. Palmette trees are also popular, their tendrils are drawn with variable thickness of a brush that give the tree a swelling look (Fig. 29). Some painters add various species of **flowers** to the palmette, some recognizable (bluebells), others that seem to be an *ad hoc* inspiration of the painter (Heuer 2019, 2015). In general, the ornament is either extremely complicated, covering almost as much of the back space on the vessel as does the main scene, or it is drawn very negligently, thickly, with forms that hardly resemble the gracious palmettes of classical period.

The ornamentation of **white lekythoi** is usually simple, painter uses the sloping shoulder and the space by the handle to paint fine, airy palmettes, almost looking like a sketch. The transition from the shoulder to the body is marked off by a meander row. Occasionally meander, or just simple lines mark the bottom of the frame. The ornament can be done on a white ground, as the rest of the body of the vase is, but it can also be fired in red or black clay, although this version is not as popular (Kurtz 1975).

Vases of the **late red figure** retain these complicated systems of palmette decoration, sometimes it is drawn finely and with great care, but more often it is painted with thick, quick brush, to cover as much space in as little time as possible. These formulas were adopted by **South Italian** painter, who, with some of their vases of monumental sizes, covered the entire back side of the body with intricate acroter palmettes that are sometimes too overwhelming to even look at. It is noticeable in late Attic red figure, but prominent in

South Italian, where the painter used more and more realistically looking vegetal ornamentation – acanthus, tendrils that shoot up like pea shoots, flowers of various species, braided into wreaths, filling the space hanging from the frame or growing from the bottom of the frame (Fig.30). Favorite ornament on the neck of kraters is a female head placed among a wild flora of tendrils and flowers (Heuer 2015, 2019). On some examples insect is added to the mix, for a truly realistic look. The painters of South Italian pottery also tried to add depth of space to their ornament by using shading, coloring, or various thickness of lines. As for a simpler ornament, that is often placed under the handle(s) of smaller shapes (Trendall 1989), grounded palmette is still a favorite, although as in Attic, it is drawn carelessly and with a thick brush. On some vessels it is a little ‘baroque’ with all the twisted and turned leaves. Favorite form is to flank the central palmette with two tendrils that divide and sometimes carry little palmettes, or even flowers. In both the naturalistic, complicated system of ornaments and the simple, grounded palmettes, it seems that for the painters it was important to have their ornaments resemble, as much as is possible, true nature – there is hardly any ornament that would hover in limbo, everything has an attachment, a root, a purpose.

It is hard to look for possible influence on the ornament in red figure. Because of the maturity of the style, it is probable that this ornament was purely Attic invention. I was not able to find any source that would comment on this. Jacobsthal talks about the influence of the East and Egypt on the ‘palmette tree’, and of the interconnected influence between vase and architectural ornamentation. In this matter, it is interesting to note that great piece on the types of circumscribed palmettes in row ornament is found in Dinsmoor’s (Dinsmoor 1946) article about the re-dating of the Athenian treasury based on its ornament. Of course, the question remains whether architecture shared the common forms of ornament with vase painting at a certain point, or whether there was a time ‘difference’ when one was ahead of another while influencing the designs.

Jacobsthal’s book, even though it is almost 100 years old, remains the basic reference not only for ornament under handle, but also ornament in general. It is a great resource, albeit written in a bit of a chaotic manner. It is, however, remarkable that he

managed to keep track of architectural ornament at the same time, footnotes are often full of analogies in architecture and sculpture.

As mentioned in black figure, monographs on painter are a great resource for individual ornament.

9. General remarks about the individual ornament shape

Tendrils – develop from the black figure fine-lined spiral vines, drawn with mathematical precision and uniform course to a more organic structure with variable width of line, but in a sort of a tension, that can snap at any moment, as if young shoots of peas were stretched in the space. Even when the tendrils are given these natural qualities, they have their prescribed shape and dynamics. In classical period, the flow of the tendrils is disturbed by deliberate division and looping. The tendril bifurcations are in black figure filled with palmettes, in red they are either left ‘blank’ or have small leaves or turnip shaped drop. These fillings act as means to fill the empty space, and also as emphasis in the axes of the ornament, their direction of growth being able to change the dynamics of the composition (Jacobsthal 1927, 163).

Buds and blooms - buds are somewhat rarer in black figure than in red. Black figure favors the ‘rose like’ multiple petal bud. Lotus flowers are common in both, in black figure they are more schematic, when hanging from the handle they are occasionally dissected into individual petals or have very sharp and slim ends. In red figure, they begin to resemble the dicentra or pea flowers. Both black and red figure flowers are however of an imaginary specie, they do not resemble the real lotus flower (Jacobsthal 1927, 165).

Palmettes – at first, they look like open fan, with the individual leaves often in light/purple color, with time the distance between the leaves widens, the fan opens up and the palmette is full of life. Since black figure is better suited for drawing palmettes, with red figure the problem of how to evolve the palmette comes, its middle leaf elongates, becomes lancet like and slowly the side leaves open into a widely spread fan. In late classical period, the leaves become ‘flame’ like, slim and curled at the tip.

Acanthus – is most popular in South Italian painting, but it can be also found in late classical Attic. When it was first introduced, as a part of the ‘acroter type’ it had leaf hooks on the sides of the ground palmette (at this point it is hard to tell what acanthus is and what palmette, for the distinction between the two depends on the specific painter), that were transformed into root leaves. The acanthus generally has a lancet shaped middle petal with saw like leaves framing it from both sides.

Three dimensionality – up until the South Italian red figure, vase painters were somewhat reluctant to show any depth of space on the vase. There are of course some architectural elements (water fountains, doors, libation fires, statues) that create the setting of the scene, but the attempts to make the scene more three dimensional were few and far apart. The evolution took some time (Richter 1970). When it comes to ornament, it is a strictly two-dimensional form, but there were some attempts to give it some depth. At the beginning of the 5th century, painters tried to use diluted paint to create an effect of depth on the leaves of the palmette. The best results can however be seen on the tendrils – sometimes the artist leave a part of the tendril ‘empty’ as if it was crossing another one and going behind it. Also, some painters play with the thickness of the tendril, the higher it goes the thinner it is. Perspective can first be properly seen on the acanthus – the painter double contours the leaves, giving them additional depth. In late red figure and especially on South Italian Painting, color, thickness of line and overlapping of tendrils all give depth and air of ‘nature’.

Interaction with ornament- while we have some figures that interact with the ornament, whether it is Eos and the nightingale, or figures throwing objects into the palmette ornament as if it were a bush, or figures holding the palmette scrolls in their hands, most often (especially in black figure) the figures simply ignore the space that the ornament occupies, they bump into it, or the painter paints them over it. Perhaps this points out to ornament being painted first, by a painter who specialized in ornament, or apprentice, with the figures painted after, and thus sometimes the painter is not able to fit them into their designated space (Kunze-Götte 2002).

10. Conclusion

It is of no question that Attic ornaments established and functioning place on Attic vases. The current research is interested in ornamentation, it is mostly in the semiotics of the study and there are a few and far between works published that deal exclusively with vase ornamentation. Although almost every book on vases and painters touches the subject of ornament, not many dedicate enough space and time to map out the development and possible influences. Interestingly, many authors state that specific shapes of Attic vases have types of decoration that are unique to them, however I could not find any formula that could describe this.

For future research it would be helpful to try to create these formulas, to put together on one place the possibilities of ornament on a certain shape, and how the painter would adjust this known formula to him. This could also help answer the question of how much of an involvement did the main painter (of the figures) have with the ornament, and what scope of work was done by another painter who might have specialized in ornamentation only. Perhaps it would also be possible to track the hands of the ornament painter and see if they worked exclusively with one painter / potter or if they were a sort of 'free agent' who would work for different potters or painters.

For overall clarity in the field, it seems to me to make sense to update Jacobsthal's work. Since the publication of the book in 1927 a lot has changed, and even though the book is still relevant, I think it deserves to be updated with the new findings and ideas.

I also strongly feel about teaching the students at least something about ornaments. Even when they do not carry the meaning of the scenes and depiction on vases, they are sometimes easy and helpful tool to quickly date the vase and / or assign it to the painter.

Hopefully with this short overview, I was able to show the basic development of Attic ornamentation and that it will be helpful guide for someone when looking at the back side Attic vases.

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