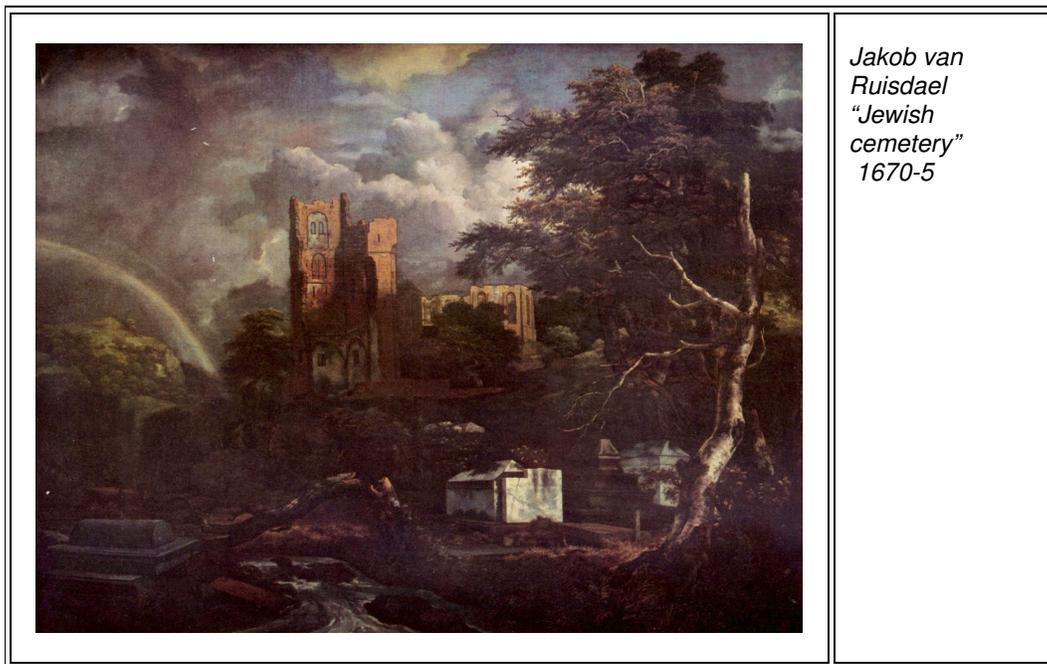


Chapter 4: Iconography and Symbolism in German Romanticism

The Influence of Dutch Painters: Jakob van Ruisdael (1628 – 1682)

Unlike his contemporaries Jakob van Ruisdael (already in the 17th century did not focus the exact reproduction of a specific landscape but painted self-designed fantasy-landscapes that were composed of different motifs. He used symbols that were distinct to the beholder. His paintings often show symbols of “vanitas” (which means “caducity”). So for example graves and graveyards and ruins show the decay and breakup of life. In his work “jewish cemetery” 1670/75) the tombs and ruins and the streaming water symbolise the dissolution of life and of human creation. In contrary to this the rainbow - for example - symbolises hope.

C.D. Friedrich, the famous and maybe most important painter of early romanticism, learned to know those paintings of Ruisdael during his study in Dresden.



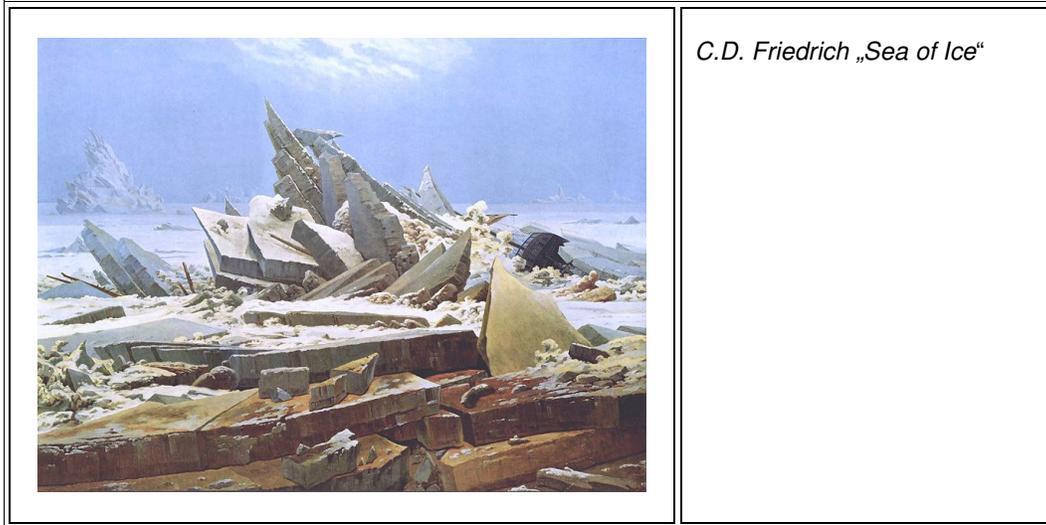
Symbolism in the Work of Caspar David Friedrich

For C.D. Friedrich “the feeling of the artist is his ordinance” **. Therefore the landscapes in his paintings are “landscapes of mood” that are based on his individual feelings. He composes his landscapes by arranging important elements and motifs he “experienced” on his journeys. He quite often sketched these motifs by “sepia-technique” and later on connected them in his studio according to his liking.

By the sheer subjectivity of this feeling C.D. Friedrich in contrary to Ruisdael not always creates a definite symbolism of the illustrated persons, items and even times of the day or of the seasons. The strong religiosity of C.D. Friedrich can be seen in the many symbols he uses that derive from Christian doctrine. Besides some of his works can also be interpreted in a political-sociological manner.

„Sea of Ice“ (1823/24)

The painting „Sea of Ice“ by C. D. Friedrich originally had the title: „Wreck of Hope“. It wasn't the artists target to display a naturalistic polar- or ice-sea-landscape. The composition of the painting uses symmetry, with its top in form of the piled up ice-sheets that form the middle axis of the painting. The pike of the ice sheet point to a bright spot on the blue ceiling, the sun, the light which symbolises transcendency. Applied on the "path of life" the salvation through death is symbolised.



This already makes apparent the so-called "thought of eternity" that is mastered by simple, space-forming means, colour-perspective, disparities of dimensions and height of the painted elements that altogether form the impression of depth of space. In the foreground the ice-sheets are stacked in several layers that evocate the steps of a temple-ruin and therefore they spread a certain ceremoniousness. The relicts of a wrecked ship seem comparably tiny and like crushed by those immense pile of ice sheets that reminds of a tomb. This may symbolise the caducity of all earthly being, too.

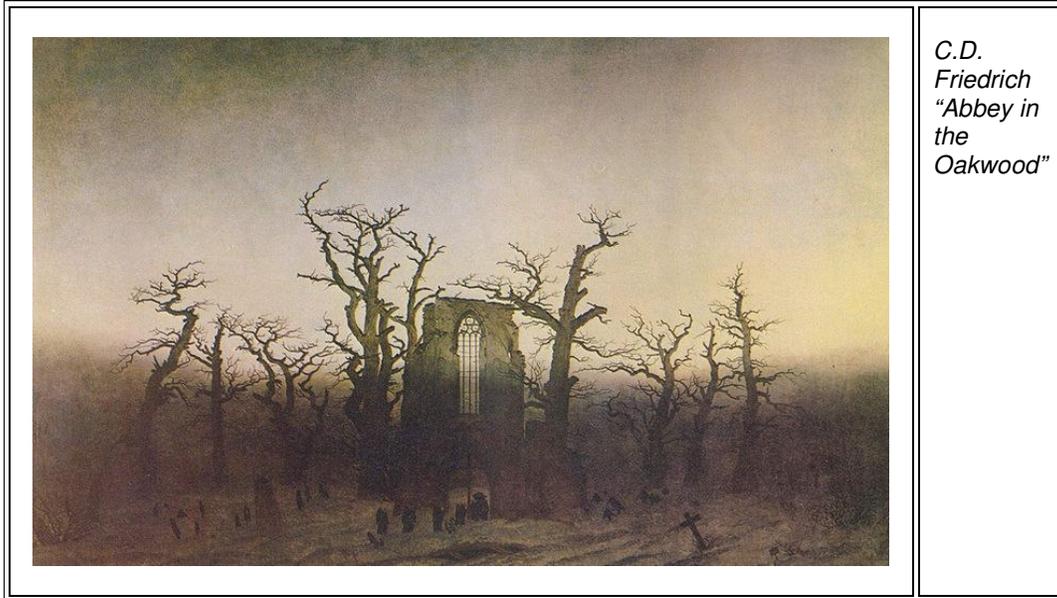
There can also be a political or social symbolism of the painting: Those stuck-together ice-sheets represent the icy, frozen political relationships in the times C.D. Friedrich lived. The ship as a symbol for freedom is buried under the mass of ice and therefore typifies hopelessness and resignation.

The Paintings „Monk by the Sea“ and „Abbey in the Oakwood“ (1810)

This „couple“ of paintings shows entirely different motifs that are connected by their common picture-symbolism.

The sketch of the composition "Abbey in the Oakwood" shows that in the middle of the painting the cross top of the churches portal is placed revealing eternity. This symbolism is reinforced by the placement of this cross and the ruins' gothic window on the perpendicular bisector that forms an axis of reflexion. Symmetry in the sense of C.D. Friedrich symbolises eternity. The organisational principle of the sequence symbolises the run of time and therefore even caducity. In this painting this can be recognized in the bizarre grid of branches of the trees ordered in rows which together with the church-ruins seem like a wall that illustrates a kind of barrier between two different worlds. Even the contrast in brightness can be seen as a symbol: The

lower, darker third of the painting, the graveyard and the brighter, foggy background are two different zones symbolising the here and now and the hereafter.



The funeral cortege therefore moves from the narrowness of the graveyard towards the longed-for but still foggy and unclear hereafter-world.

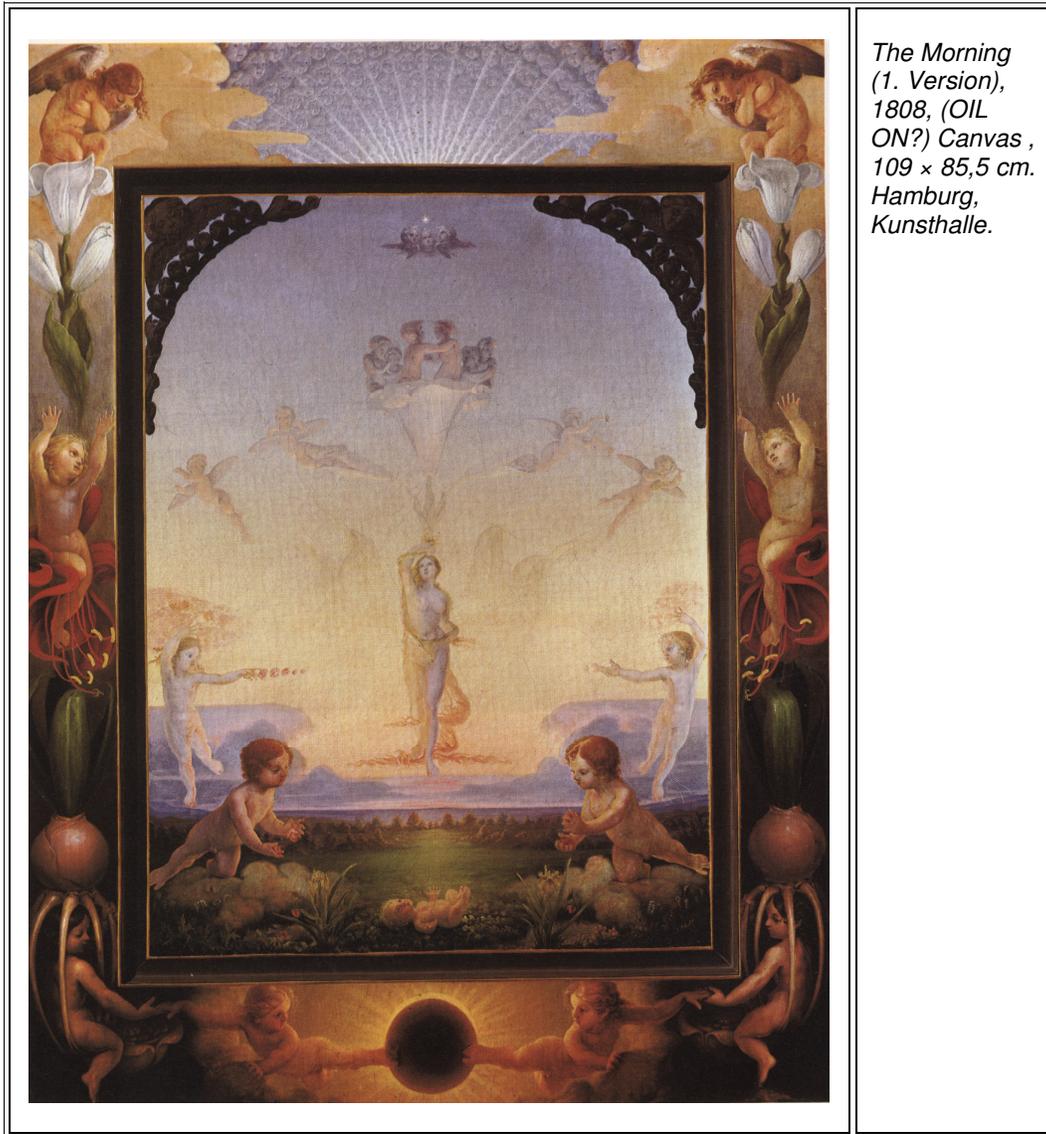
The cross in the churches portal in this connection thus can be interpreted as a symbol of transition and hope.

The painting "Monk by the Sea" can be seen as prolongation of the mentioned "Abbey in the Oakwood" which was placed right above this picture in the first exposition. The monk – maybe the person carried in the funeral cortege – after passing his "portal of death" is standing alone face to the endless sea, the infinity of space and eternity. In a first – later painted over – version of this painting there were still a couple of sailing ships visible.

In the work of C.D. Friedrich they often symbolise the travel through life, the path of life. Ships anchoring at the harbour symbolise the end of life, the death.



Philipp Otto Runge



*The Morning
(1. Version),
1808, (OIL
ON?) Canvas ,
109 x 85,5 cm.
Hamburg,
Kunsthalle.*

Despite his early death at 33 Philipp Otto Runge counts among the major painters of German Romanticism. His masterpiece is the cycle „The times of Day“. Since the end of 1808 Runge was occupied with the subjects of Morning and Evening, Day and Night which he developed as counterparts in substance and form. Initially he made four drawings, then, around 1806, four large-scale engravings to be transferred to a number of paintings in 1808. In the first version of “The Morning” representation strongly orientates by the central axis. To increase the effect of reality Runge applies a picture-within-a-picture method.

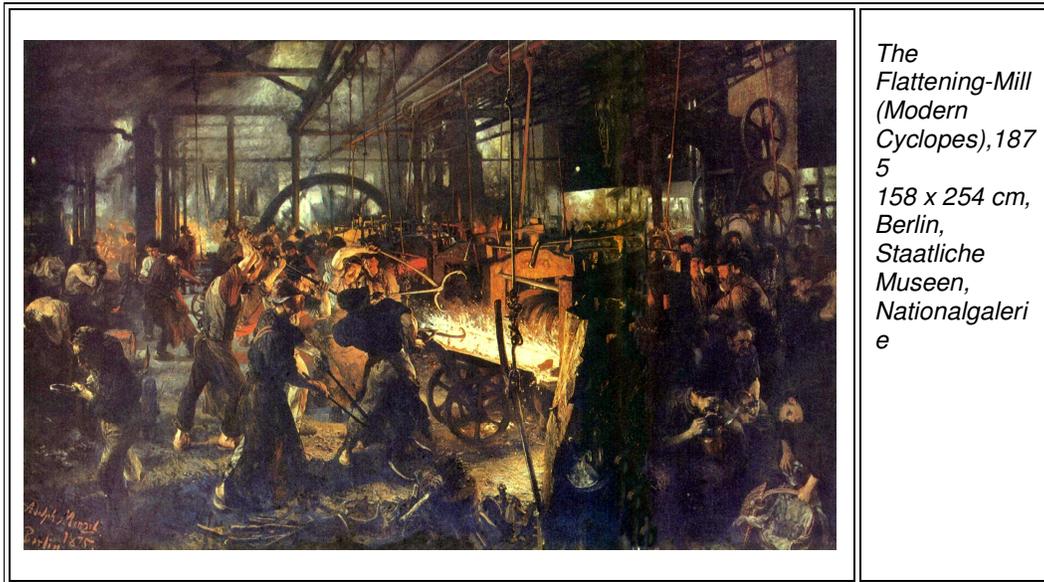
The symmetry of the iconic frame as well as the framed is almost perfect. In the centre Aurora, the goddess of rosy dawn, hovers frontally above the sea. She signifies the victory of sunlight over the pitchblack of night.

On the sepals of a lily above her three embracing child couples are seated, an allegory of Trinity. Moreover the lily symbolizes the divine light. On a meadow beneath children on both sides are kneeling on clouds, paying homage to the new-born.

A black sun (solar eclipse) refers to the darkness of the night, symbolizing death. Runge has written copiously about the role of landscape in painting, and developed from colour theory and his deeply rooted Christian faith an all-pervading artistic concept. It was his intention to create the cycle with monumental paintings, architecture, poetry, and music as a Romantic "complete artwork".

He did not succeed. Runge died on December 2, 1810 in Hamburg.

Adolph Menzel



*The
Flattening-Mill
(Modern
Cyclopes), 1875
158 x 254 cm,
Berlin,
Staatliche
Museen,
Nationalgalerie*

„The flattening-Mill“ is of particular interest as the iconic subject, prepared after long research and in many sketches, remains singular in Menzel's oeuvre and may be seen as the starting-point of a new form of historical painting in Germany. Menzel then was one of the most renowned German painters when he began to work on the project without any commission. We gaze into a huge factory hall where the only sources of light seem to be the blazing furnace-fires. Groups of workers rough-casting the liquid iron diagonally lead us into the pictorial space. Submerged in dense smoke they fulfill their exhausting task. Even short breaks and the change of shifts take place here; in the foreground a small group has gathered for a meal, protected only by an improvised screen from the machines' heat. On the left-hand side some men have a wash after work while others pass them, pulling heavy-loaded trucks.

The artist leads us into a different world testifying that it still takes human beings to serve the machines with sheer physical force. It is not an easy task the workers fulfil in the glorified Industrial Age. Menzel surely had become aware of the social tensions during his on-the-spot studies. The multitude of figures, the big wheels and technical particularities reveals a minutely detailed composition which combines the pictorial elements and thus leads the beholder. The painter dispenses with the superficial heroism of the workers but still makes them the picture's major subject, not by having them handle idealized, monumental machines but by representing the real circumstances.

The workers are perceived as a group, it is not the single person who counts but the entirety they form. The synchronicity of several actions within a painting is a traditional stylistic means to create a narrative. Here it serves to present a snapshot which in its intensity reveals a new perspective on the era of industrialization just about to begin, an era euphorically welcome at the time but to be judged more objectively only many years later.

Chapter 5: Iconography and Symbolism in Contemporary Arts

Max Liebermann



*Twelve year old Jesus at the Temple
(1887) 149 x 130 Oil on Canvas,
Hamburg, Kunsthalle*

Religious historical paintings do not belong to Max Liebermann's major interests. Still in 1879 he adopted the genre for the first time of his own volition. The subject: Twelve year-old Jesus at the Temple among the Scribes. The introduction of this painting to the International Art Exhibition in Munich 1879 caused a scandal.

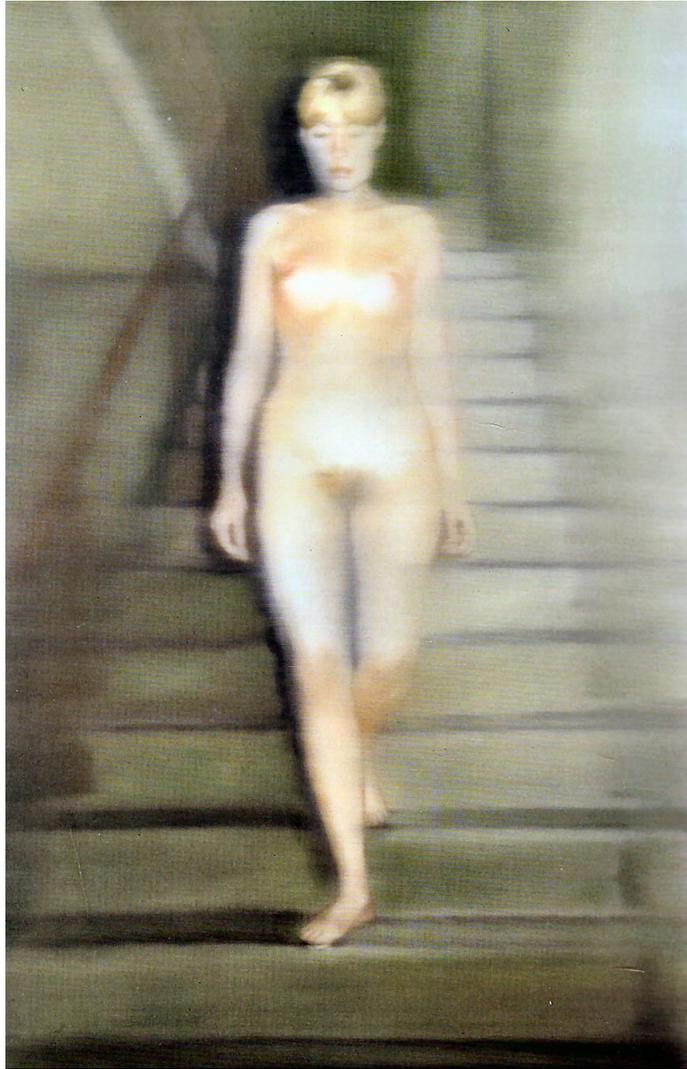
Liebermann reacted immediately upon this resentment. The figure of Jesus was partly modified. The original painting had shown a little boy, barefoot with weedy legs wearing a shabby gown. In the revised version the boy wears sandals, and his gown was lengthened to the calves. Furthermore Jesus now is shown with shoulder-length hair. The traces of this retouch are still clearly visible. Particularly the dark spots on the stone floor beneath Jesus are conspicuous.

Liebermann disclaims historical correctness. As a Jew he placed the event in a synagogue. The painting shows the very moment when Jesus lectures the scribes. As opposed to Christian tradition Jesus is not represented frontally but from the side, with his back and right shoulder turned towards the beholder, his hands folded in front of his chest, talking to the scribes. They approach from both sides, surrounding him in a half-circle opened to the front. The rabbis are silent, mesmerized by his elucidations. Their amazement is almost palpable.

Liebermann clothes these rabbis in Jewish manner. The green-dressed figure on the left is leaning on the back of a bench, bending curiously towards Jesus. Together with the rear-view figure wearing an Ashkenazim long black coat and fur-cap it frames the entire scene. The two seated figures behind and opposite Jesus emphasize their surprise by their sceptical and brooding faces. In the background, rather secondary, we can see the parents of Jesus. Joseph is already downstairs. With his back to the beholder he addresses Mary who is still descending the staircase. Jesus among all the grown-up men appears rather timid and cautious in his speech. Moreover he levels with the two sitting scribes eyes, i.e., he does in no way rise above them. Liebermann abandons the tradition of representation which generally reinforces the

triumphant supremacy of Christianity. His intention becomes clear immediately. As Boskamp (1994) points out rightly, Liebermann attempts to reconcile the Old Testament with the New.

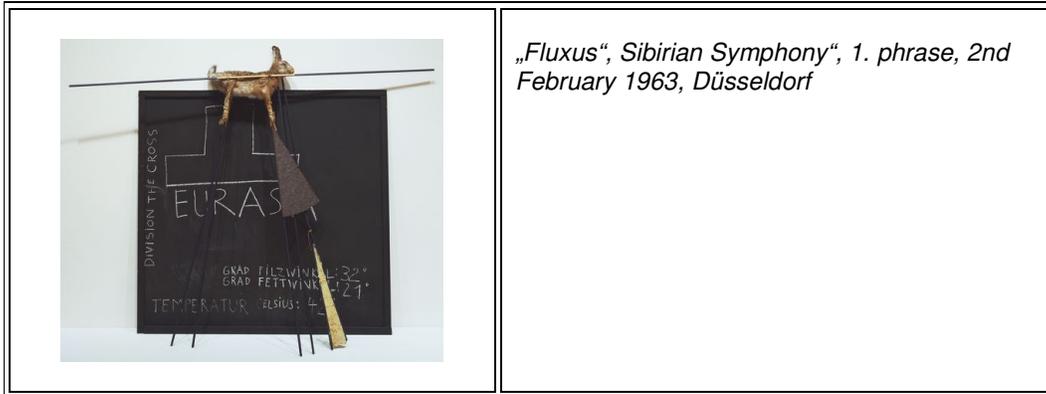
Gerhard Richter



Ema Nude on a Staircase, 1966, 200 x 130cm, Museum Ludwig, Cologne

The title already refers to Marcel Duchamps *Nude Descending a Staircase* that had raised a scandal in 1912. Richter had taken a photograph of Duchamps especially to this purpose (it is the first time he does that). But the composition reveals an important difference to his paragon. While Duchamp chose a lateral perspective of the body depicted, Richter decided for a frontal representation. We see an elegant, naked woman coming downstairs gracefully. It is not just a nude of an unknown model but of Ema, then Richters wife. She occupies the entire painting. By means of deliberately poor definition the scene is discreet and at the same time indiscreet. Ema appears before the beholder, she is perfectly there and yet dissolved, she is more the mood of appearance emanating from the momentum of reality. "I knew Duchamp, and there has certainly been an influence. Perhaps it was even an unconscious anti-attitude. For his picture has fretted me a bit. I value it very much, but I could not accept that with it a certain way of painting was finished. So I did the contrary. (Richter, in an interview 1991)

Josef Beuys

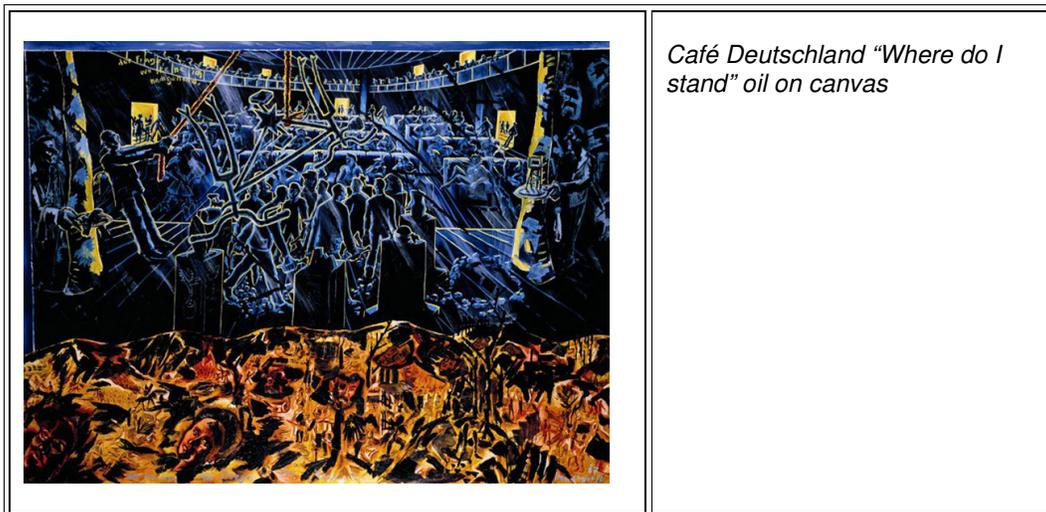


Due to the “Beuys’ Initiative” on February the 2nd and 3rd the first “Fluxus-action” at the Düsseldorf Academy took place. Almost twenty authors took part in this happening. Beuys himself accompanied two actions at those two soirees. At the second evening he made his “Sibirian Symphony”. For this purpose the grand piano was draped with little heaps of clay each of which carried a twig. Furthermore a dead hare was fixed to the blackboard. Additionally a wire was tightened between hare and grand piano.

In the run of the “action” Beuys cut out the hare’s heart. Later he explained: “If I am going to show a very intense kind of relation between the hare and me in this concert, a relation that represents birth and death, the conversion to matter, then this has nothing to do with any dadaistic happening to startle citizens.

This action was accompanied by verbal and written announcements. Even the smallest gesture was part of the opus and in so far part of language itself. The voice enters social space, the whole proceeding can be seen as a totally public action. We have to proceed to an “anthropological art” which is clearly directed to human individual (Beuys). The opinion that every human is an artist was the one and major of Beuys’ concerns.

Jörg Immendorff



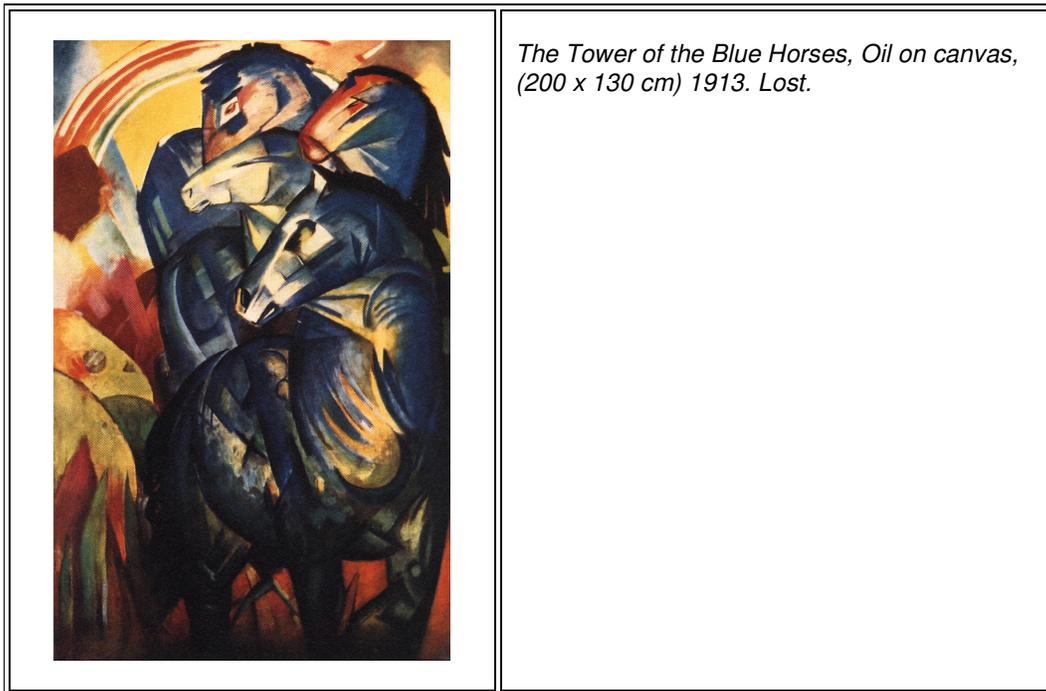
(altogether 16 paintings), the one introduced here has got the measure 250-330 1987

Immendorff began his famous series of Café Deutschland in 1977 and finished it 6 years later in 1983. In this artwork he already predicted the reunification of Eastern and Western Germany of which he was always convinced.

The visual rooms depicted in his Café Deutschland series (16 large paintings!) were taken from the discotheque "Ratinger Hof" in Düsseldorf. Main characters for these depictions were those involved in the conflict between east and west. The series is painted in a colourful manner; they are expressions of a man who tried to catch the political importance of the conflict between the two parts of Germany painted in an expressional way.

After "Café Deutschland" he produced other series of like Café de Flore in which he let loose of political articulation but searching for references to modern art. He also started to work on sculptures, e.g. the "Naht" sculpture for the documenta in 1982 and his apes that show the "enemy of a painter", as he stated himself.

Franz Marc



Franz Marc died at 36 in WW I. Still he counts among the most important German artists of the 20th century. Marc found a motif in the representation of animals, especially horses, which combined his artistic claim with his religiously spiritualized imagination. The pursuit of unity of man and nature in an approach to the untainted purity of animals was his superior subject. He founded, together with Wassily Kandinsky, the artist group „Der blaue Reiter“ (The Blue Rider), which stood in opposition to the then leading „Neue Künstlervereinigung München“ (New Artists Association Munich) and propagated the beginning of a new way of understanding and practising art.

Marc's Style soon merged a progressive Romantic perception of nature with contemporary tendencies, such as Delauney or the Futurists. „The Tower of the Blue Horses“ is, in reference

to its iconic structure and its inner consequence, not only one of Marc's masterpieces, it can also be seen as the pictorial quintessence of his spiritualized imagination of art and of life which he documented in letters and other writings.

On the left-hand side four horses rise subsequently, their bodies of a strong blue colour in various shades and levels. The heads are bent backwards towards the pictorial space to the left which is vaulted by high hills and a rainbow at the horizon. The iconic elements ascend in dense, narrow strata to the sky. Marc takes on the Romantic colour symbolism and further develops it in his oeuvre. The pure spectral colours visualize the claim to purity and harmony, blue being typified as the divine celestial colour. The swinging structures on the horses' bodies aim at the beholder to make him "feel the inwardly shivering animal life", the stroke being rhythmical and intense.

Franz Marc saw in his paintings „altars of the coming spiritual religion“, he lent the representation of animals entirely new levels of meaning by understanding them as a metaphor of a sacrally informed art.

Anselm Kiefer

Anselm Kiefer is among the most important as well as critical contemporary German artists. The different phases of his work are defined by a wide variety of different materials, but his themes are a continuous thread.

Kiefer's affinity to literature is expressed in many titles, other inspirations come from ancient mythology, the Jewish religion, the texts of the Old Testament, and not least the long chapter of „German history“. A disciple of Beuys, Kiefer creates connections between lyric titles, old stories and their actual visual transposition. An example for this approach is the installation "The Angel of History" at the Paul Maenz Gallery in Cologne.

It presents fragments as well as entire machines made of lead and glass. Arranged like an aircraft cemetery, they convey ambivalence to the beholder: on the one hand they rouse an almost childlike fascination with engineering and airplanes which appear as supersize toys, but on the other hand they lack any naïve notion, as the weathered leaden objects are easily identified as implements of war. It is a male world of image and expression – supplemented by different elements on or within the surfaces. Black locks of hair protrude from a wing fragment entitled „Berenike“ – referring to the ancient fable of the lock of Berenice.

A bit further the presentation of a Starfighter, on the wing leaden books and poppy brushwood are stacked, entitled "Poppy and Remembrance". Objects appear which seem well-known but rid of their context: „Melancholia“ - without the reference to Dürer's famous engraving it is just a glass-polyhedron filled with dirt on the wing of a leaden plane. Symbol and reception, signs which allow the beholder to only rudimentarily enter the artist's thought – similar to the famous paragon „Melancholia“; the symbolism of Dürer has not been deciphered yet, the iconic references lead in many directions.

Kiefer's art rather relies on the fact of being instead of representing. His works are myths materialized from past and present, poetic and artistic references, traces the beholder may follow, animated to ponder and to phantasize.



„Berenike“



"Poppy and Remembrance"



„Melancholia“

Max Beckmann



The Night, 1918/19, Oil on Canvas, 134 × 156 cm, Sign. below, l.o.c.: August 18 - März 19 Beckmann. Düsseldorf, Kunstsammlung Nordrhein-Westfalen

We witness a terrible crime: seven figures are crammed in a narrow room. The assault of three

felons takes place at night. There is no escape for their victims, a humble family. They are being tortured and killed. The central perspective is abolished, additionally to the dense iconic texture oblique special lines reinforce the chaotic disorder. A candle serves as the only source of light, a second one has already fallen over, signifying death. Amidst the turmoil the perpetrators callously fulfil their plan of murder, torture, rape, and abduction. On the left-hand side two of them, using a twisted blanket, heave a man on a table. One villain wearing a head-bandage and civil clothes tries to break his left arm. The tortured man's cries remain unheard, stuck in his throat. A red-haired woman, half hidden, is standing unconcerned behind him, On the right-hand side we see the man's wife, raped, half-naked. Handcuffed, she is hanging in a painful twine above the floor. The third felon's face almost vanishes underneath his cap. With a child in his arms he is looking for an escape, while in the left-hand corner a dog is howling. Underneath this animal Beckmann has put his signature. It informs us that he has been working on the painting for seven months, from August 18 to March 19. Beckmann's painting thus immediately mirrors the threatening situation of post-war times, the fear of socially brandished, of poverty and violence after the failed November Revolution of 1918 and the breakdown of the Kaiserreich. The Night is considered the masterpiece of Beckmann's early Frankfurt period.

Part 2 Practice of Art

In this part of the workpackage two topics will be dealt: One will be a report about some techniques in fine arts that were applied in former times and are still used today, the other aspect is how to teach theoretical issues about artists and artworks. For this purpose examples of teaching-units are added.

Examples for techniques can be found in Chapter 1 to chapter 4, while chapter 5 addresses the teaching units. Concerning these units it has to be mentioned, that they were made to reach different target groups. So maybe a unit for younger students (aged 12 – 14) will not really correspond to the needs of elder students on the other hand.

All examples given in chapter 5 were developed by teachers for their own purpose and thus do not claim an overall validity. Please note that in the preview as given under the single paragraphs there is a Link that will lead to the referring text- or media - file.

Chapter 1: Creation of Stained-Glass-Windows

Introduction

The model for construction of silhouette-stained-glass-windows is given by the so called "tracery". The "original" tracery was used for building churches / church-windows in former times. It was presumably sketched on the "Rissboden" (German), a carpented wooden floor. The tracery was constructed with a circle and by the help of braids that marked its original dimensions that were carved in stone later. On the "Rissboden" the window could be built together probationary and checked for fit.

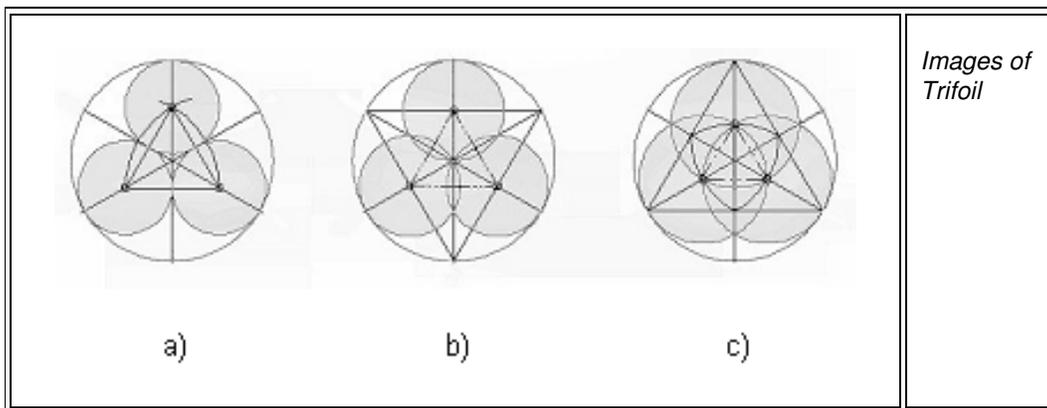
This is a practical guidance for the making of stained-glass-like tracery-silhouettes from cardboard and transparency paper. Besides the fact that first of all stained glass-windows should be contemplated concerning their structures, their meaning and their usage in foremost gothic cathedral-buildings it has to be clear that you need a little bit of euclidean geometry to resolve the construction-task on the paper itself. Therefore a short overview about how to do this starts the overview.

The numbers of kinds and patterns of tracery is various, therefore only a few principles will be shown.

What you need:
 coloured transparency paper
 black cardboard
 Scissors / cutter
 Circle
 Glue
 Some geometric knowledge
 Patience

Constructing a “Trifoil” on the Paper

In gothic tracery (as it is used in stained-glass-windows, too) the so called “trifoil” is a very important and almost omnipresent element. The number “three” has a symbolic meaning in the sense of “holy trinity”. The following explanation refers to construction of simple tracery based on a preset circle into which the trifoil shall be inserted. The following illustration shows three different accesses to construction:



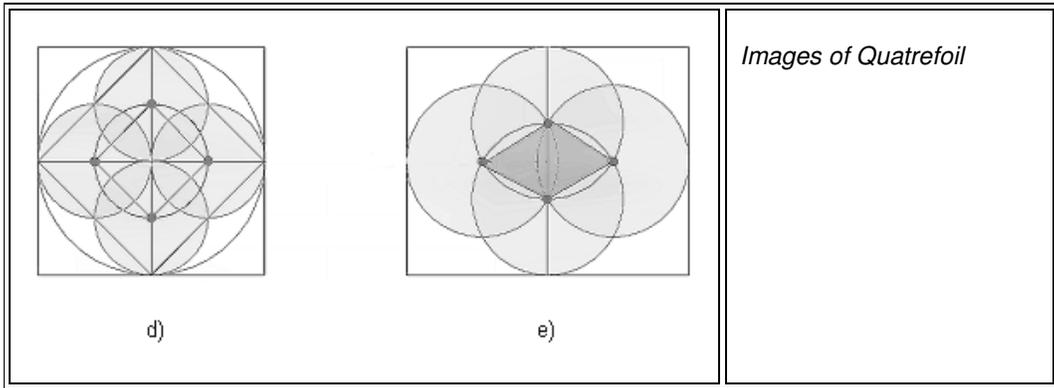
a) In a circle it is very easy to construct a triangle or a hexagon. The centre of the triangle or hexagon can be found by constructing an inner circle within the triangle (hexagon) with a semi-radius or along the bisecting intersections of the triangle. In this first trifoil in example a) there is no crossover of the three circles but only osculation points. In the middle of figure a you find a “spheric” triangle.

b) The construction of this second trifoil corresponds as far as possible to those in figure a), with exception that the diameter of the three inner circles is the same as the radius of the circumjacent circle. All circles intersect in the middle of the circumjacent circle.

c) The tangents of figure a – circles with their surrounding circle form the corners of an equilateral triangle. The bows around the medians join both other medians result in their intersection the middle of the inner circle.

The „Quatrefoil“

Unlike trifoil quatrefoil symbolises all the earthly. Multiplied by “four” the omnipresence of god on earth is indicated. The two illustrated drawings are determined by a preset height.



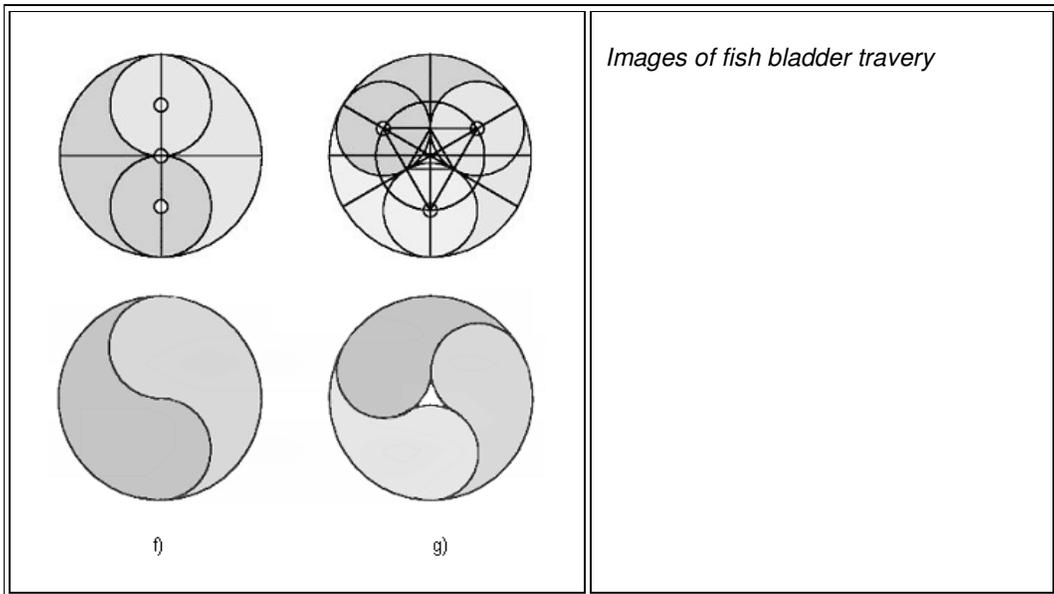
In example d) a circle is drawn within the square, the square is divided crossover in four sections. Half the radius of the inner circle is used as measure for each of the smaller four circles with overlapping areas.

Example e) shows what happens if the diameter of the inner circle is cut into thirds to be the radius of the four inner circles.

The Fish-Bladder Tracery

The most important element in late-gothic ornamental tracery is the “fish-bladder” (in German “Schneuß”). Despite its organic appearance it results from geometrical construction by circle. Its simplest shape is two fish-bladders within one circle (figure d) that can be constructed quatering the diameter of the surrounding circle. Though their construction is easy the effect is amazing.

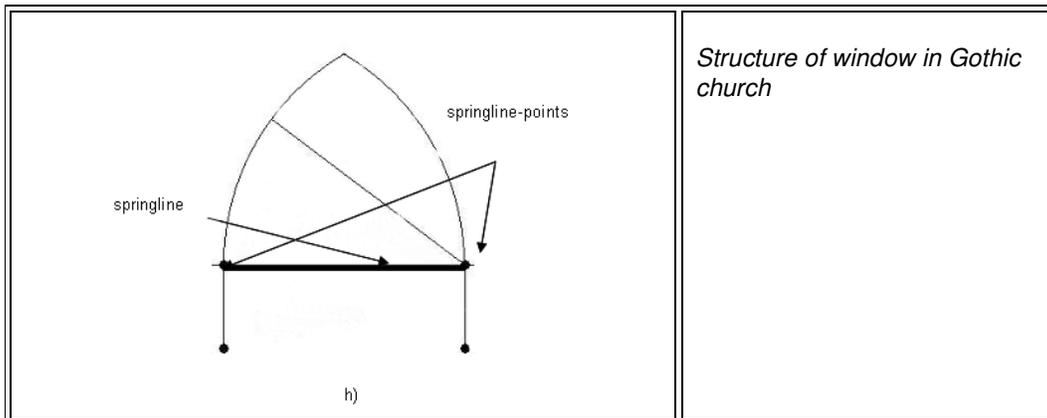
The construction of three “bladders” can be done by using a regular triangle on whose surrounding inner circle three smaller circles are placed, each of which with a radius of half the diameter of the outer circle (figure f).



Easily to imagine that almost all other forms of the fish-bladder-shape can be educed by the construction of the corresponding inner form as a pentagon, hexagon (a.s.o., see figure g).

Still some general connotations:

The windows in gothic churches are normally divided in two sections: one rectangular area which is covered by a second area formed by two crossed arches (the two elements together form a kind of “pointed arch”). The rectangular part is bordered by the so-called springingline on its top. The ends of this upper line (see figure h) are called springline points (German: Kämpferpunkte). Depending on whether the centres of those two arches are scrolled on the extended springingline the arch gets steeper or flatter.

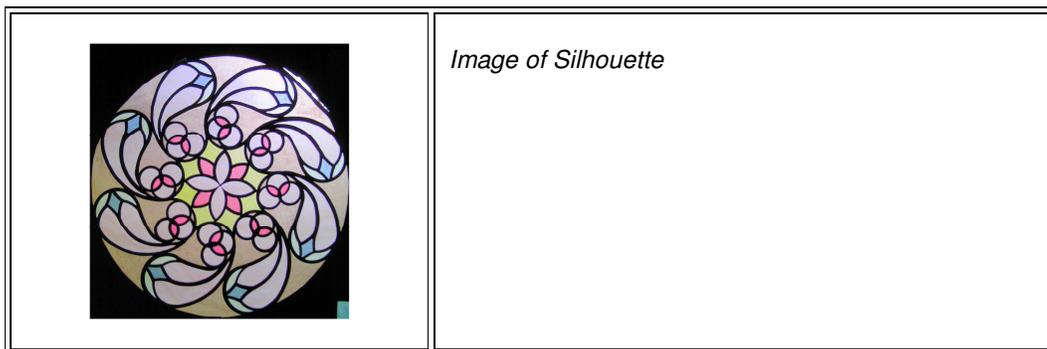


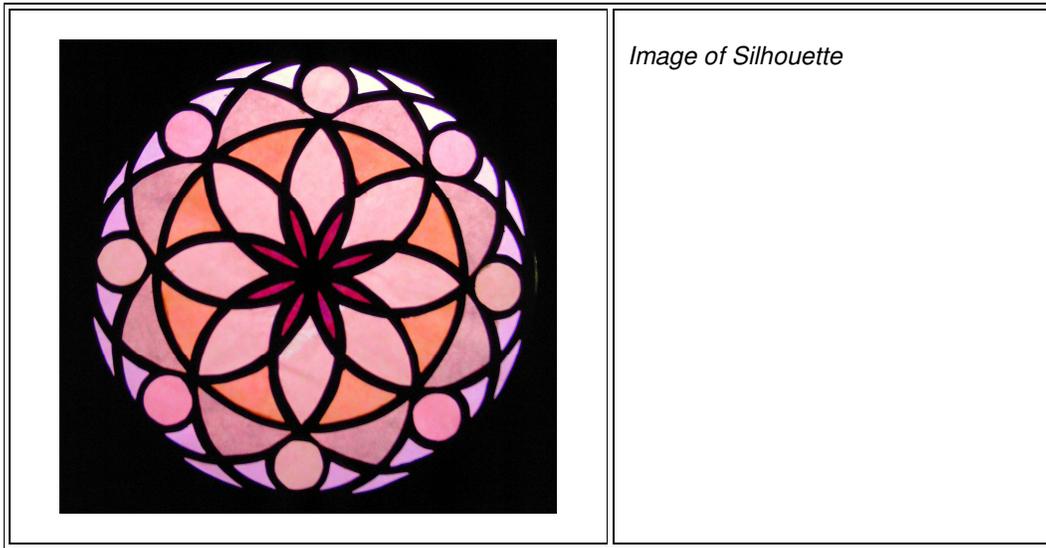
Construction of the Silhouettes

For the construction of those medieval window-shapes as silhouettes you either copy your sketch on the DIN A4-black cardboard or directly draw on it. When the copy (or drawing) is done there should be left a brim around the lines (about 2-3- mm on the left and on the right), thick enough to give some stability to the later cut-out shape.

After drawing the brim cutting can begin. Depending on the delicateness of the chosen pattern of “tracery” either the scissors or the cutter can be used.

After having done this, the cut-out shape has to be bonded with transparency paper in different colours from behind, corresponding to whatever the purpose of the construction is. The pieces of transparency-paper have to be cut out corresponding to the cutout framed by the brims and fixed on them. Some results of constructional efforts. Here some examples:





Chapter 2: Sculpturing with Clay: A short Guide to making Pottery

Different kinds of clay

used for pottery

used for ceramics/stoneware/earthenware

fireproof matter

paper-clay

brick-clay

Potting clay: The different materials have specific advantages, for making pottery in the sense of sculpturing normally potting-clay is used. It is burned red, because it contains iron. The potting clay doesn't sinter which means that its surface stays poriferous and permeable to water (as long as not glazed).

Clay always shrinks while drying, therefore it is necessary to calculate the percentage of shrinkage before burning.

Sludge

Sludge is liquid clay or clay-mud. Collect the clay no longer suitable for potting. These rests must be bone-dry before further processing. Cover the clay supply with water. Leave alone for 24 hours: the pieces of clay are going to fall apart. Twirl the mash swiftly with a twirling-stick, pass it through a fine sieve. Use a strong brush to do that. When too liquid, rest the mash for another 24 hours, then pour off the superfluous water. The sludge ought to have the consistency of clotted cream. Pour the sludge into a tight-closing tin to keep it from drying.

All parts attached to an object by help of sludge, i. e., handles, ears, embellishments, are called accessories, the process itself is called the trimming. First the points on the object and on the accessory that are going to be joined together are being roughened with a potter's needle. Sludge is then applied to both ends before the accessory is being glued to the object with very soft pressure. To that purpose the end of the accessory has to be moved rather quickly to and fro, it is, so to say, "shivered" onto the object. At a certain point during this process the

accessory suddenly sits fast on the object. The superfluous sludge can be removed with a wet sponge or soft brush. Give heed to the standard: Trimming only makes sense when both object and accessory have taken on a leathery consistency.

Layer Technique

First produce a number of clay rolls, cover them with a humid cloth, as the rolls have a huge surface, they thus do easily dry out and might break when further processed. Flatten a clay ball on a piece of paper or - . even better - on a potter's wheel, and form a round disc about 1 cm thick. Form the rim up to a height of ca. 2 cm by lifting the clay with your fingers. Apply one clay roll to that elevated rim, adjust it to the right length, form a ring and form a new layer of the vessel's wall with it. Apply some sludge if necessary. Flatten the visible joint with your fingers or a suitable tool

Plate Technique

For smaller clay-plates so-called Bodmer-G-clay is a suitable material. For bigger plates, or tiles, fire-clay is the better choice. This meagre clay is less prone to warping and fissures as it shrinks less. The bigger the tile's surface, the thicker it has to be. Put two battens next to the clay and cut off one tile after the other. Keep in mind that they will shrink. If tiles of 15 cm square are required, the fresh G-clay tiles must have 16,3 cm square (shrinkage rate 8%). The shrinkage rate is generally stated on the package.

A different method to form plates is the use of a rolling-pin. Form a clay ball, put it on a piece of smooth paper. Use the rolling-pin to form a regular plate. Cut this into squares. Dry the plates between plaster-tiles to prevent them from deforming or disproportionate drying. The plate should attain a leathery consistency before being further processed. Then they can be assembled to square vessels by means of sludge. This has to be done with great care. The edges must be roughened and supply "glued". A short pressure will not do. The plates must be "shivered" as described above, until the elements are fast. The floor-plate should stand out a millimetre after cutting, so the protruding clay can be spread. To avoid tension during the drying-process the objects ought to be covered for a few days. Glazing always causes tension which can be devastating if the trimming has not been done properly. To prevent this the edges can be reinforced with tiny clay-rolls applied to the sludge oozing during the joining of the plates and spread neatly onto the adjoined plates.

The Drying of Clay

Before burning the clay must dry proportionately and – above all – slowly. Objects of up to 1 cm thick require a week, heavier objects accordingly take longer. Drying means losing water and volume. The objects ought to be regularly turned to achieve proper results. Clay should not be dried on a non-porous surface. Plaster-tiles are ideal as they absorb water. The drying objects' temperature gives a reliable hint at its state: if it is colder than its ambience it is still containing water.

Preparation for the First Burning

Objects may be put inside each other for burning. Put smaller objects above bigger ones.

The burning process is in several phases. The clay still contains small amounts of water which must be evaporated in a controllable manner. This is done in the first burning. The furnace is fired and slowly brought to a temperature of up to 600 °C (rake-burning).

The nature of quartziferous elements of the clay change at ca. 520° C, a point which is called

“quartz inversion”. The temperature must be slowly increased to this point to avoid fissures or breaks.

The Burning

At 100 °C the clay sets free the water it still contains. At 200 °C this process is irreversible, i. e., the clay is no longer water-soluble. At 350 to 700 °C it evaporates another 5-15 % of chemically bound water. Generally the burning increases at 100 °C per hour up to 650 °C. Then the hourly increase is 150 °C, up to the final temperature of ca. 960 °C. This level is kept for ca. 20 minutes. Objects burned at 900 - 1000 °C are called sherds or biscuit ware. The clay is hard now, but still porous.

The Cooling

Burned objects ought to remain in the furnace for some time. The temperature should be below 100 °C before the furnace is opened. Then the door can be opened - a small crack only! Those too impatient risk damages!

Chapter 3: How to make a Print: Etching and Engraving

The plates

The technique of copper-plate printing is also called „intaglio” (Tiefdruck (German), gravure en creux (French), stampa in cavo (Italian), diepdruck (Dutch).

The media are plates of a very smooth surface. Cuts are chiselled into this surface to take in the printing-ink. The ink is to be removed from the untreated surface. Moreover a printing-roller and damp, absorbent paper are required.

The term „to engrave “ is derived from Middle English “grauen” and Anglo-Saxon “grafan”, meaning “to dig”, “to cut”, and also “to write”.

Furthermore there is a distinction between aquatint and engraving, the latter comprising the copper-plate print. The aquatint requires extreme prudence as the materials used are toxic and caustic. Chemical knowledge (e.g. how to handle the very concentrated acids) and precautions (safety measures, protective means, etc.) are indispensable.

It is recommendable to use ready-made plates made of copper or other suitable metals. These plates are already faceted , ground, and polished. Thus prepared, the plate must be cleansed and any surface grease removed. There may not be any finger-prints, i.e., the plate should not be touched with bare hands. To remove grease from the surface acetone, whiting chalk or liquid ammonia are applied
(Cave: chemicals!)

This kind of preparation is necessary especially with aquatints.

Sketching the motif on the plate

Secure the plate fastly

Trace over the motif (Advantage: the result of the laterally reversed print can be checked beforehand), or

Do a drawing, e.g. with a special marker or lithograph pencil, or

Use graphite paper, or

Draw with a ball-pen, soak the paper slightly, press the drawing on the plate by using the printing-roller, or draw with a pencil, proceed as with the ball-pen, but apply less pressure on the plate

Necessary tools:

Use a pantograph to increase or to decrease the scale of a drawing-copy.

The Dry Point Engraving

(“Kaltnadelradierung” (German) “pointe sèche”, „Gravure à pointe sèche (French), incisione a puntasecca”, „Puntasecca” (Italian).

With this technique the motif is being incised directly into the plate. The effect for the print is one of softness as the ink not only fills the incisions but covers their burrs, too, which are thus also printed.

The softer the plate, the easier is its treatment. But the softer the plate, the fewer the number of reproductions of a motif, as the incisions and burrs soon are wearing out. With copper-plates about 20-30 reproductions are possible.

The dry-needle has a steel-point, expensive tools have points made of diamond or sapphire.

Dry point technique:

The result of such an engraving depends upon the manner the needle is held during the work-process.

A vertically-held needle results in two burrs and thus a double-line in print

Held at an angle of 30° it produces only one burr and a broad incision

At 30°- 60° the needel cuts a so-called saw-tooth burr

At more than 60° the needle takes the burr off and only leaves an incised line which though does not reproduce very darkly

Copper Engraving

The copper engraving, also called “line engraving”, “burin work”, „burin engraving”, “chalcography” („Grabstichelarbeit”, “Strichgravur” (German), „Gravure au burin”, burin”, „Gravure au trait”, „Gravure sur cuivre”, „Chalcographie”, „Gravure en taille-douce” „taille-douce”(French), „Calcografia”, „Incisione”, „Incisione in rame”, „Incisione ad incavo sul rame”, „Incisione al bulino”, „Bulino”, „Incisione al tratto” (Italian))

In copper engraving the needle is not just drawn, it is used in various directions, and the plate is also at times being moved beneath it. In the original work-process the plate is made fast to a moveble wooden device which can be turned in any direction, while the hand rests calm on a suitable support (such as a leather cushion).

The copper engraving is apparently the simplest method of intaglio. From such an engraving many more reproductions are possible than from a merely „drawn“ one.

Engraving techniques:

- Punching,
- stippling (pointillist effect through singular, stippled holes)

Chapter 4: Oil-Painting-Technique

History of oil-painting

Of course there could be written quite a lot about this technique in special and in general. The technique of oil-painting goes back to Roman times. Recent research suggests that it spread from Afghanistan to Europe.

At first wood was the support medium. In the 15th century oil-painting had become the foremost technique besides Tempera.

This technique uses pigments processed with oil to achieve colours with certain qualities. Generally linseed-oil is the basis, but others can be used, such as of poppy-seed, sunflower or walnut. Depending on the characteristics of the oil and, of course, the support (canvas, wood, copper) effects and shades may differ.

Techniques

Quite often a sketch was drawn on the support medium, using charcoal or diluted paint (for grounding). Oil-colours were mixed with turpentine or other suitable substances so it dried faster.

The artist built the painting from „thick to thin“. The colour was applied in several layers, and each new coating had to be a bit “fatter” (oilier) than the one below, to prevent the colours from peeling and fissures. A number of substances, such as resins, solvents, waxes or varnish served to influence the colour or to get special effects.

Brushes and knives and cloths were used to apply the colour. Oil paint gave the artist many options to correct what he had painted as the colours remained paintable for quite while. Even whole layers could be removed and painted anew, as long as the paint was wet.

After a resting-period of six months a painting was dry enough to be varnished.

Ingredients

Linseed-oil is being extracted from the seeds of the flax plant. Modern water-soluble oil-colours have only recently been developed by the technical advance in chemistry.

Support Media

One traditional support for oil-paintings is canvas. It is a tissue made of flax-thread fixed on a wooden frame. A less costly variant uses cotton tissue. The tissue on the wood-frame is being tightened with wedges stuck onto the edges of the frame, thus extending it slightly. Generally bone-glue and white lead were used to ground the cloth-surface and to protect it from the caustic ingredients of the oil-paint. At times chalk was added. Wood, by the way, was prepared with „gesso“, a mixture of glue and chalk.

Steps taken in oil-painting

Before applying the colours the artist begins with transferring a sketch onto the medium (canvas, wooden board, copper, etc.). For the mixture of colours he uses pigments, originally made of most finely ground chemical elements in suitable colours (e. g. sulfur for yellow). The

pigment was mixed with oil and assumes – according to proportions – a liquid or pastose quality. Nowadays ready-made oil-colours come in tubes.

For application mostly brushes are preferred. These can have a multitude of forms and variants, there is a rich selection from the finest one-hair brush to the most robust one. The brush-size and the way its hairs are arranged determines the manner of application. A knife is often implemented to put on colour, too, though to an entirely different result. The knife can also be used to remove colour from the support (corrections).

The first layer is with oil paint diluted with turpentine. It tints the canvas and covers the white “gesso“. Artists might use this diluted paint to trace out primary features.

After the first, „sketch“- layer has dried, the colours can be applied, either „step by step“, by reworking the composition successively and in detail, or by performing the so-called mosaic technique and applying all elements side by side and finally joining them.

Chapter 5: Extracts of Teaching Units around Symbols and Symbolism in German Arts

The teaching-units given below were developed for different educational circumstances and different kinds of schools as well as in different levels of education.

Therefore their appliance is not automatically for any purpose but only the “fitting” setting. Please note before using one of these approaches that they do neither claim that they are all-embracing nor do they give “ready to use” examples that can be 100 percent copied without any adjustment to the individual necessities – there is still much more information to be added and researched. Nevertheless the units give a good cue what can be made within the theme “Symbolism in artworks and fine arts”.

For teachers interested in units that are already “ready for use” you will find a very comprehensive database under the following address (Guide to MOMA/Grove Art Learning Resources): <http://www.oxfordartonline.com/public/page/lessons/Unit1Lesson1>

Topic: Gargoyles at the Cologne Cathedral

Teaching unit for students aged 12 - 14

Teaching unit that focuses on the gargoyles and their meaning. Along three very well-known examples of gargoyles an analysis of function and relevance is shown.

Follow this link to the unit

Topic: What pictures tell us: „The Seduction of Holy Anthony“ of M. Grünewald

Teaching unit for students aged 14 -16

Contemplation of the Isenheimer Altar with its different “pieces” is an interesting issue. It contains a lot of aspects to consider, theoretical ones as well as interpretative ones. This teaching unit is about the last mentioned and tries to give the students a feeling of how to read a religious artwork like this famous altar that served as a “book” for the beholders.

Topic: Symbols in the Artwork of Albrecht Dürer

Teaching unit for students aged 14 – 16

What does the word „symbol“ mean? In general and in the artwork of Albrecht Dürer? How can content be coded by symbols and deciphered at the same time? Along three examples typical symbols used in Dürers artworks will be outlined.

Blueflowering Iris (Blaublühende Schwertlilie) (1503)
Melencolia I (1514)
The hare (1502)

Teaching – Unit about Maria Sybilla Merian

Project for a 5th grade in art education

Objective:

The discussion of life and work of the female artist and researcher M.S. Merian (17th century) will be approached using different accesses: Students work out relevant themes in groups and present their results on a poster that represents their outcomes of investigation. This poster is the basis for further both visual and verbal information for their classmates.

The distinct themes result out of Maria-Sybilla Merians biography.

Draft of a Teaching Unit about Maria Sybilla Merian

For a grammar-school, 12th grade

1. Practical work about the object „insects“ referring to the theme art of the baroque in the 17th century. Special issue is the life and work of Maria Sybilla Merian

Theme: What happened to the beautiful butterfly? Metamorphosis of a butterfly

Technique: etching, gravure