

The Science of Art and Design.

Elements and Principles

By Tracy Moreau



*There is more of a science than an art, to art.
A technical and very logical foundation on which to build the imagined.*

There has always been a mystical quality that has surrounded artists, many (Non Artists) believe that the ability to transpose what we see or imagine, to paper or canvas is somehow inherent. Those of us that have been gifted, know otherwise. Every day is a new learning experience, whether it be a new medium or technique, we know that Art and the practice of creating it, is a daily education. Continuing our education, increases our skill set, and improves, if not our work then our understanding of it.

Understanding the Principals and Elements of design, can help the artist assess his own work, to see where things may be changed, added or removed to produce a technically sound and aesthetically pleasing work. Some artists intentionally Bend the "rules" to great effect, While others adhere firmly to them, with equally pleasing results. Whatever your choice, the knowledge will serve you well.

I have given you some Basic Information on the elements of Design in this issue. I hope that you find the information useful.

Elements:

Line:

Line is a mark made by a pointed tool, A brush, stick, pencil, pen.... and is often referred to as the "Moving Dot"

It represents the path between two points , often suggesting movement within a drawing or painting. It can be straight, curved, vertical, horizontal, diagonal or zigzag, and can vary in thickness ,Thick or thin (Organic or Calligraphic).

A line can also be IMPLIED. Meaning that the mind can fill in the blanks, when several points are positioned geometrically within a frame, the points are linked as the mind searches for recognizable patterns.

The direction and orientation of a line can imply feelings (emotions) for instance Horizontal Lines imply tranquility or calm whereas vertical lines can imply power and strength. Oblique lines can imply movement, action and change. Curves lines communicate quiet, calm and feelings of sensuality.

When lines converge it implies Depth , scale and distance . Like a road , or a fence converges into the distance, provides the illusion that the flat two dimensional image has three dimensional depth.

Shape:

Shape is an area that is contained within an implied line or is seen and identified because of colour or value changes. Design in Painting is basically the Planned arrangement of shapes within a work of art.

Shape is 2 dimensional- Length and width. It can be geometric (Circle, squares, triangles Hexagons..etc or Organic (Free form or biomorphic...shapes that appear in nature , like leaves, clouds, mountains among other.

Shape are either Negative or positive space, for a painting to have a sense of balance, both positive and negative space can be used to counter balance each other.

Space is defined by shapes and forms , Positive space is the place that forms and shapes exist. The subject in a painting is usually positive. Abstract or non-objective Art usually uses a positive shape or shapes as the central element(s), Abstraction often reduce things to their simplest shape. Negative space is the empty space around the shapes and forms.

Form:

Form refers to the 3 Dimensional quality of an object, that takes up space in part to the light and dark areas. When light from one direction strikes an object, part of that object is in shadow. The light and dark areas within an image, provides contrast that suggests volume and mass.

There are a variety of forms:

Architectural Form:

Usually consist of enclosed spaces and most often are geometric. Some architects use "Curvilinear" form in design.

Abstract Form: Reduces forms to its most rudimentary basic characteristics

Non-Objective Form: Does not represent any natural form.

Realistic Form: Depicts, people, animals, birds, plants, etc, as they truly appear.

Colour:

This is perhaps the most involved of the elements, as it covers such a vast amount of information I decided on providing just some basics.

Colour has three Properties: Hue, Value, Chroma.

HUE: is the colour (ie: Red, Yellow, Blue) the colour wheel is based on 3 Primary hues (Red, Yellow and Blue) placed evenly around a circle.

Value:

Value refers to the Lightness or darkness of a Hue. (the amount of White or black added)

Chroma (Intensity or saturation) This refers to the purity of the hue or the saturation of the colour. In order to mix pigment into clean saturated colours, it is essential to include a warm and a cool of each of the primaries in your palette. There is no such thing as a pure primary pigment, so when mixing green for example, selecting a cool blue such as a Phthalo, and a cool yellow such as Lemon, ensures there is no trace of red in the green. Using a warm yellow like cadmium or a warm blue like ultramarine, would introduce a slight trace of red into the green resulting in a compound colour.

Colour Continued: General Knowledge

Secondary (Hues) Colours: Are the colours you obtain by mixing two primary colours. Ie: Red and Yellow make Orange, Blue and Yellow make green, Blue and red make purple.

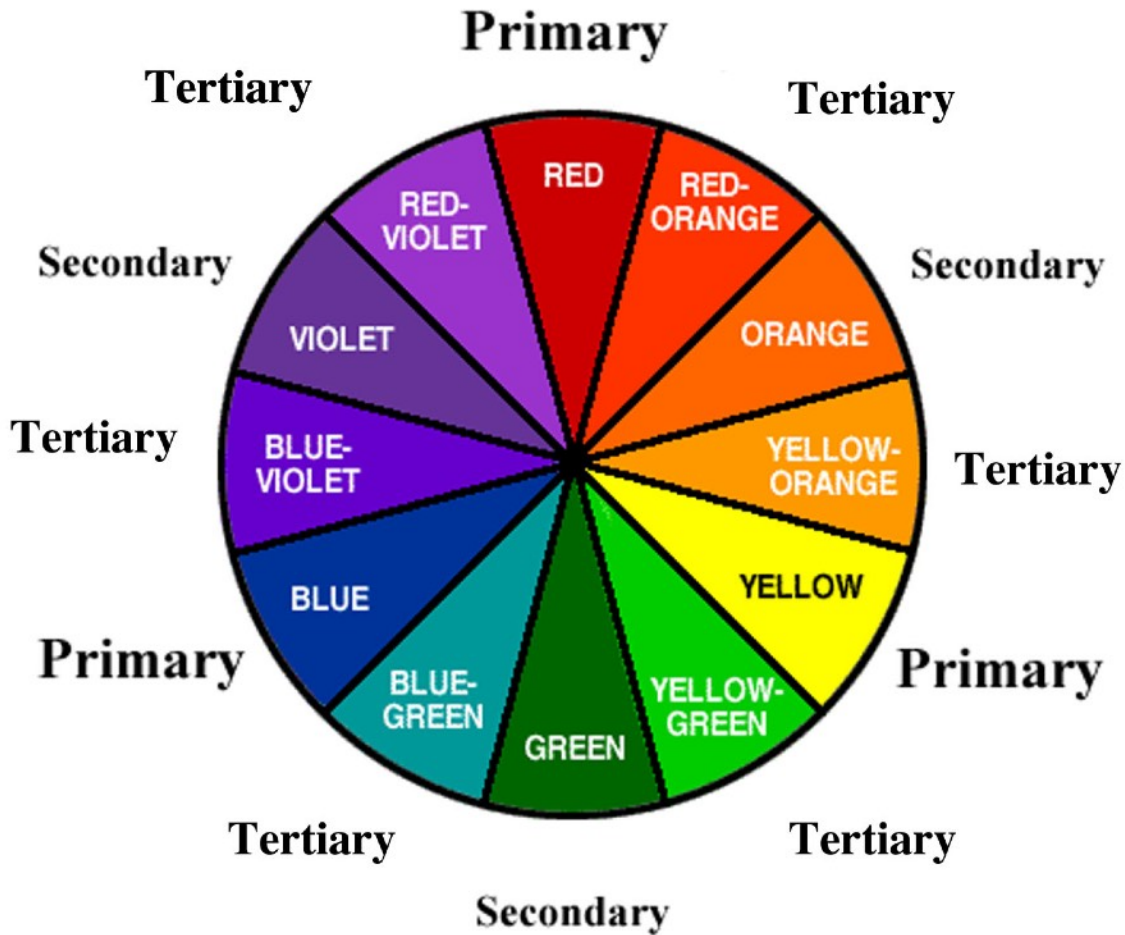
Tertiary (Hues) Colours: Are the colours you obtain when you mix a primary colour with a secondary colour. Ie: Yellow and Orange make Yellow Orange, Blue and Violet make Blue Violet.

Monochromatic (Hues) Colours: refers to the use of a single colour and merely adding Black or White to achieve a different value.

Analogous (Hues) Colours: This refers to colours that are adjacent to each other on the colour wheel, Ie: Yellow and green. Analogue colours harmonize well, and tend to have a soothing effect.

Complementary (Hues) colours: Are colours opposite each other on the colour wheel. Ie: Blue Violet and Yellow. Complementary colours exhibit a higher degree of contrast, when side by side.

Triadic (Hues) Colours: These colour schemes involve the use of colours that are equally spaced on the colour wheel.



Compound (Hues) Colours: are colours made using a combination of all 3 of the primary colours together. Ei: All browns, Khakis, and earth colours are compound colours.

Neutral (Hues) Colours:Are made by adding a “Complimentary Colour(opposite on the colour wheel) to a Hue Neutralized hues are often called “Tones Value

Value is the lightness or darkness of a colour. Value is also called Tone. Value helps us to see and understand a two dimensional work of art. Value describes form. Value creates a focal area or centre of interest. Value defines space.

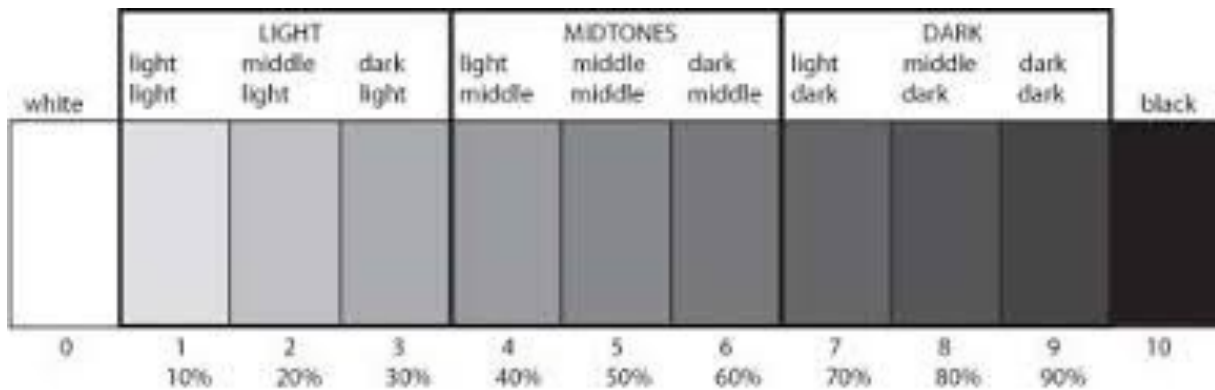
Value contrast is also evident in colors which enables us to read shapes in a painting. Some pure colours (yellow and orange) are light in value; Other pure hues are dark in value (purple and blue).

High key paintings are made mostly of light values and contain a minimum of value contrast. Light values suggest happiness, light, joy, and airiness. An ethereal quality.

Low key paintings use dark valued hues and contain little value contrast. Dark values suggest sadness, depression, loneliness and sometimes mystery.

To make value changes in a colour, add white to make it lighter and black to make it darker. Value changes help us feel the shape of an object by showing us how light illuminates these forms and creates shadows on them. The entire object may be the same colour but varying amounts of light give it different values.

Tonal Contrast: Tonal contrast is simply the difference between the light and dark areas in a painting. The greater the difference the more attention the area attracts. The eye will go straight to the area of maximum contrast between the white and black shapes. When the tonal range is reduced, the eye still goes to the area of maximum contrast, but the design loses impact. Tonal contrast is one of the most powerful tools we have to define the centre of interest in a painting.



Texture

Texture refers to the surface quality or "feel" of an object - smooth, rough, soft, etc. Textures may be actual (felt with touch - tactile) or implied (suggested by the way an artist has created the work of art - visual). Texture is often emphasized in oblique lighting as it strikes the objects from one side. Textures are all around us in our environment and in nature - a gravel path, tree bark, cat's fur or a stucco wall.

Physical (tactile or actual) Texture is the texture you can actually feel with your hand. The build up of paint, slipperiness of soft pastel, layering of collage - all the things that change the nature of the surface.

Visual Texture (also known as simulated texture) is the illusion of physical texture, created with the materials you use. Paint can be manipulated to give the impression of texture, while the surface remains smooth and flat.

Understanding the difference between physical (tactile) and visual texture helps us take full advantage of this element. Traditional transparent watercolour makes little use of physical texture other than the roughness of the paper. Some heavily textured surfaces can have an overbearing effect on a painting. Always try and relate this type of texture to your subject matter. Mixed media allows advantage to be taken of physical as well as visual texture.

Texture is often something that finds its way into a painting in an accidental sort of way, particularly with mixed media. Lumps, bumps and scratches pop up all over the place, often bearing no relationship to the painting. Make it a habit to question whether these marks help the work or just add unnecessary confusion.

Texture can have more impact through variation and relief - contrasting rough, coarse areas with orderly patterned areas and providing smooth areas of relief will make a painting far more interesting than an even, unrelieved texture running from edge to edge.

Techniques used in painting to show texture; dry brush technique produces a rough simulated quality and heavy application of pigment with a brush produces a rough actual quality. Colour and value contrasts also help you feel the textures with your eyes.

Remember - creating textures is easy, it's where and how you place them that makes the difference between a good painting and an ordinary one.

Space

Actual space is a three-dimensional volume that can be empty or filled with objects. It has width, height and depth. Space that appears three-dimensional in a two-dimensional painting is an illusion that creates a feeling of actual depth.

Various techniques can be used to show such visual depth or space. Sculptures, architecture and various craft pieces occupy actual or real space. You are aware of actual space in a large room or in an open landscape. If objects or people overlap in a painting, we sense space between them. If overlapping is combined with size differences, the sense of space is greatly increased.

Linear space is a way of organizing objects in space. One-point perspective is used if the artist is looking along a street or directly at the side of an object. Two-point perspective is used when looking directly at the front corner of a box, building, auto or other form. Combining two-point perspective with light and shadow greatly increases the sense of space.

Aerial perspective is a way of using color or value (or both) to show space or depth. Distant elements appear lighter in value, have less details, and less intense colors.

Areal perspective can be used to great effect in portraiture, allowing the colour on one side of the face to have lighter value and fewer of the finer details to create the illusion of distance from the viewer.

Principals of Design

Balance:

The distribution of interest or visual weight in a work... If all the visually interesting elements of a work are centered in one spot, the work is off-balance and the viewer's gaze will be stuck in one place, ignoring the rest of the piece. A balanced piece of work will have art elements arranged such that different areas draw the viewer's eye around or through the whole piece. Some types of balance are symmetric, asymmetric and radial.

The concept of visual balance is often illustrated using a seesaw. Like a seesaw, when two elements of an artwork have the same visual weight and are on opposite sides of the center, equally distant from it, they balance. Likewise, a smaller element can balance out a larger one if the smaller one is farther from the center and the larger one nearer. In two-dimensional art, the center of the work serves as the fulcrum (the visual center). In three-dimensional art, visual balance and the physical balance of mass both come into play, and the balance of one does not assure the balance of the other.

Movement:

Visual movement is often used to direct the viewer through the work, often to focal areas. The movement can be directed along lines, edges, shapes and colours within the painting, but moves the easiest along paths that are of equal value. An artist may move the eye through a painting by providing the viewer with a visual passage or by connecting dark or light values. That movement is intended to bring the eye to the focal point of the work.

Linear movement can be both direct and (straight lines) or irregular (curvilinear). Our eyes follow lines and edges in paintings, sculpture and architecture as well as in nature. As lines and shapes move our eyes across a surface, interruptions or breaks may occur... the eye skips over them and continues to follow the path laid out for them.

Rhythm:

Repetition, Rhythm and Pattern... Repeating art elements in regular or cyclical fashion to create interest and movement and/or harmony and unity. Rhythms can be random, regular, alternating, flowing and progressive. Classes of pattern include mosaics, lattices, spirals, meanders, waves, symmetry and fractals, among others.

Motifs:

Motifs can be thought of as units of pattern. In visual arts, they are bounded areas or volumes that contain designs or any desired combination of art elements: stamps, tiles, building blocks, modules, etc. Motifs can be copied and arranged in multiple instances to create a desired effect, such as repetition, rhythm and pattern.

Repetition... Repeated use of a shape, color or other art element or design in a work can help unify different parts into a whole. The repetition might be limited to only an instance or two - not enough to create a pattern or rhythm, but enough to cause a visual echo and reinforce or accent certain aspects of the work.

Rhythm... When motifs or elements are repeated, alternated or otherwise arranged, the intervals between them or how they overlap can create rhythm and a sense of movement. In visual rhythm, design motifs become the beats. Rhythms can be broadly categorized as random, regular, alternating, flowing and progressive.

- Random Rhythm - Groupings of similar motifs or elements that repeat with no regularity create a random rhythm. Pebble beaches, the fall of snow, fields of clover, herds of cattle and traffic jams all demonstrate random rhythms. What may seem random at one scale, however, may exhibit purpose and order at another scale.

Contrast:

Contrast refers to differences in values, colours, textures, shapes and other elements. Contrasts create visual excitement and add interest to the work. If all the art elements - value for example - are the same, the result is monotonous and unexciting.

Value contrast is most evident when black is next to white and when light values from one end of the gray scale are next to dark values from the other end. A black and white photograph is readable because of gray value contrasts.

Simultaneous contrast occurs when two pure complementary colors are placed side by side. Each will appear brighter than when placed next to any other hues. Visual vibration might occur.

Contrast in color intensity occurs when a pure, fully intense colour is positioned next to a muted or colour mixture. The pure colour's strength and intensity seem to cause it to glow.

Shape contrast occurs when organized shapes are placed in a geometric environment. Or in an opposite way, a building in a landscape will produce shape contrast, as will a person in a city street.

Temperature contrast refers to the contrast of warm and cool colours. If small warm areas are placed in a dominantly cool painting, temperature contrast is evident.

Textural contrast is easily noted when artist use heavy textures to contrast with smoother areas in painting, sculpture, photography, architecture or any of the crafts. Textural contrasts are found abundantly in nature.

Emphasis:

Emphasis is used by artists to create dominance and focus in their work. Artists can emphasize color, value, shapes or other art elements to achieve dominance. Various kinds of contrast can be used to emphasize a center of interest.

An artist often uses focal areas (centres of interest) to place emphasis on the most important aspect of a work. The best placement for a focal area is a location off center about one-third from either side of the piece of paper and one-third from top or bottom.

Color dominance is a way of emphasizing a colour or colour family in a painting.

Visual emphasis on a focal area can be achieved by having the strongest light and dark value contrast in the painting located in a desirable place. Visual emphasis in a painting is enhanced when value passages (light or dark movements) lead to a focal area. Such visual movement places emphasis on the focal area in a work. In nature, emphasis might be felt when elements are isolated, such as a tree or an animal. Emphasis is usually on the element that is different. A person in a landscape becomes the focus or visual emphasis of a photograph. Visual emphasis at a centre of interest can be developed by using shape contrast.

Unity:

Harmony and Unity... Harmonious elements have a logical relationship or progression – in some way they work together and complement each other. When a jarring element is added – something that goes against the whole – it is said to be dissonant, just like an off-note in a musical performance. Unity is created by using harmonious similarity and repetition, continuance, proximity and alignment, and closure of design elements in different parts of the work so that the parts RELATE to each other and create a unified whole that can be greater than the sum of the parts, rather than an ill-fitting and meaningless assortment of elements.

Similarity... Items with similar or identical characteristics – size, shape, color, etc. – will be thought of as a group by the viewer. A few similar elements throughout a work can help the whole work appear more cohesive; you want enough, but too much can take away variety.

Continuance... An art element that has direction – a line, edge, spiral, path leading back in perspective, the direction a figure is gazing or moving, or any shape or form that stretches out – will tend to point the viewer's attention off in that direction. The viewer's eye will keep on looking in that direction, skating off beyond the element, until another significant element stops or redirects the viewer's gaze. This means a dominant pointing element can lead the viewer's gaze out of the picture, which might not be desired, unless countered by something that blocks or deflects attention back into the picture. Using continuance, small cues can be used to steer attention around the whole work.

Closure... Our brains like to fill in the blanks and complete things, much like a phone guessing at what you're trying to text as you type. Small parts can be used to suggest a whole; a few corners or a dotted outline can conjure up a whole shape. Not explicitly showing the viewer everything, leaving her room to work some parts out for herself, can create a more rewarding experience.

Proximity and Alignment... Things that are close together or aligned with one another will be lumped into a group by the brain, even if they are very dissimilar. The more similar, closer or aligned the elements are, the more strongly they will be read as a group.

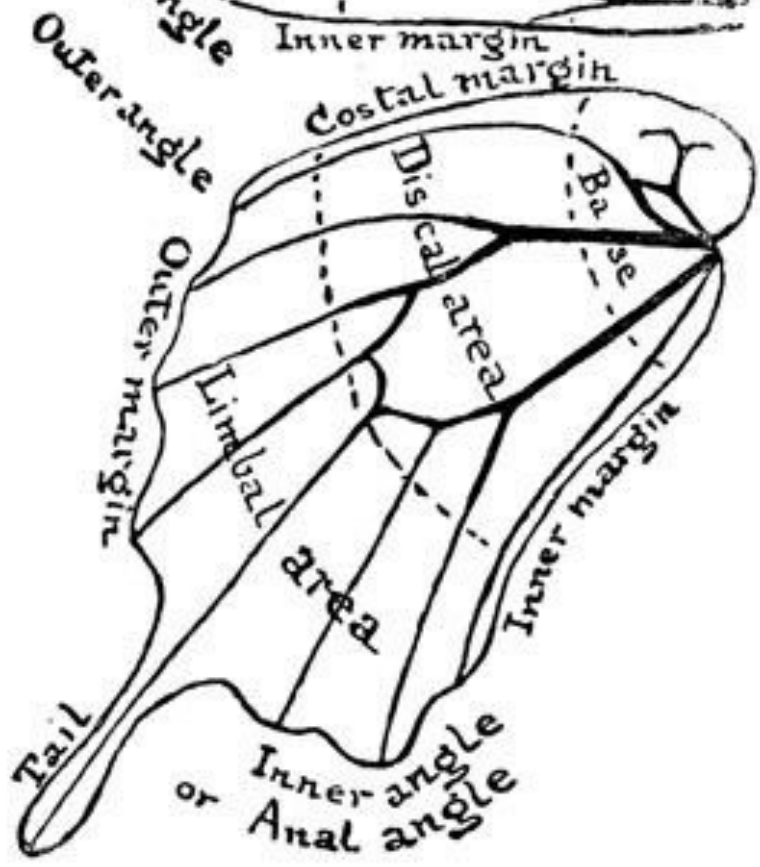
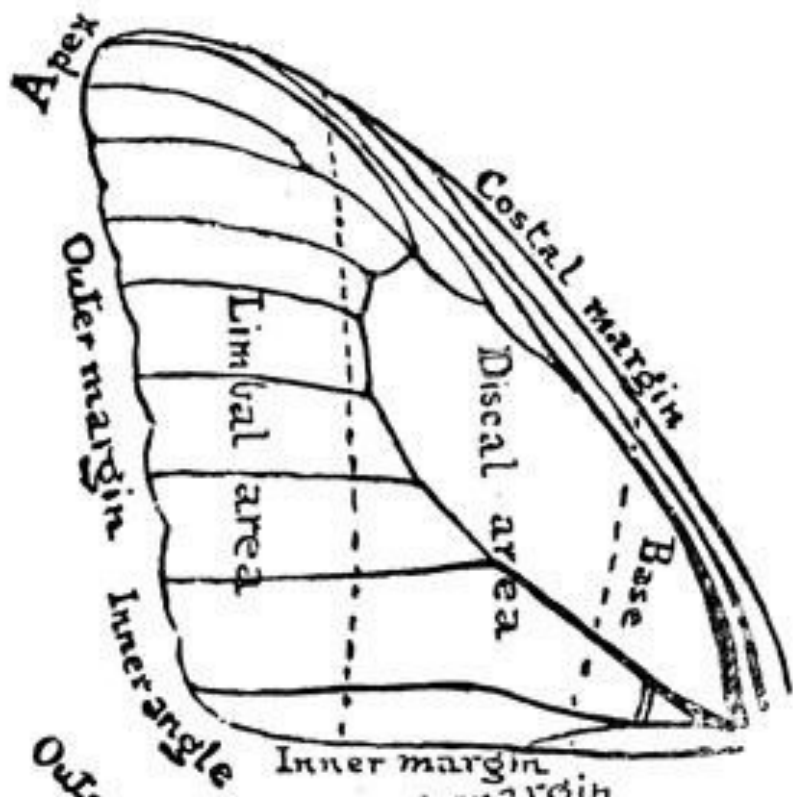
Proportion and Scale:

Proportion is the relationship of sizes between different parts of a work. For example, how wide it is compared to how tall it is. Some proportions, such as the golden ratio and the rule of thirds, are thought to be more naturally pleasing. Scale is the size of something compared to the world in general – an artwork might be termed miniature, small scale, full scale or life-size, large scale or larger than life, or monumental.

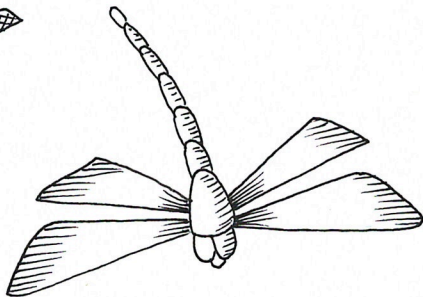
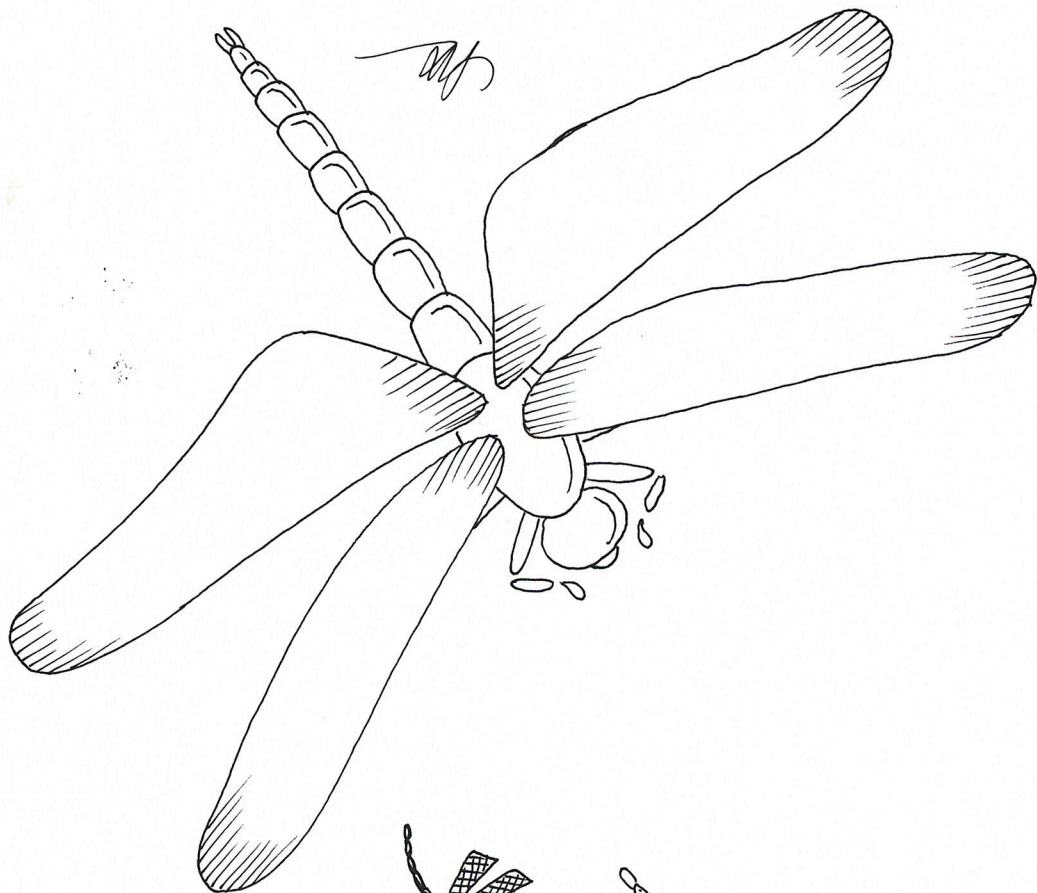
The Golden Ratio, Section, Mean, Rectangle, Spiral, etc. ... The golden ratio is a recurring relationship found in math, art and nature, and is thought by many to be inherently aesthetically pleasing. In its many forms, it boils down to approximately 1.618: a rectangle with dimensions 1 x 1.62 could be called a golden rectangle. More elegantly and interestingly expressed, two quantities, a and b, are in the golden ratio if a is to b as a + b is to a.

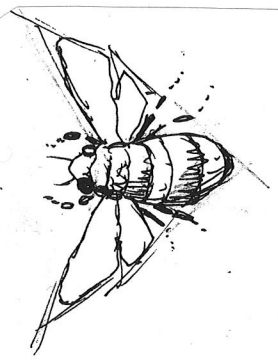
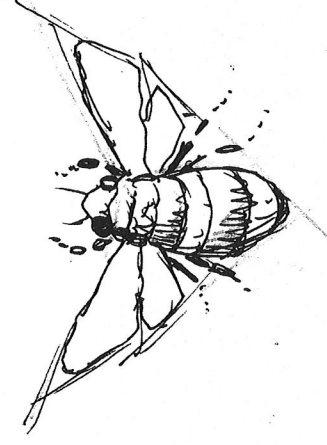
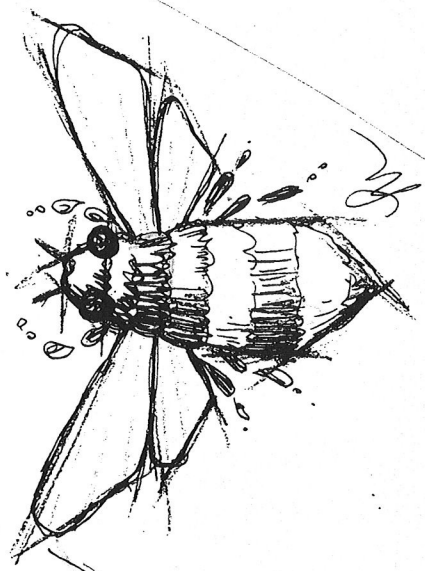
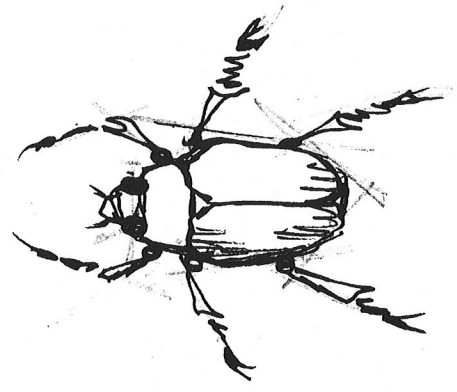
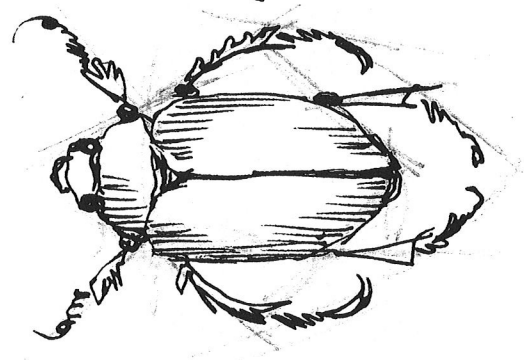
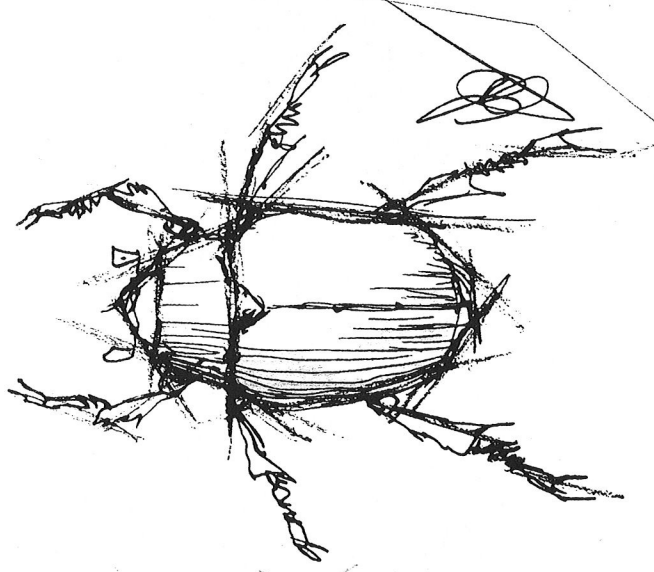
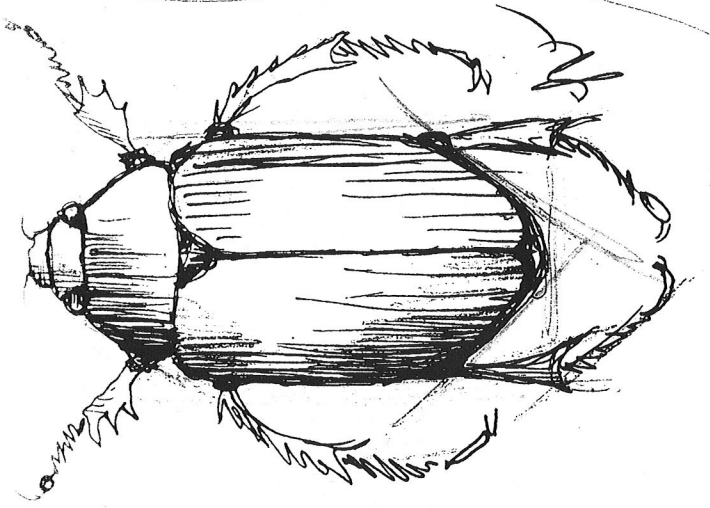
The golden ratio is said to be the basis of the proportions of many works of art and architecture, including most famously the Parthenon. However, like conspiracy theories, once you start looking for golden ratios, you can find them everywhere, to absurdity. Whether the artist intentionally employed the ratio, and whether it helps make the work more aesthetically pleasing, can sometimes be open to debate.

The Rule of Thirds... As a compositional rule of thumb, the rule of thirds states that it's a good idea to imagine the picture plane divided into thirds horizontally and vertically, and then to place compositional elements along these guidelines or at their intersections. Placing the subject off-centre and the horizon at the upper or lower third create more interest and invite the viewer to look at more of the picture. If the subject is at the centre, it can be more confrontational and in-your-face, and more formally balanced and static. The same idea may be applied to three-dimensional art – a vase might look more pleasing if it swells to its widest two-thirds of the way up rather than at the middle. Good artists will neither slavishly follow this rule nor automatically centre everything in the middle of the canvas or viewfinder; rather, they will consider what they want to convey, then experiment and choose the composition and proportions that best help express themselves.









hoof [hu:f] Huf m; Klaue f; hoofed [hu:ft] behuft, hufig.
hook [huk] 1. (bsd. Angel-)Haken m; Sichel f; 2. and eyes Haken und Osen; by ~ or by crook so oder so; Am. F ~ line and sinker mit allem Drum und Dran; 2. vlt. (zu-, fest-)haken; fangen, angeln (a. fig.); sl. klauen; sl. ~ it abhauen; ~ up an haken; v/i. sich festhaken (a. ~ on); hooked [t] hakenförmig; hooker ~ Huker m; hook-up Bündnis n; Übereinkommen n; Radio: Ring-sendung f; hooky hakig; Am. play ~ from school die Schule schwänzen.
hoo-i-gan [hu:li:gan] Rowdy m.
hoop [hu:p] 1. Faß- usw. Reif(en) m; Ring m; Spiegel m; Reifrock m; 2. Fässer binden, mit Reifen belegen; hoop-er Küfer m, Böttcher m.
hoop-ing-cough [hu:piŋkɔ:f] Keuchhusten m.
hoop-poe orn. [hu:pu:] Wiedehopf m.
hoose-gow Am. sl. [hu:sgau] Kittenchen n (Gefängnis).
hoot [hu:t] 1. Schrei m; Geheul n; Getute n; 2. v/i. heulen; johlen; tuten; mot. hupen; v/t. aus-pfeifen, -zischen (a. ~ at, ~ out, ~ away); 'hoot-er Schreier m; Sire'ne f, Dampfpeife f; mot. Hupe f.
hop [hɒp] 1. Hopfen m; ~ s pl. Hopfen(früchte f/pl.); 2. v/t. Bier usw. hopen; v/i. Hopfen ernten.
hop² [.] 1. Hupf m, Sprung m; ~ Kniips m, Dreikäsehoch m.
hop-er [hɒp] Mühlentrichter m; Floh m; Käsemade f.
horde [hɔ:d] Horde f.
ho-ri-zon [ho'raizn] Horizónt m; ho-ri-zon-tal [ho'ri:zɔntl] horizon-tal; Horizont...
hor-mone [hɔ:mɔ:n] Hormo'n n.

horn [hɔ:n] Horn n der Tiere, des Mondes; ~, zo. Fühlhorn n; Trinkhorn n; Schalltrichter m; mot. Hupe f; (stag's) ~ s pl. Geweih n; ~ of plenty Füllhorn n; ~-book Bibel f; horned [hɔ:nd, in Zsgh] gehörnt; Horn...
hor-net zo. [hɔ:'nit] Horn'sse f.
hor-net-less [hɔ:'nɪs] hornlos; 'horn-pipe (a. sailor's) Ari (Seemanns) Tanz m; horn-swog-ge Am. sl. [hɔ:'swɔgl] j. (he)reinlegen; 'horn-y [hɔ:nj] hornig; schwierig.
hor-o-loge [hɔ:'rɒlɔ:dʒ] Stundenuhr f; hor-o-scope [hɔ:'skɔup] Horoskóp n; cast a ~ das Horoskop stellen.
hor-ri-ble [hɔ:'rɪbl] entsetzlich; scheußlich; hor-rid [hɔ:'rɪd] gräßlich, abscheulich; hor-ri-fic [hɔ:'rɪfɪk] entsetzlich; hor-ri-fy [hɔ:'faɪ] entsetzen; hor-ror [hɔ:'rɔ] Entsetzen n, Schauer m (of vor dat.); Schrecken m; Greuel m; F the ~ s pl. das Delirium.
horse [hɔ:s] 1. Roß n, mst Pferd n; coll. Reiterer f; Bock m, Gestell n; take ~ aufsitzen; ~ artillery reitende Artillerie f; 2. bespannen; beritten machen; j. auf den Rücken nehmen; 'back: on ~ zu Pferde; im Reit-sitz; be (od. go) on ~ reiten; get on ~ aufsitzen; ~ bean Saubohne f; ~-box Pferdetransportwagen m; ~-breaker Bereiter m; ~-col-lar Küm(me)t n; ~-dealer Pferdehändler m; 2 Guards pl. eng-lisches Garde-Kavallerie-Regime'nt n; ~-hair Roßhaar n; ~-laugh F wiederndes Lachen n; ~-man Reiter m; ~-man-ship Reitkunst f; ~-op-er-a Am. drittklassiger Wild-west m; ~-play grober Scherz m; ~-pond Pferde-schwemme f, -tränke f; ~-power Pferde-kraft f; ~-race Pferderennen n; ~-rad-ish ~ Meerrettich m; ~-sense gesund Menschen-verstand m; ~-shoe Hufeisen n; ~-whip Reitgerte f; ~-wom-an Reiterin f.
hor-sy [hɔ:'sɪ] Perde liebend; jockeimäßig; Stall...
hor-ta-tive [hɔ:'tə:tɪv] hor-ta-to-ry [hɔ:'tɔ:ri] ermahnend.
hor-ti-cul-tur-al [hɔ:'tɪ:kʌltʃərəl] Gartenbau...; hor-ti-cul-tur-er Gartenbauer m; hor-ti-cul-tur-ist Gartenkünstler m.

Roman: Persönlichkeit f, Rolle f (a. fig.); Rang m, Würde f; Leu-mund m, (bsd. guter) Ruf m; Zeug-nis n für Hausangestellte; char-acter-is-tic 1. (~ally) charakteristisch, kennzeichnend, bezeichnend (of für); 2. Kennzeichen n; char-acter-i-za-tion [tʃa:'rɪ:zɪʃn] Charak-teri'stik f; 'char-acter-ize charak-terisieren: kennzeichnen; schildern.
cha-ra-de [tʃə:'rɑ:d] Scharade f, Silbenrätsel n.
char-coal [tʃa:'kɔ:ʊl] Holzkohle f; ~-burn-er Kähler m; ~-pile (Kohlen-)Meiler m.
chare [tʃeɪ] 1. Hausarbeiten über-ne'hmen, reinmachen (in od. bei); 2. (mst ~ s pl.) Haus-arbeit f, -reinigung f.
charge [tʃɑ:dʒ] 1. Ladung f e-r Feuerwaffe; fig. Last f, Belastung f (on für); Verwahrung f, Obhut f, Pflege f; Pflegebefohlene f, Schütz-ling m; Mündel m, f, n; unver-trautes Gut n; Amt m, Stelle f; Auftrag m, Befehl m; ~ Angriff m; Ermahnung f; ~, eccl. Belehrung f; Beschuldigung f, Anklage f; ~ Be-schuldigung f; in Rechnung gestell-ter Betrag m, Preis m, Forderung f; ~ ~ s pl. Kosten pl., Spesen pl.; be in ~ of et. in Verwahrung haben; mit et. beauftragt sein; für et. sorgen; take ~ of et. in Ver-wahrung nehmen; free of ~ kostenfrei; 2. v/t. Gewehr usw. laden; beladen, belasten; beauf-tragen (with mit); j-m et. ein-schärfen, (an)befehlen; ermahnen; beschuldigen, anklagen (with gen.); zuschreiben, zur Last legen (on, upon dat.); bsd. fordern, verlangen (a p. a price e-n Preis von j-m); Preis, Ware an-, be-rechnen, in Rechnung stellen (to dat.); ~ be-schicken; mit der blanken Waffe an-greifen (a. v/i.); behaupten; ~ a p. with the duty of ger. es j-m zur Pflicht machen, zu inf.; 'charge-able [tʃɑ:'dʒəbəl] zu belasten(d) (with mit); zur Last fallend, anzurechnen(d) (to dat.); zur Last zu legen(d) (on dat.).
charg-e d'affaires [tʃɑ:'ʒeɪ dæ'feɪ] pol. Geschäftsträger m.
char-ger [tʃɑ:'dʒə] poet. Schlacht-roß m; ~ Dienstpferd n.
char-i-ot poet. od. hist. [tʃa:'rɪɔt]

(Staats-, Kriegs-, Sieges-)Wagen m; char-i-ot-eer [tʃa:'rɪɔ] Wagenlenker m.
char-i-ta-ble [tʃa:'rɪ:təbəl] wohl-tätig, mild(tätig); mild (nach-sichtig); ~ society Wohltätigkeitsverein m; 'char-i-ta-ble-ness Mildtätigkeit f; Milde f.
char-i-ty [tʃa:'rɪ:tɪ] Nächstenliebe f; Wohl-, Mild-tätigkeit f; Güte f; Milde f, Nachsicht f; milde Gabe f; milde Stiftung f; sister of ~ barm-herzige Schwester f; ~ begins at home jeder ist sich selbst der Nächste; ~-child Armenkind n; ~-school Arme'nschule f.
char-la-tan [tʃa:'lætən] Scharlatan m, Marktschreier m; 'char-la-tan-ry Scharlatanerie f, Marktschreierei f.
char-lotte [tʃa:'lɒt] Küche: Apfel-pudding m.
charm [tʃɑ:m] 1. Zauber m; fig. Reiz m; 2. bezaubern; fig. ent-zücken; ~ away etc. weg- usw. zaubern; ~ ed a. gefeilt (Leben); 'charm-er fig. Zauberin f, Schöne f; 'charm-ing [tʃɑ:mɪŋ] □ bezaubernd, reizend.
charm-el-house [tʃɑ:mɪn'haʊs] Bein-, Leichen-haus n.
chart [tʃɑ:t] 1. Seekarte f; Tabelle f; 2. mappieren.
char-ter [tʃɑ:tə] 1. Urkunde f; Frei-brief m (a. fig. = Vorrecht); Paté nt m; ~ Schiffmiete f, Frachtvertrag m, (mst ~-party) Charterpartie f; 2. privilegieren; ~ chartern, mieten; ~ ed accountant beidseitig Buchsachverständiger m und Bü-cherrevisor m.
char-wom-an [tʃɑ:'wʊmən] Scheu-er-, Reinemache-frau f.
chary [tʃa:'rɪ] (of) vorsichtig (in dat.); sparsam (mit).
chase¹ [tʃeɪs] 1. Jagd f; Verfol-gung f; Jagdrevier n; gejagtes Wild n (a. fig.) od. Schiff m; beasts of ~ jagdbares Wild n; 2. jagen, hetzen (a. fig.); Jagd machen auf (acc.); j-m nachjagen.
chase² [tʃeɪs] ziselieren.
chase³ [tʃeɪs] typ. Setzrahmen m.
chase⁴ [tʃeɪs] typ. Setzrahmen m.
chaser¹ [tʃeɪsə] Jäger(in) f m; Verfolger(in) f m; ~ Jagd-flieger m; ~ Jagdgeschütz n.
chase² [tʃeɪsə] ziseleu'r m.
chasm [kæzəm] Kluft f (a. fig.), Spalte f; Lücke f.

fall [fɔ:l] Bodensatz m; Extrem-e n; pl. Pläckeri f; Erschöp-fung f; Fuchs m (Schilf, über einem ätheren Dienste lasten, mdf); fig. Packesed m; Zugare te f; 2. v/i. sich placken; Fuchsendienste tun; v/i. erschöpfen, müde machen; ~-end f (letzter, schlechter) Nest m, Stummel m, Kippe f.
fag-ot, fag-got [fagɔ:t] Reisig-bündel n; ~ Bündel n Stahlsäbe.
Fahr-en-heit [fæ'hɔ:nhaɪt] Eng-land: ~ thermometer Fahrtenheitthermo-meter n.
fall [fɔ:l] 1. v/i. fehlen, mangeln; fehl-schlagen, -gehen; versiegen (Quelle); stocken, versagen (Strim-mel); nachlassen, abnehmen, schwä-cher werden (Kraft); usw.; er-mangeln (in gen.); bankro't ma-chen; durchfallen (Kandidat); be-~ed to do (a. in doing) es mißlingt ihm zu tun; he cannot ~ to er kann nicht unthun zu; v/i. im Stich lassen, verlassen; verfehlen, ver-säumen; durchfallen lassen; his heart ~ed him ihm sank der Mut; 2. s/i. without ~ unfehlbar, ganz gewiß; fail-ing 1. Fehler m, Schwäche f; 2. prp. in Ermangelung (gen.); ~ which wädrigfalls; fail-ure [fɪljə] Fehlen n, Ausbleiben n; Fehlschlag(en) m; Mißlingen n; Mißerfolg m; Versagen n; Verfall m; Zs-bruch m; Versäumnis f; Bankro't m; Versager m (P.).
fain [feɪn] adj. froh; adv. gern.
faint [feɪnt] 1. □ schwach, matt; 2. schwach werden; in Ohnmacht fallen (with with); 3. Ohnmacht f; ~-hearted □ [hɔ:'hɑ:rd] verzagt; ~-hearted-ness Kleinmut m; faint-ness Schwäche f, Matig-keit f.
fair [fɛə] 1. adj. schön; hell, rein; blond; ansehnlich; heiter; 2. adj. u. adv. günstig; leserlich; ehrlich; un-anständig (with gegen); billig, un-parteilich; gerecht; annehmbar; ziernlich; Schluß; auszeichnend; ~-ness Reinschrift f; ~ dealing Red-lichkeit f; ~ play ehrliches Spiel; ~ Prädikatsnamen werden; in e-n Zu-readers unsere Leserinnen; the ~ pl. das schöne Geschlecht (a. the sex); ~ and softly sagte; ~ ~ trade Freihandel m auf Gegenseitigkeit;

fall [fɔ:l] e. fair; erräglich, leidetlich; zernlich; völlig, gänzlich; fair-ness Schönheit f; Blond-heit f; Gerechtigkeit f; Redlich-keit f; Billigkeit f; fair-spo-ken höflich, artig; fair-weather Fahr-wasser n; fair-weather friend Freund m im Glück.
fair-y [fɛəri] 1. feenhaft; Feen...; Zauber...; ~ lamp, ~ light Illumi-natio'nslämpchen n; 2. Fee f; Zauberin f; Elf m; 'Fair-y-land Feen-, Wunder-, Zauber-, Mär-chen-land n; 'fair-y-tale Märchen n.
'faith [feɪθ] Vertrauen n (in auf acc.); Glaube(n)skennnis n; Treue f; Redlichkeit f; gegebenes Wort n; in good ~ in gutem Glauben; ~-treut; gewissenhaft; ehrlich; wahr-hetsgerau; the ~ pl. die Glaubigen; yours 'y ... Ihr ergebener ...; 'faith-ful-ness Treue f; Ehrlich-keit f; 'faith-less □ treulos; un-gläubig; 'faith-less-ness Treu-losigkeit f.
fake sl. [feɪk] 1. Schwindel m; Fäl-schung f; Schwindler m (Am. a. 'fak-er); 2. zurechtmachen, fäl-schen (a. ~ up).
fal-con [fɔ:lkn] Falke m; 'fal-con-er Falkner m; 'fal-con-ry Falkenbeize f; Falknerei f.
fald-stool [fɔ:ldstu:l] Berrup n.
fall [fɔ:l] 1. Fall(en) n; Sturz m; Verfall m; Einsturz m; (Blätter-, Schnee- usw.) Fall m; bsd. Abn-, Herbst m; Sinken n der Preise usw.; Kurssturz m; Baisse f; Fällen n von Holz; Gefälle n; (mst ~ s pl.) Wasser-fall m; Senkung f, Abhang m; ~ Fall n; the ~ of Mon) der Stünden-fall m; have ~ fallen, stürzen; 2. [vrr.] fallen; ab-, ein-fallen; ab-nehmen; sinken (Mit usw.); her-ab- untergehen (Preise); fig. (herab-) stürzen; sich legen (Wind); (mit Prädikatsnamen) werden; in e-n Zu-stand verfallen; geworfen werden (Tiere); münden (into in acc.); his countenance fell er machte ein





