Photographic design – composition – Dan Swart APSSA

Composition means the sensitive, intelligent and appropriate arrangement of the parts of a visual image. Shapes, lines, mass, tone values, colours and chunks of background can be organized within the picture format to make a coherent whole.

Photography and its unique characteristics

The general principles of composition apply to all the visual arts, but not quite in the same way to photography. Having established its unique character among the visual arts over the past 170 years or so, it has become apparent that photography sometimes demands a different kind of composition or, alternatively, a different attitude towards the importance of composition.
There is a substantial body of informed opinion and great photographs by acknowledged masters to support this view.

Photography is not just another kind of visual art. It is a unique and very special kind of visual art that has some characteristics none of the other arts can ever have.

Two of its unique characteristics are that a photograph can capture a moment in time and that it is directly derived from visible reality.

Both of these characteristics have profound implications for composition.

The viewfinder as a tool of selection

The most important part of the camera in composing a photographic image is the viewfinder. This little window imposes a rectangular or square frame to contain whatever the photographer chooses to include. It also leaves out whatever the photographer chooses to exclude.

The viewfinder frame corresponds to the proportions of the picture area, the format of the film or the aspect ratio of the digital sensor.

The photographer is to a large extent faced with an already existing composition. They cannot easily re-arrange shapes, alter their relative scale, change the angles of lines or create balance out of imbalance. The structure of a photograph must be seen in the reality out there in front of the camera and the photographer must use the viewfinder to select whatever fits together best and fits within that format. With a rectangular format one must decide whether to use it vertically or horizontally.

The photographer must use intuitive aesthetic judgment to decide what to include and what to exclude. One must change the angle of the camera, shift position and choose the appropriate focal length or distance to obtain the best from the already existing composition in front of the camera.

Shapes can be moved in the viewfinder frame by changing its direction, but that could mean that now other shapes may have to be included that are not wanted. One has to try out a great variety of different positions, angles and distances before one gets the composition to look exactly right.
The way that photographers compose an image is by selection.

Formal and informal composition

If you want to capture a moment you are unlikely to have much time to consider all the compositional options a particular subject may have to offer. A moment in time can be a totally unique, never-to-be-repeated incident that conveys an emotion, insight, idea, story, thought or feeling – what Cartier-Bresson called "the decisive moment".

Henri Cartier-Bresson: *Place de la Europe* an example of spontaneous composition

A photographer who values the decisive moment above the structure of the image must, like Cartier-Bresson, develop an instinctive eye for spontaneous informal composition. This is very different from the deliberate formal composition where you have all the time you need to get the best angle for the shot.

If you were to try and get the composition exactly right according to some preconceived formula you could miss the moment and the resulting photograph would

lack the essential quality that that moment represented. It could turn out to be perfectly composed – but meaningless and boring.

Compositional formulas and rules

Some amateur photographers, photographic magazines and "how to take better photographs" booklets from major film manufacturers have tried to make the whole business of photographic composition easy to grasp in rule-of-thumb formulas.

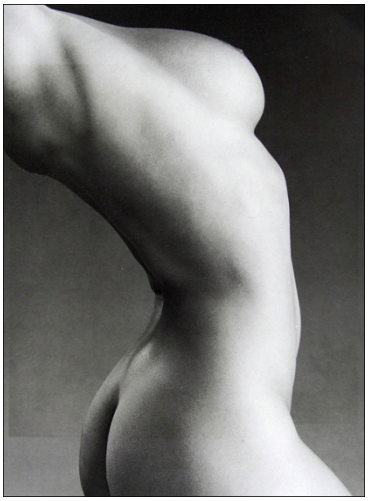
The very nature of photography does not lend itself to preconceived formulas. The real world is a very rich source of visual imagery that ought not to be forced into some unimaginative and insensitive stereotype.

The various rules and compositional formulas are to a large extent dictated by a particular style of photography with limited creative potential. Against this the elements and principles are based on objective studies of human perception and are applicable to the visual arts in general from all periods and styles and in this component related specifically to creative photography.
The basic concepts of design involving visual elements and principles can increase our awareness and promote a creative approach to photography. Some individuals are blessed with an innate sense of intuitive aesthetic judgment and in the microsecond before pressing the shutter are able to compose the image beautifully. Most of us need to be educated about the elements and principles before we can make those kinds of judgments. The emphasis here is on awareness rather than restrictive dos and don'ts.

The visual elements – the building blocks of composition

Visual artists have over thousands of years established a vocabulary consisting of visual elements that can be understood and organized into meaningful and coherent arrangements in the process of composition.

Shape and form



Any three-dimensional form, a human body for instance, is capable of presenting many different shapes as it is seen from different angles and in different positions such as this nude by Robert Mapplethorpe. As the camera shifts its position relative to the body the shape of the body will look different.

The shape of a form is the two-dimensional image of the form in the photograph.

A photographer in the post-modern age can choose to depict a familiar object in its stereotypical and most characteristic aspect or to find an angle that reveals an

unusual shape. The more unusual the shape the more interesting the photograph could be but also the more puzzling it may be. When it is so unusual as to be unrecognizable it could become an abstract shape.

Perspective distortion and foreshortening can drastically alter the shape of a familiar object so as to render it almost unrecognizable. Whether or not that distortion is acceptable to you is largely a matter of personal taste and how it is handled in the particular photograph.

In photography, as in sculpture, we become aware of the form of an object by the way light falls across its surface. The simplest photographic representation of a shape is in the form of a flat silhouette. Corporeal form such as the surface contours of the human body can be very well shown in a photograph with effective lighting. Chiaroscuro, an Italian word that means the use of gradations of tone values to depict form, comes naturally to photography.

The design of this landscape by Herman Potgieter is based on triangles but the shapes of clouds tend towards being biomorphic or even amorphous shapes

Shapes can be classified as being strong or weak. Those shapes that resemble basic geometric shapes are usually stronger than amorphous vague shapes. Using strong shapes such as triangles, circles, ovals, squares and rectangles can strengthen the composition of almost any kind of picture. Then there are biomorphic or organic shapes such the shapes of fruits, weathered stones, flowers and the human figure, a face, eyes, the mouth or the shapes of animals that can also be very strong, despite the fact they do not necessarily resemble basic geometric shapes.

Negative shapes

The shapes of objects are positive shapes; the chunks of background between shapes, the spaces within positive shapes that show background and the spaces between objects and the edge of the format are negative shapes.

The black areas in this nude by Bill Brandt are the negative shapes

The untrained eye tends to see only the positive shapes; artists and skilled photographers also see negative shapes and take them into consideration when composing a painting or a photograph. One has to learn to see those negative shapes to be able to draw accurately or to be in control of photographic composition.

When looking at a photograph we tend not to be too aware of the negative shapes but they can nevertheless make an important difference to the effectiveness of the composition at an unconscious level.

Negative shapes are usually abstract in character but they are part of the design of any visual image and perform various functions like contrasting with or imitating positive shapes or creating patterns and directional pointers that lead the eye from one part of the design to another.
Negative shapes that are nicely varied can set up a satisfying visual rhythm in a composition. This kind of rhythm is something you cannot measure or make rules for but you can develop sensitivity to it by consciously looking for it. You can also try to get in touch with your innate aesthetic feelings that will give you an insight into what kind of rhythm works, and what does not.
A good old saying to remember: 'look after the negative shapes and the positive shapes will look after themselves'.

Every well-composed image has a matrix of negative shapes that support and emphasize the positive shapes.

(Negative shape as an element of composition has absolutely nothing to do with the photographic negative for monochrome or colour prints.)

Line

In real life and in photographs there are no actual lines as one would see in a drawing, yet line is an important element we must be aware of and take into consideration for photographic composition.
The edges of shapes function as outlines in photography.
There are also objects that have a linear quality such as power lines, tree branches, flowing hair, rivers, paths, roads, and wisps of smoke, snakes, eels, mortar between bricks and many other thin long shapes that function as lines.

Then there are other lines that are not all that obvious that we can call implied lines. An implied line can be the axis within a form. Every human body has a linear axis within its form represented by a line going through it from the top of the head, down the neck and torso and through the legs to the feet.
A group of objects can by their proximity and arrangement suggest a line such as the linear V pattern of a flock of migrating geese. Even two objects can suggest a visual tension between them that becomes an implied line as can the direction of eyes looking.

Apart from its obvious function in outlining shapes, line can also contribute greatly to the strength of a composition by virtue of its ability to suggest movement. Lines in a picture, whether outlines or implied, can lead the eye from one part to another, giving emphasis to a particular shape and creating visual links between different areas.

With their ability to suggest movement lines can impart a sense of dynamism, action, stillness or stability to a composition by their direction. A picture with mainly horizontal lines will give a feeling of calm or stillness; with mainly vertical lines – stability; diagonals – dynamism or action.

The directions of lines in a formal classical composition should usually be balanced by other lines in opposing directions. That is, of course, if you want to create a harmonious effect. One could quite legitimately choose to make an unbalanced composition if it suited the subject.
Undulating or jagged lines can, like negative shapes, also create visual rhythms. These rhythms can communicate at an unconscious level and reinforce the mood or feeling of an image.

Space

A photograph automatically translates real three-dimensional space into two-dimensional pictorial space. Although a photograph is essentially a flat, two-dimensional image it can create an illusion of three-dimensional space by means of various visual clues.

Because human visual perception is based on the combined stereoscopic views of two eyes we can obtain a much better idea of real three-dimensional space than what

can be represented in a photograph. In the process of looking we are also continually and unconsciously scanning the scene by moving our eyes, altering their focus and shifting our position. A photograph represents a one-eyed view of the subject from a fixed point of view.

If you are fully aware of this limitation inherent in the photograph you can choose the point of view in order to include visual clues that help to create an illusion of depth in space.
One of the most important visual clues that tell us that one object is nearer than another is when it overlaps or partly occludes the other object.

Photo: Andreas Feininger *Railroad tracks, Nebraska, 1952*

Possibly the most important indicator of three-dimensional space is linear perspective. As objects get further away from the camera so the sizes of their shapes in the image decrease. Parallel horizontal lines such as the railroad tracks in this photograph by Andreas Feininger seem to be converging upon a vanishing point on the horizon.
Another kind of perspective, aerial or atmospheric perspective, is more subtle in that the colour and tone of an object change progressively as more and more air or mist or dust particles come between the object and the camera. The more distant an object the paler or more bluish it becomes. A hazy atmosphere can increase the effect of aerial perspective dramatically.
Selective focus can also create an illusion of depth. By choosing a large aperture one can restrict depth of field and place the background out of focus, allowing the foreground object to stand out strongly.

The two-dimensional pictorial space of a photograph is bound by the edges of the format and that rectangle or square can be divided by the placing of shapes within it. Lines such as the horizon or vertical objects can cut the space of the format into smaller portions. One should be aware of how the space of the format is divided and try to

create a variety of different spaces in order to promote a harmonious spatial rhythm. An unbroken line or edge such as the horizon that cuts right across the format can have the undesirable effect of cutting off part of the image from the rest. Any element that bridges such a line by leading the eye across it can solve that problem.

Various proportional divisions can be used, contrasting smaller and larger spaces rather than too many of the same size. Generally speaking, the eye tends to move from the bigger space to a smaller one so this is one way one can create emphasis in a composition.

Colour, tone value and texture

In painting and in colour photography there is a hierarchy of colours, ranging from the most intensely saturated colour to the least saturated and another from the lightest to the darkest. In any painting or colour photograph the most intense and/or the brightest colour will attract the eye and the shape with that colour will tend to be a point of particular interest.
There is also a polarity of colour divided into warm and cold colours. Warm colours such as yellow, orange and red tend to stand out of the picture and can be called advancing colours. Cold colours around blue tend to fall back into the background and can be called receding colours. This means that the warm/cold polarity can enhance an illusion of three-dimensional space and that a warm coloured shape will attract attention if it is placed against a cool coloured background.
The lightest to darkest hierarchy is more of a tone value scale rather than a colour scale. In monochrome photography colours are translated into a range of grey tones from pure black to pure white. White and very pale grays tend to attract the eye more than the darker tones. For this reason one should be aware of lighter tones and try to exclude them from unimportant background areas of the composition.

This hierarchy can be reversed in the special case of the high-key photograph. In an image where the background and most of the area of the picture are very pale or white, any black or darker shape will attract attention.

It is by means of colour, tone value and texture that the edges of objects contrast with the background and their shapes stand out. We see a shape as distinct from its background if there is a difference in colour, tone or texture between the shape and the background. Too little difference in tone and/or colour will create a flat, lacklustre effect.

High-resolution photography can record the surface texture of any object very dramatically. With appropriate lighting, usually light raking across the surface, texture can be greatly emphasized. Texture can play a role in both colour and monochrome photography but is usually more dramatic in monochrome. Although not as visually powerful as tone value or colour, texture can attract the eye and give a tactile quality to the image.

When a photograph is greatly enlarged or when you use very fast film the texture of the grain in the emulsion becomes obvious. The digital equivalents of grain are electronic

noise and pixilation. Some photographers exploit this grain texture to achieve a starkly graphic effect. One disadvantage of this technique is that the grain texture tends to mask the natural textures of actual objects.

Principles of design – the cement of picture-building

If the elements can be called the visual vocabulary then the principles of design are the syntax, the grammar of the visual arts. Within the constraints of this component it is not possible to explore all the principles of design or to present sufficient examples to provide a comprehensive analysis. The following is only a selection of some of the principles that would be most useful to a creative photographer.

Balance and visual weight

Any shape in a picture is perceived as having weight and the placing of shapes within the format must take this into consideration. This has little to do with the measurable mass of actual objects but rather with visual weight. The visual weight of a shape depends on factors like its size, tone value or colour relative to its surroundings and it's placing relative to the visual centre of the format.

A relatively small shape can acquire greater visual weight because it attracts attention by its complexity or psychological content. A human face, for example, will nearly always attract more attention than an inanimate object.

As in the example of a playground seesaw a lighter shape can balance a weightier one, as one can see in this photograph by Horst – the ribbon hanging down balances the figure.

The visual centre of the format corresponds to the seesaw fulcrum.

The principle of visual balance also operates from top to bottom of the format. A more or less equal distribution of visual weight in the upper and lower portions of the format with slightly more weight towards the bottom will give a feeling of balance and stability to the composition. Too much at the top makes it seem top-heavy.

A balanced composition in terms of mass will create visual harmony and equilibrium and that is what formal classical composition strives for. However, there are occasions when the subject matter of a photograph demands an off-balance composition.

Robert Mapplethorpe: *Sigourney Weaver*, an example of symmetrical composition

Closely involved with the principle of balance are the opposing concepts of symmetry and asymmetry. Both are valid types of composition although there has been a tendency to prefer asymmetry in that it is less predictable and open to many different variations. Symmetry means that opposite sides of the composition balance perfectly and are mirror versions of each other. An asymmetrical composition means that the opposite sides are different and balance is achieved by positioning shapes of differing visual weight.

Contrast

Apart from the limited purely technical concept of contrast that refers to the difference between the lightest and darkest tones in a photograph, as a principle of design the term contrast can refer to a whole range of different kinds of contrast.

A concept that is closely linked to the contrast principle is that of juxtaposition. Contrasting elements that are placed directly next to each other – juxtaposed – draw attention to their differences and heighten the effect of contrast.

It is possible to identify many different kinds of contrast such as large/small, high/low, broad/narrow, light/dark, black/white, sharp/blunt, rough/smooth, straight/curved, jagged/sinuous, crowded/isolated, and near/far – to name a few.

Whatever kind of contrast there is in an image there is also the possibility that the contrast can be extreme, moderate or very subtle.

Contrast can also be in terms of any of the elements of art. A contrast of shape could for example be one of an angular versus a rounded shape. In line a contrast could be lines at right angles or opposing diagonals.

It is only by virtue of contrast that a shape will stand out from a background. A lack of contrast could mean that a shape does not stand out, resulting in a weak effect of depth in space.
When the edge of a shape contrasts strongly with the background it gives a sense of sculptural relief and three-dimensional space. This kind of contrast can result from differences of local colour and tone of the object and background or because of the direction and quality of the lighting.

Emphasizing a centre of interest

A visual image is usually more easily understood if there is some kind of centre of interest to which the eye is attracted. Ideally this more interesting part of the image should also be the part that conveys most of the essential content of the picture. A centre of interest depends on the other, less interesting parts of the image to lead the eye towards it and can be emphasized by contrast, converging directional lines, isolation, change of scale or any other elements and principles.
The arrangement should clearly emphasize one centre of interest in the presence of other competing centres in formal classical composition.

This group photograph by Cecil Beaton has no clearly-defined point of interest

Repetition and pattern

It is however also possible to have a successful composition without an identifiable centre of interest and without any special emphasis. This is usually the case when the subject consists of many similar shapes in some kind of repetitive pattern – either a formal pattern such as a rectangular grid or an informal scattering of shapes or a colour field.

An uninterrupted formal pattern can be visually uninteresting but if there are minor variations or permutations or if there is a contrasting element that breaks the regular rhythm or contrasts with it the picture can be much more interesting. A change of scale in the pattern can also provide the visual dynamic that the perfectly regular pattern lacks.

Visual tension

When a visual element seems out of place it can cause a sensation of visual tension. Conversely when an element is placed so as to give a feeling of stability and order there is very little visual tension.
A lack of visual tension could be the result of a totally predictable composition or the placing of the centre of interest exactly in the visual centre of the picture format. Very regular formal rhythms or patterns can also lack tension and the result could be that the image would lack visual impact.
Classical formal composition benefits from a moderate amount of visual tension. This can come from the placing of shapes slightly away from prime positions such as the visual centre or along the diagonals from corner to corner. The nearer a shape is to the edge of the format the more tension there is between the shape and the frame.
One can think of visual tension as being a kind of visual magnetic field that attracts shapes and lines towards prime directions and areas. A slightly off-vertical line can create tension because the eye seems to want to straighten it. At a certain point a sloping line becomes a deliberate diagonal and the tension dissolves.

Cropping

A principle that is particularly applicable to photographic composition is the way that the edge of the frame cuts off shapes or background details. The viewfinder performs a cropping function all the time but in prints, digital images and to a lesser degree in slides it is sometimes necessary to further crop the format in order to strengthen the composition.

Maybe the focal length of the lens included too much background or some unwanted extra shape found its way into the image or the balance requires it. These would be reasons to perform secondary cropping. There are however some purists who believe that secondary cropping is nothing more than damage control for incompetent photographic technique but that is an extremist view.

An example of extremely close cropping by Harry Callahan

Secondary cropping also alters the proportions of the format, the aspect ratio. Some images just do not fit comfortably into the standard proportions of film formats. Maybe the image requires a square or an elongated rectangle. The choice of a vertical or horizontal rectangle is also an important cropping decision. Whether primary or secondary cropping is involved, the way the edge of the format cuts the image can make significant differences to the composition. Whether you crop right down to the

main subject with hardly any background such as in the example by Harry Callahan or include a lot of background depends on what you are trying to convey in the photograph. There may even be occasions that only a portion of a face would be included, the rest cropped off. Some photographers refer to this as amputation cropping.

This portrait of the dog photographer William Wegman by Sue Adler is an extreme example of radical cropping.

By cropping a face so that half an eye is off the edge results in considerable visual tension that is unacceptable for some people. Others find it stimulating and daring. This is largely a matter of individual taste and depends on what kind of photographic education you may have had. In conventional classical or pictorial composition the extremes are avoided and a comfortable amount of background space is allowed to surround the main subject of the photograph. A classical composition isolates the main subject, includes all the significant parts and allows breathing space around the main subject. Other conventions of cropping dictate that in a full length portrait one ought not to crop off the feet and that for a person turned slightly to one side there should be more space in front than behind. Whether or not one follows these conventions depends on the requirements of a particular subject. To make them hard and fast rules excludes the possibility of alternative creative solutions.

Spots and clustering

Any small shape that contrasts with its background functions as a spot. Attention is drawn to any spots there may be in a picture and moves from one to another according to how they are placed and how much they contrast with the background. They can function as major or minor points of interest.
Widely separated spots create visual links and tensions across the format. This could also result in a lack of cohesion. If spots are grouped in a closely bound cluster they function as a larger shape. If they are strung out they can suggest a line.

Structural framework shapes

Renaissance artists such as Leonardo and Raphael used a pyramidal or triangular structure for their groupings of human figures. This shape gives a feeling of harmony, stability and balance to a composition.

There are many other structural framework shapes one can use to organize shapes in a composition. Some of them are S-shaped, others parallelograms, circles, ovals, spirals or other letters V, L, M, X. Z or N. One can either visualize the shape as being purely in terms of pictorial space on the surface of the image or as three-dimensional shapes in deep space. To be successful a structural framework shape should be fairly simple and not too obviously contrived.

Framing devices and the base

Objects such as trees, arches, doorways or windows in the foreground of a composition can function as a kind of frame that leads the eye into the subject beyond and gives the picture a formal coherence and special emphasis.

This portrait by Annie Liebovitz makes use of the architectural background as a framing device

A framing device in the background is also possible. An archway behind a figure can give great emphasis to the figure.

Most compositions benefit from having a strong base. If objects give a feeling of falling out of the bottom this can create an uncomfortable visual tension. Any horizontal or nearly horizontal line or shape across the bottom will help to contain the image and add a feeling of stability.

Unity and cohesion

Each photograph should present a unified, cohesive whole, both in terms of composition and in concept. Photographs that try to deal with more than one subject or idea are usually not as strong as those with a single, clear concept. In terms of composition this would mean emphasizing and isolating the main element and excluding extraneous or intrusive elements as much as possible. In documentary photography this is sometimes difficult to do but in any genre where the photographer has the opportunity to choose what to leave out, either by using the viewfinder or at a later stage in secondary cropping one can achieve greater unity and cohesion. An

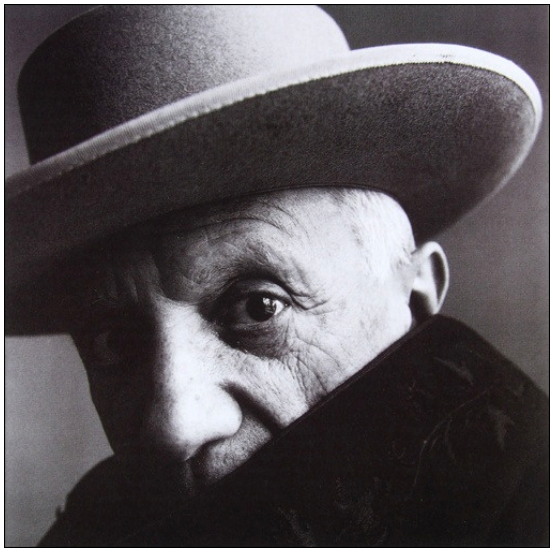
incoherent image conveys a muddled message; a muddled composition; the parts do not combine and work together satisfactorily.

Factors which work against unity and cohesion can be disharmony of colour, extra elements that tell a different story or interfere with the structure of the picture. Clashing and distracting colours can be overcome by converting a colour picture to monochrome or toning down some colours. Getting a properly unified picture usually involves choosing the right viewpoint and seeing the entire contents of the viewfinder from edge to edge, corner to corner.

Compositional elements such as linking lines, repeated colours, and rhyming shapes, framing devices, concentric and radiating lines can strengthen the unity of the image.

Experienced picture editors and professional photographers will tell you to get closer to the subject or zoom in closer and in most cases this works well. Selective focus and an awareness of what is happening in the background and periphery can also contribute to the unity and cohesion of the image.

A picture that seems incomplete can also lack unity if important details have been excluded. It could be perceived as an indecipherable, meaningless fragment; something important is missing. This does not apply to well-known elements such as cutting off the top of a head, a circular shape partly cut off by the edge or anything else of minor importance not completely shown in the picture.



Gestalt psychology tells us that the viewer's perception can easily fill in those missing parts. One does not always have to see the entire outline of the shape of a familiar object to be able to understand it. A side view of a head for example would show only one eye but we do not think the other eye is missing. The same would apply to parts of limbs cut off by the edge of the format. The underlying principle here is: "the part represents the whole".

This portrait of Picasso by Irving Penn crops off parts of his hat and one eye is almost completely lost in shadow yet what is still visible tells us enough about Picasso's character. The cut-off bits of hat and invisible eye are not essential to the coherence of the image.