The Elements of Pictorial Design:

Introduction:

Images are composed of images, both real and imagined.

At the start of a photographic workflow when we release the camera's shutter we are simultaneously creating two images; what is in front of the lens, and what is happening on our side of the lens. That is, we are capturing what initially grabbed our attention, the object, gesture or fleeting moment, the beautiful light or the ‘mark that wins the grand final’ and so on. We are also capturing the thoughts, feelings and ideas that motivated or convinced us that capturing the image was worthwhile. In other words, we simultaneously create a photograph of things that can be seen, and a photograph of things that can’t be seen, only felt, imagined or desired.

How much time we spend on each side of our lens is up to the individual. Commercial photographers might tend to spend more time focused on what is right in front of their lens, the person, product, event or environment, while fine art photographers might tend to spend more time engrossed in their surrounding political, theoretical, poetic, or representational concerns.

From the outset we are therefore engaged with making ‘images about images.’ That is, images composed from multiple aims and ‘points of departure,’ objectives and subjects that matter. Though what we bring to the creation of a photograph might be science or art, philosophy or politics, humanity or self interest, our concerns and intentions though they might breath life into the image, do not make the image, it still has to be constructed.

A way of understanding this ‘division of functions’ comes from turning a photograph upside down. This simple act reduces the representational weight or subjective nature of the picture but doesn’t effect its objective pictorial qualities. The colours and tones, shapes and outlines, textures and surfaces remain the same. Though no longer as meaningful or ‘representational’ of a person, place or a thing, the pictorial elements from which the picture is constructed don’t change, they are just upside down. Their meaning may be different when viewed in this way, but they remain what they are.
The Elements of Pictorial Design:

Images are both composed (meaning) and constructed (built).

While their meaning is largely subjective, their construction can be objectively defined.

To achieve this, three conditions are required:

**Process**

**Tools**

**Principles**

That is, we require a process to work within, a range of tools to create with, and a set of principles to guide our progress.

**Process:**

Identifying an image according its individual compositions, and then exploring and refining their contribution, honestly reveals the structure of the image. By rendering the individual compositions in the following order, the image can be most efficiently resolved.

<table>
<thead>
<tr>
<th>DRAWING COMPOSITION</th>
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<td>Defines the relationships within the image</td>
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<th>TONAL COMPOSITION</th>
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<td>Defines the drama of the image</td>
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<tr>
<th>COLOUR COMPOSITION</th>
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<td>Defines the personality or mood of the image</td>
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<tr>
<th>SPATIAL COMPOSITION</th>
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<td>Defines our relationship to the image</td>
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Structure is the backbone of our desire. Bringing things together in a image, and the associations between them, builds structure. Preventing collaboration between friendly areas of an image destroys structure. Without structure we have nothing expect spectacle or artifice to carry the weight of our concerns. The heart of an image doesn't escape our attention when its structure doesn't require our attention. In other words, a self-sustaining image sustains us.
The Elements of Pictorial Design:

Post Processing Workflow - Four Compositions:

Drawing Composition - begins in the camera’s viewfinder and includes any staging or direction of the scene. It continues into post capture processing where the image’s cropping and proportions can be further refined, along with the removal of any distracting artefacts such as dust spots.

• Apply the Dust & Scratches filter on a duplicate layer blended in Darken Mode.
• Spot any remaining non-image artifacts with the Cloning Tool.
• Cropping experiments uncover the ‘psychological space’ within the image.
• Use Guides to outline the image window, thereby allowing precise cropping of the image.
• Carefully examine the image on screen and in a test print at the final scale.

Tonal Composition - includes targeting the image’s white and black points, and adjusting global and local contrast. Correcting the tonal composition also eliminates many primary and secondary colour casts.

• Convert the RGB image to Lab (16bit) and display only the monochromatic ‘L’ channel.
• Use Levels to set highlight and shadow points, and adjust middle grey (gamma).
• Use Curves to adjust local contrast.
• Apply the Dodge & Burn tool to modify local tonal values.
• Paint with black and white on a 50% grey layer in Soft Light mode as a ‘printing pack’.

Colour Composition - is concerned with refining the mood or personality of the image through changes to its global and/or local hue and saturation.

• Convert the image from Lab to RGB.
• Use Levels to globally adjust overall colour balance.
• Use Curves to locally adjust colour contrast (saturation) and density.
• Use the Sponge tool to locally saturate or desaturate the image.
• Use HSL controls and Selective Colour to precisely adjust individual colour values.

Spatial Composition - combines the drawing, tonal and colour compositions into a unified whole that constitutes the spatial relationships within the image, which is defined by our relationship to the image, and the meaning it represents for us.

• Duplicate the image layer and apply the Unsharp Mask filter or Gaussian Blur filter.
• Use a Layer Mask to locally apply the sharpening or blurring with different brushes.
• Use Advanced Layer Options to blend the effect into specific tonal regions.
• Duplicate the image layer and apply a low pixel radius High Pass filter in Overlay mode.
• Paint on this layer or add a Layer Mask to locally distribute the effect.
The Elements of Pictorial Design:

Tools:

All pictorial design can be reduced to eight elements or dimensions:

- Line
- Direction
- Shape
- Tone
- Texture
- Size
- Hue
- Chroma

LDSSTTHC are the elements or building blocks of visual art. When organised they create form, design and composition. They constitute the alphabet of our visual expression.

In photographs the elements of line, shape, texture and colour are used to describe, depict, or illustrate solid objects in three-dimensional space. The success of subject matter of a photograph usually relies on our ability to recognise or perceive its meaning. But photography is also a convention, that through habit training and education we accept and respond to its effects. We nevertheless recognise that the depicted objects and space are merely an illusion and do not exist. The photograph remains composed of flat, coloured patterns on a two-dimensional surface.

On the other hand, a line, shape, texture, or colour is a concrete reality. These elements are more real than the objects they represent in the image.

Their effect does not depend upon an appeal to our intellect as much as to our primary instincts, which are deeper and more fundamental than the concepts we encrust them with. These elements make a direct visual impact evoking an immediate and vigorous response. The elements, along with the principles of design that govern these relationships are therefore real and powerful forces.

If we want to control and direct these pictorial forces, we must understand the tools (elements) themselves as well as the principles by which they are employed and constructed to arrive at a desired visual appearance and iconography.
The Elements of Pictorial Design:

Line:
First there is the line, either straight or curved.

Adjacent lines such as 1 and 2, or 5 and 6 are similar or harmonious. 1 and 6 are in contrast of opposition to each other.

Direction:
A line has direction. The four primary directions are horizontal (H), vertical (V), left oblique (L), and right oblique (R).

Adjacent directions such as V and VR or H and HL are similar or harmonious. Directions at right angles to each other such as H and V or LV and RH are complementary, being in opposition or contrast.
The Elements of Pictorial Design:

Shape:
A series of lines of different directions defines a shape or pattern, such as triangular, round and so on.

In a pattern or shape ring-around, adjacent shapes such as i and 2 are similar or harmonious, where as shapes diametrically opposite such as 1 and 6 are contrasting.

Size:
Lines and shapes, and the space intervals between them may differ in size or measure.

Shapes A and B and space interval R and S are harmonious or similar in size. Shapes A and E and space intervals R and U are contrasting in size.
The Elements of Pictorial Design:

Texture:
A line or shape has texture, rough or smooth, and so on.

As with the other elements, there is also harmony and contrast of texture.

Tone:
A line or shape has a tonality; from black to white.

Neighbouring tones such as 1 and 2 or 10 and 11 are in harmony. Values 1 and 11 are opposed or contrasted.
The Elements of Pictorial Design:

Hue and Chroma:

A line or pattern may have a colour with a red, green, blue, or yellow etc hue. The purity of the hue is its chroma or saturation value.

Colours are described in terms of their Hue or the ‘colour of the colour’ and their Chroma (Saturation) or purity, where 100% Saturation is the purest colour (without contamination of other colours) and 0% Saturation is colourless (white, grey or black).

A pastel red for example is desaturated by white light rendering it less pure than 100% red.

Adjoining hues such as red and magenta are harmonic. Hues diametrically opposite such as red and cyan (minus-red) are complementary or contrasting.
The Principles of Pictorial Design:

Principles

Form:

The forms that result from certain relationships of the elements of pictorial design, such as repetition, harmony, contrast and unity, are in general similar across the arts, from music to poetry, literature and dance. The forms have a similar basic character and significance, and accomplish similar effects. The difference is in the medium in which they are played out and its temporal element. In photography the form is visual and is perceived instantaneously, in music the form is aural and the temporal element is prolonged. The essential difference therefore is in the nature of the intervals. In music they are time and pitch intervals, in the visual arts they are space, shape and colour intervals. In dance, both are combined as visual music.

A principle of design is therefore a relationship law or an organisational plan that determines the way in which the elements must be combined in order to accomplish a particular effect.

There are only three ways in which elements may be combined: they may be identical (repetition), or similar (harmony), or totally different (discord). The difference among these three fundamental relationships is the degree of the interval and the kind and number of intervals.

Repetition:

Repetition in the visual arts concerns just one dimension, space. That is, the only difference between identical objects is their position in space. The relationship is therefore one-dimensional and is measured in terms of space. Intervals of space, or the voids between objects, are as much a part of visual art as intervals in time, or the silences between sounds are a part of poetry and music.

The above diagram illustrates complete repetition. All the elements, shape, size, tone, texture, hue, and chroma are repeated.
The Principles of Pictorial Design:

Harmony:

Harmony is a combination of units which are similar in one or more respects. Harmony is a medium interval or difference in one or more dimensions. Units are harmonious when one of more of their elements or qualities, such as shape, size or colour are alike.

HARMONY

In the above illustration there is a medium interval or similarity in five dimensions. There is harmony of shape, size, tone, hue and saturation.

DISCHORD

Complete repetition is one extreme. Discord is the opposite extreme. Harmony is between the two extremes and (like middle grey) combines the character of both. In repetition only one kind of difference or dimension is involved, which is a spatial interval. Discord involves all dimensions. Discord is a maximum interval of shape, size, tone and colour. Discord is a combination of totally unrelated units.

Repetition, harmony or discord therefore is simply a matter of degree of interval or difference between units. If two units have no dimension or quality that they share in common, they are totally unrelated and represent maximum opposition or contrast. If one or more of their dimensions is similar or identical, the units are harmonious. More similar dimensions equals greater harmony. If all their units are the same, they are identical.

These three fundamental forms, repetition, harmony and discord, and their combinations are the basis of all poetic structure.
The Principles of Pictorial Design:

Gradation:

Gradation is a sequence in which contrasting extremes are bridged by a series of similar or harmonious steps. Gradation therefore is a particular combination of discord (contrast) and harmony.

Gradation is illustrated by the tonal scale, in which black and white, the contrasting extremes are connected by a continuous sequence in which the adjoining greys are similar or harmonious.

![Tonal Scale]

All scales are various forms of gradation, because any scale consists of a succession of graded steps.

Gradation is a common and basic form of natural order. The expanse of a clear blue sky is a gradation of hue, tone and saturation that progresses from the pale horizon haze to the darker and colder-blue zenith. The ebb and flow of tides, the slow passage of the seasons, the waning of the moon, all illustrate gradation in various forms. Gradation characterises the flowing pattern of plant and animal life in all its successive and transitory stages from birth to death.

Because gradation implies change, movement and life, it is a most useful and valuable instrument of expression. In photography the gradation of light is one of the most effective devices with which to intensify the mood and accentuate dramatic movement. The flow of light over a curved surface is represented by graduated tones from light to dark.

The graduation of size and the graduation of direction represent, and the graduation of hue, tone and saturation represent aerial or, that together depict the relative position of forms in space.

The graduation of line, direction, shape, size, tone and colour produce compositional strategies that can be used in many different ways to express all manner of thoughts, feelings and things.

The elements can be combined in all manner of combinations. The graduation of size might be combined with the repetition of shape and object. Radiation of line and/or space is another form of gradation.
The Principles of Pictorial Design:

Contrast:

Life consists of things and the difference between them. Through contrast opposites are intensified and derive their meaning (their difference from one another). From the contrast or interval between things is woven the rhythm of life. Contrasting long and short waves bombard the ears and eyes to create sound and colour sensation. Warm, soft and rough contrast with cold, hard, and smooth. Contrast, opposition, conflict or variety is the dynamic essence of all existence, and all art forms.

Contrast is as essential to art as is unity. Variety stimulates interest and rouses excitement. Variety enlivens a composition. A composition with too little contrast is monotonous.

In any work of art a certain amount of variety is inevitable. A black line on white paper automatically produces a contrast of tones. How much more variety is necessary? The amount depends the artist and the desire behind the work of art. The use of contrast is governed by taste. Some works of art (and some artists) desire subdued and muted harmony, while others demand strong opposition.

Contrast of line, and/or contrast of direction of shape and size underscore the drawing composition of the work of art. Contrast of texture and tone determine the tonal composition, while contrast of hue and saturation (colour) establishes the colour composition.

When repetition, harmony and contrast are combined, extremes are harmonised. Units that are contrasting in one dimension or element may be harmonised by another.

Interest is produced by variety. The more variety a composition has, the more interesting it tends to become. Interest may also be created not only by variety of line, shape, size, tone, texture and colour, but also by the variety of unequal contrasts or differences between these elements. That is, strong or great intervals, medium intervals, and weak or minor intervals. In other words, unequal intervals create interest through variety, where as equal intervals tend to become monotonous and less interesting because of the lack of variety. If you want maximum interest in your work, you must plan your shapes, sizes, tones and colours so as to produce maximum variety of contrasts or intervals.

For example, if you used only three tones in a photograph, you would not use black, white and middle grey if you wanted to capture maximum interest from the viewer. This is because the interval between black and middle grey is the same as between white and middle grey. More interest could be derived by using more variety based on unequal tonal intervals, where the grey is light or darker than middle grey, or substituting light grey for white, or dark grey instead of black. Moving one value closer to an extreme (black or white) produces the difference or variety that triggers interest or attention. The same principles apply to the other elements of line, direction, size, shape, texture and colour. For example, yellow is half way between red and green. That is, the hue interval between yellow and red is the same as between yellow and green, where as the interval between red and green-yellow is greater than between green and green-yellow.
The Principles of Pictorial Design:

Unity:
The fundamental principle of visual order is aesthetic unity, which initiates the secondary principles of conflict and dominance.

Conflict is the visual tension between opposing or contrasting lines, directions, shapes, sizes, textures, tones and colours. Visual conflict produces contrast and variety, and is used to stimulate interest.

But the principle of aesthetic unity demands that this conflict and contrast between competing visual elements (forces) be resolved. The successful integration of disparate elements comes through an idea or plan of orderly arrangement. That is, the elements come together through the dominance or subordination of the conflicting parts. This can be based on gradation, or repetition with variance and dominance.

In other words, unity is the cohesion and consistency, the integrity that is the essential element of a composition. Composition and unity are synonymous.

Static and Dynamic Unity:
Static unity is exhibited by regular geometric shapes, such as the triangle and circle and their derivatives. These are passive and inert, fixed and without motion. Static compositions are based on regular and repetitive patterns, on the uniform such as the unchanging curve of a circle.

On the other hand, dynamic unity is the progressive rising and falling, and subordination of the pictorial elements to a dominant rhythmic line or harmonious sequence that usually culminates in a climatic resolution. The motions of the human body are great examples of dynamic unity, while the repeating patterns in textiles are good examples of static unity.

Any orderly arrangement where the elements are subordinated to an idea or pictorial plan will produce a composition (unity).

Dominance of one kind of line, direction, shape, size, texture, tone or colour can be produced by making one of the competing units larger, stronger in tonal contrast, or hue or saturation contrast. It can also be produced by repetition. However a combination of harmonious units does not necessarily produce unity or a good composition. Harmony and unity are not synonymous. For example, to create unity one colour (or other element) must be dominant. It could be made by increasing its area, or intensifying its saturation, or both. Discord or contrast are not incompatible with unity. They can exist in the same composition as long as the principle of dominance is enforced. Whether you like discord is another matter altogether.

Varied repetition builds up an intense and dramatic mood. Exact repetition and alternation produce a strongly integrated, clear and emphatic effect. Balanced compositions can be formal, dignified, serene; or informal, less peaceful, less obvious, but more interesting.
The Principles of Pictorial Design:

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