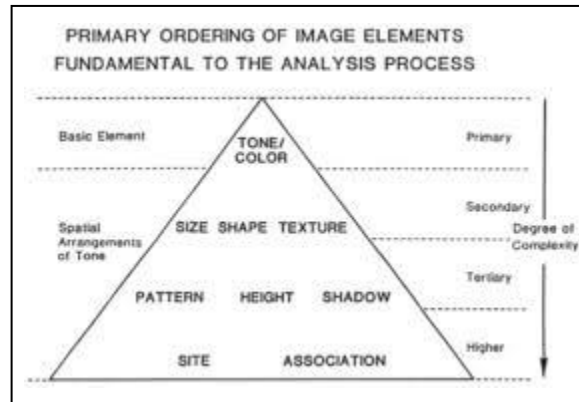


## Elements of Photographic System

An object or phenomena on an image can be identified, recognized and delineated on the basis of some of the typical characteristics of the image. These characteristics, which allow for a systematic and logical approach in carrying out image interpretation, are known as the elements of photo interpretation. These image characteristics are described below:



**Size:** Size of an object is a function of scale. Generally, relative sizes of objects must be taken into consideration within a same image. Individual houses would be smaller in size in comparison to commercial buildings.

**Shape:** Shape normally refers to the general form or outline of individual features. It is a very distinctive clue for interpretation. Normally, man-made features tend to have defined edges leading to regular shape, while natural objects will be having irregular shape while forest areas; water bodies tend to have irregular shape.



**Tone:** Tone of an object or phenomena refers to the relative brightness or colour in an image. It is one of the fundamental elements for distinguishing between different objects or

phenomena and is a qualitative measure. Generally, tone is designated as dark, medium or light.

**Pattern:** Pattern refers to the spatial arrangement of visibly discernable objects. Typically, the repetition of similar tones and texture produces a distinctive and recognizable pattern. For example, houses laid out in orderly manner in urban area or the trees in an orchard create different patterns.

**Texture:** Texture is referred to as the frequency of tonal changes in particular areas of a image. Texture is a qualitative characteristic, and is normally categorized as rough or smooth. An area of dry sand will appear on an image having smooth texture, since the variation of tone for long stretches is not present. Similarly, an area covered with forest having variety of tree species with varying canopy size, shape, and density will appear with rough texture, as tone will be changing very rapidly.

**Shadow:** Shadow is an important characteristic of image interpretation. It gives an idea of the profile and relative height of an object, hence making identification easier. In mountainous areas shadow is an important characteristics of images as it enhances the ground topography, and hence helpful for identifying variations in geological landforms.

**Association:** Association is another important characteristics as it considers the interrelation with the objects within the close proximity of an object or phenomena. For example, white irregular patches adjacent to river indicate presence of dry sand banks of the river. A regular grid of lines having small regular shaped box like objects is an indication of urban areas.

**Site:** Site refers to the vocational characteristics of objects such as topography, soil, vegetation, and cultural features.

