

As a teenager when I was in secondary (high) school in Hong Kong (Wah Yan College, Kowloon) I had an exceptionally good art teacher (Mr. Laurence Tam). In 2006 he discovered a long-forgotten collection of paintings done by us students back in the 60's / 70's. With the help of a group of alumni, a public exhibition of those works was held at the Hong Kong City Hall in Dec. 2006.

Mr. Tam was very unique in that he did ***NOT*** approach teaching in Chinese ink painting (or ANY painting, for that matter,) in the traditional manner, namely, imitating traditional masterpieces; instead he emphasized ***originality***, coupled with a ***solid mastery of use of the medium*** as the foundation of building a piece of good art. So he had us ***experiment*** with the elements of a painting - dots, lines, shades, using specific properties of the ink/brush/paper. For Chinese ink painting there are a variety of Chinese paint papers, each of which has a unique characteristic as far as how the ink/water diffusion is concerned, producing different visual effects accordingly. Those form the basis of building up the structure of the painting. As for theme, that is up to the artist's imagination. Mr. Tam considered traditional categorizations such as tree, flowers or landscape, to be too restrictive for a true freedom of expression of art. In fact, as it often happened, a painting begins with no more than merely an exercise in experimentation with unrelated dots, lines and shades on a piece of paint paper, followed by an artistic interpretation of the possibilities of imageries formed by these otherwise unrelated dots and lines.

Once an overall pictorial concept is conceived, it is often necessary to refine the painting by further, **deliberate** brush strokes to produce a theme and an overall coherent visual effect, thus converting the original, seemingly random exercise piece to a finished product. This **“bottom-up”** approach often results in themes and visual effects more striking and interesting than those arising from preconceived notions at the outset of creating the painting. Shown here are a few of my paintings (those labeled “original ink painting”) shown at the exhibition at City Hall in Hong Kong in Dec. 2006, conceived and composed largely by the method described above.

1. **“cave.jpg”**: original ink painting;
2. **“volcano.jpg”**: original ink painting- sampled/digitized and expressed mathematically as $f(x,y)$, where “f” is the “brightness value” of the pixel at (x,y);
3. **“volcano_high_pass.jpg”**: 2-D spatial high pass filtered version of volcano.jpg – basically $\frac{\partial f}{\partial x} + \frac{\partial f}{\partial y}$ or $\frac{\partial f}{\partial x \partial y}$ or some similar partial derivative variations, which highlight all sharp edges;
4. **“wavy_branches_original.jpg”**: original ink painting,
5. **“wavy_branches_high_pass.jpg”**: - 2-D spatial high pass filtered version of original;
6. **“WAVY_BRANCHES_WITH_LEAVES.JPG”**: **_wavy_branches_original.jpg with pixels lying within a certain range of brightness value, replaced by green pigments.**

Those labeled “original ink painting” were composed by Prof. Lau during his teens in secondary school in Hong Kong. The other variational compositions were done recently by Prof. Lau using mathematical algorithms as described. For a clue as to the actual size of the original painting, see **“VOLCANO_PAINTING_AT_EXHIBITION.JPG”**