MANGA TECHNIQUES

The typical five drawing steps for producing one manga image-frame. First, artists decide the perspective and roughly sketch the major structure if the scene with pencils (Step 1). Next, they finalize the drawing with ink (Step 2). With the precise lines in place, artists then begin the screening procedure. Based on the inked lines, manga artist usually select appropriate pre-cut screen sheets to fill regions in order to express shading, tone, texture, or atmosphere. The selected screen paper, which is necessary for the next step, is usually set up in such a way that each region is painted with a different tone (Step 3). The artist usually uses a brush to specifically carve out screen paper along the boundary and paste it on the target region (Step 4). The manuscript is made for print when all the regions are completed with selected screens (Step 5).

MANGA TECHNIQUES

Texture

Teckonics

Michel Foucault: technique

ON THE FIRST DAY OF SCHOOL...

Journey

You Weng Lam showing her first day of architecture building at CUHK.

Walkthrough

Winnie Tang portraying the story of the AIT Building.

Motion

Kenton Sin: it depicts the spatially chaotic and non-linear movement of the human body and their impact on the movement of the surrounding environment.

COMPARISON

This novel representation is especially useful in contexts of architectural depictions. Given an arbitrary colour image of an architectural arrangement, our computational method can instantaneously transform the input into a bi-tonal multi-screening texture representation. Since architectural design is rich in details and elaborated in high levels, the process of creating an adequate illustrative sketch becomes even more complex.

PATTERNS ON ELEVATION

This method of visual communication provides another realism representation in architectural designs and even photographs. The b/w lines and pattern representations of this manga representation is very similar to conventional architectural drafting, in other words, bi-tonal representation, but it provides better personal engagement and legitimacy to non-professional.

ACCURACY

To speed up the production time of drawings, some artists already employ computer techniques to convert images to filming effects, using techniques such as halftoning or lettering. However, these techniques fail to represent the original image with the rich expressions of colour graphics and elaborated architectural details in sketches.

Our technique can deal with an arbitrarily complex image or colour palette. Each set of lines and patterns represents the original image with the goal of preserving three key-factors of graphical representation: chromaticity distinguishability, texture representation, and tone similarity. While the tone is preserved by matching the density of the tone with the use of architectural pattern, the core contributions of our method is the preservation of chromaticity distinguishability and texture representation in a harmonic way; in other words to keep the perceptual distances between chromaticity by using variety of patterns.