

# การสร้างสรรคงานสตอปโมชันพิกซิลเลชัน สำหรับการนำเสนอในงานแต่งงาน Pixilation Stop Motion Animation Production for Wedding Presentation

ศักรา ไพบูลย์\*

## บทคัดย่อ

บทความสร้างสรรค์ทางวิชาการนิเทศศาสตร์ฉบับนี้ เพื่อศึกษารูปแบบกระบวนการวางแผนสร้างสรรค์งานอนิเมชันในรูปแบบสตอปโมชันพิกซิลเลชัน สำหรับการนำเสนอในงานแต่งงาน โดยวัตถุประสงค์ที่สำคัญในการศึกษาครั้งนี้คือ (1) เพื่อศึกษาลักษณะการสร้างสรรคอนิเมชันในรูปแบบสตอปโมชันพิกซิลเลชันในมุมมองจากด้านบนลงพื้น (Top-Down) ทั้งเทคนิคและแนวคิดการสื่อสารของแต่ละฉากเพื่อให้ผู้ชมเข้าใจเรื่องราวที่เกิดขึ้น (2) เพื่อศึกษาปัญหาและอุปสรรคในการสร้างสรรค์ผลงานทั้งในขั้นตอนการเตรียมงานและระหว่างการถ่ายทำ และข้อจำกัดของการทำงาน การศึกษาครั้งนี้มีเป้าหมายสำคัญคือการนำผลของการศึกษามาประยุกต์เข้ากับการเรียนการสอน ในรายวิชา พื้นฐานสื่อผสม ของภาควิชาสื่อดิจิทัล คณะนิเทศศาสตร์ มหาวิทยาลัยสยาม ซึ่งในการศึกษาครั้งนี้ จะทำการศึกษาจากกรณีศึกษาการถ่ายทำภาพยนตร์นำเสนอในงานแต่งงานของ คุณ Joy และ คุณ Mike ทั้งนี้ ผู้เขียนบทความ ได้ทำหน้าที่เป็นผู้ร่วมอำนวยการสร้าง ผู้กำกับภาพ และผู้ผลิตตัดต่อ ของตัวผลงาน ภาพยนตร์สตอปโมชันชิ้นนี้

**คำสำคัญ:** สตอปโมชัน งานแต่งงาน พิกซิลเลชัน มุมมองจากด้านบนลงพื้น

## Abstract

The creative academic article in pixilation stop motion animation production for wedding presentation aims to present the knowledge, techniques and the tools involved in producing Top-down Pixilation Stop Motion animation piece. The objectives of this study are: (1) Study of creative process in top-down pixilation stop motion production and equipment for wedding presentation; the types of perspectives and techniques in stop motion as well as creative thoughts in visualising each scene for audience's understanding (2) Identifying problems in each step of production as well as limitations. The outcome of this study will be used to apply in teaching of the course "Fundamentals of Multimedia" at Faculty of Communications Arts, Siam University. In this creative academic article will utilise the stop motion wedding presentation "Joy + Mike" as the case study in which the author of this article was the co-producer, director of photography and movie editor of the project.

\* อาจารย์ประจำภาควิชาสื่อดิจิทัล คณะนิเทศศาสตร์ มหาวิทยาลัยสยาม

**Keywords :** Stop motion, Wedding, Pixilation, Top-Down

### Inspiration

The practice of Stop Motion animation is an essential skill set for Mass Communication students as it is a basis of animation and film production. Present technology of digital photography which has become readily available in affordable cost has made creation of stop motion animation to be easily accessible. Stop motion animation can be produced single-handedly or a collaboration as a production team. This creative academic article aims to present the knowledge, techniques and the tools involved in producing Stop Motion animation piece with digital tools and how it is accepted in contemporary digital media through wedding ceremony in Thailand. It is essentially an update on classic media production which students can learn to adopt into their creative production process.

### Brief History of Stop Motion

Stop motion animation has been around since the start of film. At the beginning stop motion was used to animate objects often to show their movements as if it is enchanted. The first recorded stop motion feature is “The Humpty Dumpty Circus” by director and producer J. Stuart Blackton and Albert E. Smith in 1898. The circus doll set used for the film belonged to Smith’s daughter.

The simplified process of creating stop motion involves capturing a frame of inanimate objects, move the object slightly into a different motion and then capture the next frame. After sufficient frames captured, the frames are stitched and played consecutively which becomes the illusion of the objects moving on its own.

### Types of Stop Motion

1. Clay animation or Claymation using clay or wax with wireframe inside to move them around
2. Cut-out animation using paper or cloth cut-outs and move them frame by frame
3. Model Animation which is similar to Claymation where models are used and the subsequent stop motion are overlay by actual film footage e.g. the 1933 film King Kong or the 1973 film The Golden Voyage of Sinbad.



4. Object Animation uses toys, dolls, figurines, Legos which cannot be facially modified to animate

5. Pixilation uses real live actors to perform the movements

**Case Study: Wedding Presentation “Joy + Mike”**

The team was approached by the couple to create a wedding presentation that was not under the mundane format of slides of photos of the couple, introducing their parents with romantic background music. The idea of utilising stop motion was chosen as it is not something that has been done especially in the wedding presentation scene.

The stop motion wedding presentation “Joy + Mike” utilises a variation of stop motion called “Pixilation” where instead of moving objects, the real live actors are used instead. The viewpoint of this pixilation stop motion is from a top-down perspective, where the characters are lying flat on the floor and camera is set perpendicular to the subject visualising the scene making it appears to be two dimensional (2D).

**Equipment**

The Stop Motion wedding presentation use the following equipment for production.

1. Camera Gear
  - DSLR Camera, Canon EOS 7D
  - Lens, Canon EF-S 10-22mm f3.5-4.5 USM
  - Super Clamp with Standard Stud
  - Micro USB to LAN cable adapter set

- LAN Cable
- 2. Strobes Set
  - Light strobes
  - Boom Stands
  - Radio trigger for strobes

For the type of top-down stop motion wedding presentation such as “Joy + Mike”, the camera is set to hang from the studio’s ceiling lighting grid bars approximately 6 metres above the set using the Super Clamp with the standard stud facing down perpendicular to the set. Camera is connected to the computer using LAN cable via the Micro USB to LAN cable adapter set which allows the camera to be operated from the ground. The lighting strobe is set to hang from a boom stand illuminating the set from above the set with slight angle pointing towards the models lying down on the floor to avoid intruding into the frame

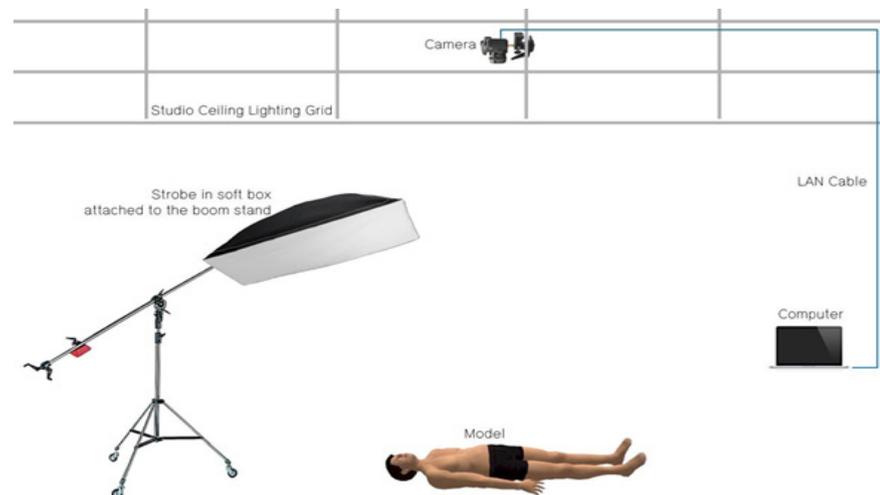


Figure of top-down stop motion set-up in studio (not to scale)

Producing stop motion in this scale requires a team with of the following responsibilities: Camera operator, Director, and one or more props manager

### Production Process

1. Pre-Production of “Joy + Mike” Wedding Presentation took a few months to develop the concepts and make preparations for the production. The couple has only a few days in Bangkok and there were only two available days for the shoot where all the scenes has to be completed. The pre-production process is broken down into the following:

1.1. Obtain the story and requirements from the couple. The team discusses with the couple and make sure to get the important parts of their love story. The highlight events are their introductions, their encounter, dispute, departure and reunion.

1.2. Draft the story in shorts based on interesting elements, events of the couple and getting the story approved. This process also used to decide the type of stop motion to use, which, in this case, the team opted to use the style of top-down approach to tell the story.

1.3. Craft detailed storyboard with annotated appearances and movements of characters and props. This process helps the team to prepare how each scenes will be shot.

1.4. Preparation of props and outfits for each scene.

Each of the key highlight events of the story are portrayed with visuals without aid of voice-over to narrate the story. Here

are some samples of the key visuals used to tell the story.

- Introductions:

The bride is introduced as beautiful and angelic who loves shopping. The groom is shown as a college American footballer, a video gamer and loves eating snacks and drinks cola.



Figure showing the bride and groom introduction

- Their encounter is love at first sight and the connection is represented literally with the red rope line which links both together and formed their bonds, which coincides with East Asian belief originating from Chinese legend “The Red String of Fate”.



Figure of the red rope line in the encounter

- The only voice-based narration is the background music “Stole My Heart” by “Little and Ashley”. The team uses the lyrics as the literal theme where the main turning point in the story where the bride literally stole the groom’s heart through their string of fate.



Figure showing his heart pulled out and stolen by her via the red rope

- To search for his stolen heart, the groom decides to go look for the bride who has his heart only to realise he needs to let go of some of his past in order to move forward by throwing away his favourite things.
- His journey through different countries are depicted with flying on paper airplane and encounter another flyer along with a problem.



Figure showing him throwing away his favorite things and passing another flyer

- He finally gets to meet her but in search for his heart he was hurt and incomplete until they reunited and she returns the heart to its place.



Figure showing her putting his heart back in place

- They finally made peace and accepting each other’s characters where she accepts his character and he accepts her loves of shopping.



Figure showing their love and acceptance of each other

2. Production consists of a team with assigned tasks as follows

2.1. Camera Operator

- Controls operations of the camera from connected computer.
- Checking camera focus after each battery replacement.

- Inspect each frame taken in comparison to previous frame for consistency and check for any continuity errors.

#### 2.2. Director

- Oversees the production process.
- Direction of each movements and ‘acting’ of the characters.
- Keeping track of scenes taken.

#### 2.3. Props Manager

- Preparing each props that comes into the frame and assist in movements of objects in each consecutive frames.

- Helps move the characters in position that the director desires.

3. Post Production is mainly the editing the shots taken with photo processing and video editing application software using the following steps

3.1. Editing the frames in batch using photo processing applications to crop each frame into 16:9 format.

3.2. Check each frames for any unwanted item which would be erased

3.3. Export the edited frames in sets cataloguing by scenes they appear in with dimension size 1280 x 720 pixels JPEG and import them into video editing software.

3.4. Video Editing by putting each frames in consecutive order.

3.5. Adding in the background music to match the scenes.

3.6. Submission by exporting edited video in 720p HD format to be played at the wedding reception

## Conclusion of the case study

The creative process in the pixilation stop motion wedding presentation “Joy + Mike” key elements are how it is represented through a fixed top-down view where the camera is fixed at a distance. The conclusion of this study is aimed to identify the process of the top-down stop motion, problems, obstacles and limitations as follows

### Top-Down Pixilation stop motion

The top down view of this stop motion is selected based on the play on visual of putting characters and objects that are three-dimensional to appear as if they are on a 2-dimension plane. The camera is fixed at a distance pointing perpendicular to the ground, in which the characters and objects lay flatten on its surface as well. Changing of camera lens and distant of camera to the subject can simulate the different point of view ranging from Wide shot, Mid Shot to Medium Close-Up.

### Limitations and problems

1. Fixed Focal Length: In the wedding presentation “Joy + Mike”, only Wide Shot is used where the subject takes up the full frame. The reason that only the wide shot is selected is because the height of the studio is estimated 6-7 metres and the only way in changing the lens is through a mobile scaffold where each change takes 10-15 minutes to complete. After each time the scaffold is moved in and out, it leaves a tread marks that requires cleaning to prevent it appearing in the frame. With that in mind, the team

chose to only use the scaffold when the camera battery requires changing to minimise the production time limit. This in turn, becomes a creative challenge to the team to tell the story interestingly with a single type of shot.

2. Strobe Synchronisation: the strobes flash is often out of sync with the camera shutter curtain resulting in a black frames taken instead of a properly lit scene. The team opted to take each frame with at least 10-15 seconds delay from the previous shot which alleviate the problem but does not preventing it from happening completely.

3. For a top-down type, we have the character lying flat on the floor looking at the camera, however, when the team started shooting, the head of the character is tilted up too much resulting in some unnatural head movements. The problem is fixed when

we created a cubic foam ‘pillow’ for each character’s head to rest on and the head movements are more ‘natural’.

4. The floor of the studio is the background, thus it gets dirty easily which sometimes lead to a continuity error where a set of footprints suddenly appears. In order to keep the scene clean, a mop-up of the floor is required after each time battery is change via the mobile scaffolding or when the scene changes.

**Application in academic teaching**

From the experience in producing the top-down stop motion wedding presentation “Joy + Mike” the author has adapted into the lecture in the course “Fundamental of Multimedia” in Digital Media department, Faculty of Communication Arts with the following topics

Lecture Topic	Stop Motion production for multi-media
What to cover	<ol style="list-style-type: none"> <li>1. Equipment required for creating stop motion</li> <li>2. Different types of stop motion and how it is produced</li> <li>3. Telling story in stop motion</li> <li>4. Problems and limitations in stop motion</li> </ol>
Assignment	<ol style="list-style-type: none"> <li>1. Solo production of short stop motion (at least 30 seconds in length)</li> <li>2. Group production of a short feature stop-motion, (at least 3 minutes in length)</li> </ol>

## บรรณานุกรม

From <http://www.awn.com/animationworld/advanced-art-stop-motion-animation-history-stop-motion-feature-films-part-1> Retrieved [2016, June 20]

Jean Mendoza (20 June 2016). A Short History of Stop-Motion Animation. *Lomography Magazine*. From <https://www.lomography.com/magazine/127612-a-short-history-of-stop-motion-animation> Retrieved .

Ken A. Priebe (2011). *The Advanced Art of Stop-Motion*. Course Technology Cengage Learning.

Lumière Reader (2016). King Kong from the original 1933 film, battles aeroplanes on the

Empire State Building. (26 June 2016). The Lumière Industries. From [http://www.lumiere.net.nz/reader/media/images/img\\_kingkong1.jpg](http://www.lumiere.net.nz/reader/media/images/img_kingkong1.jpg) Retrieved .

Taylor, Richard (1996). *Encyclopaedia of Animation Techniques*. Philadelphia: Running Press.

---