

# CUT-OUT ANIMATION AS A TECHNIC AND DEVELOPMENT INSIDE HISTORY PROCESS

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## ABSTRACT

Art of animation has developed very rapidly from the aspects of script, sound and music, motion, character design, techniques being used and technological tools being developed since the first years until today. Technical variety attracts a particular attention in the art of animation. Being perceived as a kind of illusion in the beginning; animations commonly used the Flash Sketch technique. And then tools like Magical Lantern, Thaumatrope, Phenakistiscope and Zoetrope were developed and started to be used intensely in the first years of the art of animation. Today, on the other hand, the art of animation is affected by developments in the computer technology. It is possible to create three dimensional and two dimensional animations with the help of various computer softwares. Cut-out technique is among the important techniques being used in the art of animation. Cut-out animation technique is based on the art of paper cutting. This study titled "Cut-out Animation as a Technic and Development Inside History Process" will embrace the art of paper cutting, the relationship between the art of paper cutting and cut-out animation, its development within the historical process, animation artists producing artworks in this field, important cut-out animations and their technical properties.

Keywords: Cut-out; Paper-cut; Animation; Illustration.

JEL Classification: I29

## 1. INTRODUCTION

Throughout history, people seek out the different ways for self-expression, and they succeed their desire through different methods and materials. One of these materials is paper. It is not merely a means for artistic expression but also it meets some needs in many areas, including packing to the money bill.

When the root of *kağıt* is analyzed, it came from the words of *kağat* or *kagas* in Uyghur language. In the western languages, the words of paper, papier, papel, paperi are derived from papyrus (Poşul & Görçelioğlu, 2004).

What we know consider paper invented by Cai Lun, who was a Chinese, during the Eastern Han Dynasty in the first century BCE. The paper which developed by Lun differs from previous versions in terms of inclusion of essential new materials that significantly improved its durability and production. Lun's paper was created using a process in which fibers of bark, hemp, and silk were suspended in water. A sieve-like screen would then be used to gather the fibers, and this pulp would dry into a thin, matted sheet. Over the course of the two thousand years, the craft and tools used have become more complex, but the basic principle and process remains same (Gildersleeve, 2014). The manufacture of paper had been a secret in China throughout the centuries. Afterward, it spread out to Central

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Asia, Iran, and the Arab world by following the Silk Road (citation from Ainsworth; Poşul & Görcelioğlu, 2004).

## 2. PAPER-CUT

Even though paper-cut exists in many cultures with different names, its origin is rooted in the Far East. The art of cutting paper designs is called as Fuyang in Chine and Kirigami in Japanese (Koç, 2017). Fuyang is a city in which located eastern region of the People's Republic of China. Paper-cut is very common in Fuyang. The meanings of **Kiri** is paper and **gami** is cutting in Japanese (Kayaoğlu, 2014).

The translations of paper-cutting, in some sources, are “L’art de la Silhoutte’ and ‘Decoupage’” in French language; “Efshan” in Persian; “Paper filigree”, “papercut” or “Silhoutte cutting” in English, “Silhouettenkunst, Scherenschnitt” in German language (Özsayiner, 1995).

There are different views about the history of paper-cut. According to Zhan, archeological findings show that the beginning of paper-cut is traced to an early date, during Northern Dynasties (Zhang, 1980). Another view claims that the beginning of paper-cut was before the invention of paper.

“Paper-cut is an important form of Chinese folk art which can be traced back to an era before paper had even been invented, where artisans patterned fastidiously intricate veins into leaves of gold or silver foil, leather or silk through engraving, embossing and cutting. The invention of paper during the Han Dynasty prompted the transposition of these skills to the new material, giving birth to modern paper-cut” (Wang, 2013).

It is known that paper-cut produced in different forms based on intended purpose. It was used for many aims such as ornament, religious beliefs, and social customs. “Approximately the size of one’s palm, paper-cuts are commonly called ‘window flowers.’ The designs are cut out from red-colored paper with scissors and pasted as decorations on wooden-framed windows made of rice paper” (Wu, 2015), (Figure 1).

Figure 1. Window Flowers in Yan’an, 2004



Source: Author’s photo

“Paper-cuts in ModernChina: The Search for Modernity, Cultural Tradition, and Women’s Liberation” Ka-ming Wu, 2015, Vol. 41(1) 90-127

It is also known that paper-cut is related to individual's feelings. Paper-cuts have different meanings based on patterns on them. Happiness, longevity, wealth, and nobility are some of these meanings (Figure 2a, b).

Figure 2. (a) Happiness, longevity, (b) wealth and nobility paper-cut examples



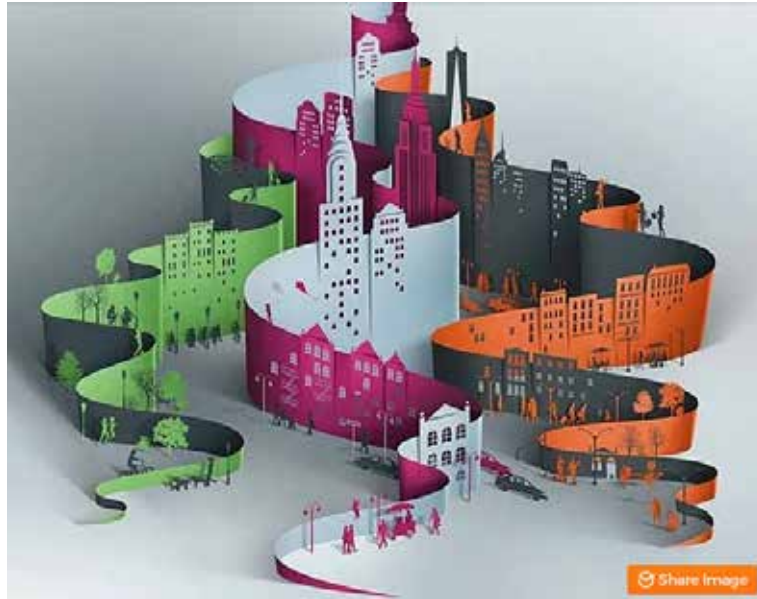
Source: Xuxiao WANG, *Lucky Motifs in Chinese Folk Art: Interpreting Paper-cut from Chinese Shaanxi*, *Asian Studies I* (XVII), 2 (2013), pp. 123-141

Paper-cut is traced to religious ceremonies in the ancient times. Chinese people burnt or buried human and animal figures which made by paper with the dead. These figures in the form of paper, according to the belief, go along with the dead forever (CRIONline, 2017). Paper-cut was also related to social customs. "In the past, women in rural regions of China generally gathered after harvest in autumn and they made ornaments of paper-cutting. This was an indicator of the capability and skill of all young girls and brides" (Clearharmony.net, 2012). In the manufacture of paper-cut, papers and varied sized clippers, which depend on its pattern are used as materials.

Paper-cut continues its existence with different names in many countries. In this context, there is the art of *kat'ı* in Turkey. The art of *kat'ı* is performed by stenciling the example of any inscription or ornament from a thin paper or leather. This art has an important place in Turkish book arts (Mesera, 1998). Special knife or clippers are used in cutting. The emergent pattern after cutting is pasted on the surface by a proper adhesive (Toktaş, 2012).

Paper-cut, nowadays, is accepted as art branch and exhibited in various museums. Many designers, aside from traditional practices, use paper as a material and benefit from the technique of paper-cut. One of the artists who use paper-cut in illustrations is Eiko Ojala. Estonian artist successfully uses paper in his own designs. He influentially represents the depth of three-dimension (Figure 3). Another artist who uses paper-cut is New Yorker, Made White. In White's illustrations which made with snap off knife, embroidery on paper and richness in detail attract notice (Figure 4).

**Figure 3.** One example from Eiko Ojala's, Estonian artist, paper-cut illustrations



Source: <https://onedio.com/haber/kagit-kesme-sanatinin-en-guzel-ornegi-292979>. Access: 10.03.2017

**Figure 4.** New Yorker Made White's paper-cut illustration / The art of paper cut



Source: <http://www.cnnturk.com/fotogaleri/kultur-sanat/diger/kagit-kesme-sanati?page=13>. Access: 10.03.2017

Yulia Brodskaya is also one of the designers who uses paper-cut in illustrations. Brodskaya was born in Russia. She has lived in London since 2004. Her interest about paper-cut causes to develop an original style. Brodskaya applies modern paper-craft and this helps to gain an influential customer list (Figure 5). These customers are Hermès, Starbucks, Target, Sephora, and the New York Times magazine (Gildersleeve, 2014). It is possible to show the effects of Kirigami, Japanese paper-cut art, on her illustrations.

Figure 5. Yulia Brodskaya's paper-cut illustration



Source: Gildersleeve, Owen. (2014). *Paper Cut An Exploration into the Contemporary World of Papercraft Art and Illustration*, Beverly: Rockport Publishing, s.27.

### 3. PAPER-CUT AND ANIMATION

Many different materials and techniques have been used up to now in the production process of the animation, which basically relies on the principle of arranging pictures of 24 frames successively. Among the some of the materials used are clay, puppet, sand, ink, acetate and paint. Today, computer and computer software are widely used. The other material used in the production process of the animation is paper. Paper, which was found thousands of years ago and used for different purposes, has been one of the important materials of animation since the early 1900's, and allows the acquisition of original narration forms.

Paper-cut is also used in the field of animation. Although starting point of paper-cut was the People's Republic of China, China does not have any cut-out animations and films, which are well-known throughout the World. In 1958, Chinese artists start to produce animation films by using the technique of paper-cut. They also united paper-cut and Chinese ink art in the film-making. These films are accepted as Chinese school. Yet these films were limited due to high cost (Li, Yu, Ma & Shi, 2007).

In the sector of animation, professional animators and commercial studios produced only films composed of cell animations. These films, unfortunately, were difficult and time-consuming for independent animators. Because of this, independent animators found out cutout animation, which enables to efficiently work about character and scenario. Thanks to

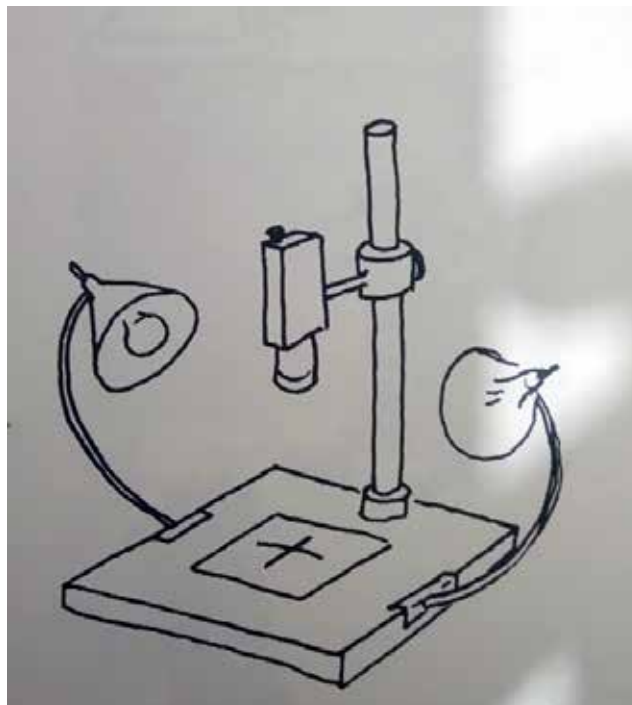
cut-out animations, independent artists can reach many creative opportunities (Laybourne & Palmer, 1998).

German artist, well-known throughout the world, Lotte Reiniger was one of the artists who benefited from the opportunities of the cut-out. Even though Reiniger was a Western artist, he successfully united and advanced animation and an Asian folk art. The adventures of Prince Ahmed, one of the well-known films of Reiniger, is accepted as the world's oldest surviving feature-length silhouette film. The characters of the film, which created by the National Film Board of Canada, set in painted backdrops and glass table is lightened from below and shoot the film from above. The most succeeding feature in the silhouette film is to hide the join of characters from viewers by the technique of camera. The contrast between cut-outs and lighted backdrops easily camouflages the join of characters. Lotte Reiniger, who had enormous elegance, was accepted as the pioneer of these simple techniques (Laybourne & Palmer, 1998).

Jan Lenica's "Labyrinth // 1962", Jean Francois Laguionie's "La Traversee De L'atlantique A La Rame // 1978", Terry Gilliam's "Monty Python's Flying Circus", Rene Laloux's "La Planete Sauvage // 1969-1973 were some films made by the technique of cut-out.

Daniel Greaves's animation, "Flatworld" (1997), is another cut-out film. All humor in the film is based on paper and two dimensions of paper. Matt Phlatt, one of the characters in the animation, shaves his own beards with an eraser on the morning and cuts the asphalt with clippers to repair cables. In this film, fire is absolutely prohibited. When someone strikes a match, the alarm raised. The injury is only composed of tearing and the treatment is possible with sellotape (Samancı, 2004). These examples are some senses of humor about paper in this animation film.

Figure 6. A mechanism for cut-out animation



Source: Kit Laybourne and Dave Palmer (1998). *The Animation Book*, NewYork: Three Rivers Press, s. 59.

Paper, clippers, and a mechanism that records the movements are required for cut-out animation. In this mechanism, camera situated directly above level in which characters are

animated. As shown in figure 6, a simple duplication table or tripod can easily hold a camera and the light is put into both sides for well illuminating (Laybourne & Palmer, 1998).

#### 4. CONCLUSION

In this article, "Cut-out Animation as a Technic and Development Inside History Process", the development of paper-cut in the historical process and the effects of paper-cut on animation and graphic design are studied. Contemporary designers are inspired by paper-cut as an ancient folk art. They create different and original products by adding technical features of paper-cut into the design process. In the education of graphic design and animation, giving information about traditional arts could enable the production of more original designs. The idea to reach modern through tradition should be adopted both in the education of art design and design processes.

#### REFERENCES

- Clearharmony.net. (2012). *Geleneksel Çin sanatları: kâğıt kesme el sanatı*. Accessed in: 11.03.2017, retrieved from: <http://tr.clearharmony.net/articles/a110813-Geleneksel-Cin-Sanatlari-Kagit-Kesme-El-Sanati.html>
- CRIONline. (2017). *Çin'deki geleneksel kesme kağıt sanatı*. Accessed in: 13.03.2017, retrieved from: <http://turkish.cri.cn/chinaabc/chapter21/chapter210202.htm>
- Gildersleeve, O. (2014). *Paper cut an exploration into the contemporary world of papercraft art and illustration*. Beverly: Rockport Publishers.
- Kayaoğlu, S. H. (2014). *Kağıt kesme sanatı mı dediniz?*. Accessed in: 09.03.2017, retrieved from: <http://www.hasansabrikayaoglu.com/kagit-kesme-sanati-mi-dediniz/>
- Koç, S. (2017). *Kirigami - fuyang - kağıt kesme sanatı*. Accessed in: 14.03.2017, retrieved from: [http://www.unutulmussanatlar.com/2012/12/kirigami-fuyang-kagt-kesme-sanat\\_87.html](http://www.unutulmussanatlar.com/2012/12/kirigami-fuyang-kagt-kesme-sanat_87.html)
- Li, Y. B., Yu, J., Ma, K. & Shi, J. (2007). 3D Paper-cut modeling and animation. *Computer Animation and Virtual Worlds*. 18: 395-403. DOI: 10.1002/cav.188.
- Mesara, G. (1998). *Türk sanatında ince kağıt oymacılığı (katı')*. (2. basım). Minpa Basımevi. Ankara.
- Özsaymer, Z. (1995). Katı' hatlar. *Türkiyemiz*. 76: 14-19.
- Palmer, D. (1998). The animation book. Cutout animation. In K. Laybourne (Ed.), *Three Rivers Press*. New York.
- Samancı, Ö. (2004). *Animasyonun önlenemez yükselişi*. İstanbul: Bilgi Üniversitesi Yayınları.
- Toktaş, P. (2012). Geleneksel Türk kitap sanatlarından katı' sanatı. *Uluslararası Türkiye-Belçika İlişkileri ve Türk Kültür-Sanatı Sempozyumu Bildiri Kitabı. Halk Kültürü Araştırmaları Kurumu Yayını*. 621-627.
- Wang, X. (2013). Lucky motifs in Chinese folk art: Interpreting paper-cut from Chinese Shaanxi. *Asian Studies*, I(XVII): 123-141.
- Wu, K. (2015). Paper-cuts in modern China: The search for modernity, cultural tradition and women's liberation. *Sage Publishing*, 41(1): 90-127.
- Zhang, D. (1980). *Chinese folk paper-cuts*. Jiangsu: Jinling shuhua chubanshe.